A Message from Our Dean

We welcome you to explore the many offerings of our graduate programs here at the University of Florida. The reputation of a research university is, in large part, measured not only by the excellence of its graduate faculty and graduate students, but also, importantly, by the quality of its academic graduate programs. Through its chosen graduate faculty members, the University of Florida is able to offer graduate programs of the highest quality.

Our catalog is intended to provide information and resources to those interested in graduate education programs at the University of Florida and also is here for our current students, by helping them to make the best decisions, in order to maintain and continue their academic progress, while on the way to their professional and personal goals.

Henry T. Frierson, PhD
Associate Vice President and Dean of the Graduate School

Equity and Diversity

The University encourages applications from all qualified candidates. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status.*

Refer to the Office of Institutional Equity & Diversity within UF's Human Resource Services for additional information. For more information regarding UF's commitment to equity and diversity, visit The Office of Institutional Equity & Diversity's website at http://www.hr.ufl.edu/eeo/default.htm.

Accreditation

The University of Florida is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award bachelor, master, specialist, engineer, doctoral and professional degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of the University of Florida.

Notes:

*As protected under the Vietnam Era Veterans’ Readjustment Assistance Act

Commitment to Diversity

The University of Florida is committed to creating a community that reflects the rich racial, cultural and ethnic diversity of the state and nation. No challenge that exists in higher education has greater importance than the challenge of enrolling students and hiring faculty and staff who are members of diverse racial, cultural or ethnic groups. This pluralism enriches the university community, offers opportunity for robust academic dialogue and contributes to better teaching and research. The university and its components benefit from the richness of a multicultural student body, faculty and staff who can learn from one another. Such diversity will empower and inspire respect and understanding among us. The university does not tolerate the actions of anyone who violates the rights of another person.

Through policy and practice, the university strives to embody a diverse community. Our collective efforts will lead to a university that is truly diverse and reflects the state and nation.

Graduate School

The information in this catalog is current as of July 2014. Please contact individual departments or programs for any additional information or changes.

Graduate School

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Organization

The Graduate School currently consists of the Dean, a Senior Associate Dean, an Assistant Dean, the Graduate Council, the Graduate Faculty, and the Graduate School staff. General policies and standards of the Graduate School are established by the Graduate Faculty. Any policy change must be approved by the graduate dean(s) and the Graduate Council. The Graduate School is responsible for enforcing minimum general standards of graduate work in the University and for coordinating the graduate programs of the various colleges and divisions of the University. Responsibility for detailed operation of graduate programs is vested in individual colleges, schools, divisions, and academic units. In most colleges an associate dean or other administrator is directly responsible for graduate studies in that college. The Graduate Council helps the Dean in being the agent of the Graduate Faculty for executing policy related to graduate study and
associated research. The Council (chaired by the Graduate Dean) considers petitions, policy changes, and creation of or revisions to graduate degree programs, concentrations, and certificates. All faculty members who serve on supervisory committees or who direct master's theses and doctoral dissertations must first be appointed to the Graduate Faculty. A graduate program's academic unit nominates faculty members for appointment to the Graduate Faculty. Nominations must be approved by the Department Chair/Instructor, the College Dean, and a vote of the current graduate faculty members in the nominating unit. The appointment is formally approved by the Graduate Dean. The academic unit determines the level of duties for each Graduate Faculty member, though it is expected that all Graduate Faculty members should be available and willing to serve as external members of doctoral dissertation committees across the University of Florida campus.

Graduate Deans

HENRY T. FRIERSON  
Ph.D. (Michigan State University), Dean of the Graduate School, Associate Vice President, and Professor of Research and Evaluation Methodology

R. PAUL DUNCAN  
Ph.D. (Purdue University), Senior Associate Dean of the Graduate School and Malcolm and Christine Randall Professor of Health Services Research, Management and Policy

Graduate Council (2013-2014)

HENRY T. FRIERSON  
Chair, Ph.D. (Michigan State University), Dean of the Graduate School and Associate Vice President

NANCY FICHMTAN DANA  
Ph.D (Florida State University), Professor, Teaching and Learning

AMIR EREZ  
Ph.D (Cornell University), Associate Professor, Management

ANN HORGAS  
Ph.D (Pennsylvania State University), Associate Professor, Nursing

CHRISTOPHER JANELLE  
Ph.D (University of Florida), Applied Physiology and Kinesiology

ELLEN MARTIN  
Ph.D (Scripps Institution of Oceanography), Professor, Geography

HEATHER MCAULANE  
Ph.D (Texas A&M University), Professor, Entomology and Nematology

KEVIN ORR  
D.M.A (The Cleveland Institute of Music/Carnegie Western Reserve University), Professor, Music

JOANNA PERIS  
Ph.D (Oregon Health Sciences University), Associate Professor, Pharmacodynamics

CINDY PRINS  
Ph.D (Penn State University), Clinical Assistant Professor, Epidemiology

CONSTANCE SHEHAN  
Ph.D (Pennsylvania State University), Professor, Women's Studies and Gender Research

DIETMAR W. SIEMANN  
Ph.D (University of Toronto), Professor and Associate Chair for Research, Radiation Oncology

PAMELA SOLTIS  
Ph.D (University of Kansas), Distinguished Professor, Botany

History

Graduate study at UF existed while the University was still on its Lake City campus. However, the first graduate degrees, two Master of Arts with a major in English, were awarded on the Gainesville campus in 1906. The first Master of Science was awarded in 1908, with a major in entomology. The first programs leading to the Ph.D. were approved in 1930, and the first degrees were awarded in 1934, one with a major in chemistry and the other with a major in pharmacy. The first Ed.D. was awarded in 1948. Graduate study has grown phenomenally at UF. In 1930, 33 degrees were awarded in 12 fields. In 1940, 66 degrees were awarded in 16 fields. In 2013-14, UF awarded over 5000 graduate degrees in more than 100 fields, including 765 Ph.D. degrees.

Graduate Deans and Years of Service

May 2007 to Present  
Henry T. Frierson, Dean

2004-2007  
Kenneth J. Gerhardt, Interim Dean

1999-2004  
Winslow M. Phillips, Dean

1998-1999  
M. Jack Ohanian, Interim Dean

1993-1998  
Karen A. Holbrook, Dean

July-September 1993  
Gene W. Hemp, Acting Dean

1985-1993  
Maddyn M. Lockhart, Dean

1983-1985  
Donald B. Price, Acting Dean

1980-1982  
Gene W. Hemp, Acting Dean

September 1982-January 1983  
Francis G. Stohl, Dean

1979-1980  
F. Michael Wah, Acting Dean

1973-1979  
Harry H. Sisler, Dean

1971-1973  
Alex G. Smith, Acting Dean

1969-1971  
Harold P. Hanson, Dean

1952-1969  
L. E. Grinster, Dean
Governance

Florida State Board of Education

Florida Board of Governors
UF Board of Trustees
UF President and VPs
UF Deans and Other Administrators
Purpose and Mission
Vision, Mission, and Values of the Graduate School

Florida State Board of Education

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Contact a member of the Board of Governors:
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State University System of Florida
325 West Gaines Street, Suite 1614
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Ph.D., Vice President for Research

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M.S.E.E and M.B.A, Vice President for Business Affairs

JEREMY FOLEY
MS, Director, UF Athletics

ED JIMENEZ
M.B.A., Interim CEO, Shands HealthCare

TJ VILLAMIL
Deans and Other Administrators

CAMMY ABERNATHY,
Ph.D., Dean, College of Engineering

MILLIE FERRER-CHANCY,
Ph.D., Interim Dean and Director for Cooperative Extension Services, Institute of Food and Agricultural Sciences

GEORGE L. DAWSO
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HENRY T. FRIERSON,
Ph.D., Dean, Graduate School, and Associate Vice President, Academic Affairs

GLENN GOOD,
Ph.D., Dean, College of Education

MICHAEL L. GOOD,
M.D., Dean, College of Medicine

JOHN HAYES,
Ph.D., Interim Dean for Research, Institute of Food and Agricultural Sciences

JULIE A. JOHNSON
Pharm.D., Dean, College of Pharmacy

DOUGLAS S. JONES,
Ph.D., Director, Florida Museum of Natural History

JOHN KRAFT,
Ph.D., Dean, Warrington College of Business Administration

LUCINDA LAVELLI,
M.F.A., M.N.O., Dean, College of Fine Arts

JAMES W. LLOYD,
D.V.M., Ph.D., Dean, College of Veterinary Medicine

ANNA MCDANIEL,
Ph.D., R.N., F.A.A.N, Dean, College of Nursing

DIANE H. MCFARLIN,
Ph.D., Dean, College of Journalism and Communications

REBECCA M. NAGY,
Ph.D., Director, Harn Museum of Art

MICHAEL PERRI,
Ph.D., Dean, College of Public Health and Health Professions

STEPHEN J. PRITZ, JR.,
B.S., University Registrar

MICHAEL B. REID,
Ph.D., Dean, College of Health and Human Performance

DAVID E. RICHARDSON
Ph.D., Interim Dean, College of Liberal Arts and Sciences

BOYD E. ROBINSON,
D.D.S., M.Ed., Interim Dean, College of Dentistry

JUDITH RUSSELL,
M.S., Dean, University Libraries

DAVID SAMMONS,
Ph.D., Dean, International Center

JEN DAY SHAW,
Ph.D., Assistant V.P. for Student Affairs, Dean of Students

CHRISTOPHER SILVER,
Ph.D., Dean, College of Design, Construction, and Planning

ELAINE TURNER,
Ph.D., Dean, College of Agricultural and Life Sciences

RICHARD D. WILDER
B.S.B.A., Director of Student Financial Affairs

Purpose and Mission of the University

The University of Florida is a public land-grant, sea-grant and space-grant research university, one of the most comprehensive in the United States. The university encompasses virtually all academic and professional disciplines. It is the largest and oldest of Florida's eleven universities, a member of the Association of American Universities and has high national rankings by academic assessment institutions. Its faculty and staff are dedicated to the common pursuit of the university's threefold mission: teaching, research and service.
The University of Florida belongs to a tradition of great universities. Together with its undergraduate and graduate students, UF faculty participate in an educational process that links the history of Western Europe with the traditions and cultures of all societies, explores the physical and biological universes and nurtures generations of young people from diverse backgrounds to address the needs of the world's societies. The university welcomes the full exploration of its intellectual boundaries and supports its faculty and students in the creation of new knowledge and the pursuit of new ideas.

Teaching is a fundamental purpose of this university at both the undergraduate and graduate levels. Research and scholarship are integral to the educational process and to the expansion of our understanding of the natural world, the intellect and the senses. Service reflects the university's obligation to share the benefits of its research and knowledge for the public good.

The university serves the nation's and the state's critical needs by contributing to a well-qualified and broadly diverse citizenry, leadership and workforce. The University of Florida must create the broadly diverse environment necessary to foster multi-cultural skills and perspectives in its teaching and research for its students to contribute and succeed in the world of the 21st century.

These three interlocking elements—teaching, research and scholarship, and service—span all the university's academic disciplines and represent the university's commitment to lead and serve the state of Florida, the nation and the world by pursuing and disseminating new knowledge while building upon the experiences of the past. The university aspires to advance by strengthening the human condition and improving the quality of life.

Vision, Mission, and Values of the University of Florida Graduate School

Vision

The Graduate School is the umbrella administrative unit that guides all graduate programs at the University of Florida, thereby allowing students to reach their educational potential with a focus on contributions to the state of Florida, the nation, and the world.

Mission

The University of Florida Graduate School is committed to ensuring that every graduate student obtains the best possible educational and research experiences, is supported by committed Graduate Faculty and can complete their degrees in a reasonable time. Policies and procedures developed by the Graduate School are intended to uphold the highest academic standards without restricting student success in scientific, scholarly, creative, and professional arenas. The Graduate School provides administrative services to help coordinate, educate, and collaborate with the university community in all aspects of graduate education.

Values

Members of the Graduate School and graduate community value

- High academic standards
- Ethical conduct of scholarship and research
- Creating, archiving and transmitting knowledge and beauty in word, thought and the arts that enhance the human experience
- Desire for life-long learning
- Diversity
- Commitment to advance the health, education, and well-being of citizens throughout the world

Admission

The information in this catalog is current as of July 2014. Please contact individual programs for any additional information or changes.

How to Apply

Admissions Examinations
Medical Immunization
Computer Requirement
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International Students
Students with Disabilities
Postbaccalaureate Students
Nondegree Registration
Readmission
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Residency for Tuition

How to Apply

To apply for admission, go online to the Office of Admissions Graduate Admissions website (http://www.admissions.ufl.edu/applygraduate.html) for basic information and contact the academic unit of interest for specific deadlines, requirements and procedures. To find websites for academic units, go online to http://www.graduateschool.ufl.edu/academics/colleges-schools-departments. The Office of Admissions refers applications that meet minimum standards to the graduate admission committees of the pertinent academic units for approval or disapproval. Applicants must meet the requirements of both the academic unit and the Graduate School to be admitted for graduate study. Admission to some programs is limited by what resources are available.

Requirements for Admission:

- A recognized baccalaureate, graduate or professional degree from a regionally accredited U.S. institution or a comparable degree from an international institution.
- For applicants with a bachelor's degree only, a minimum grade point average of B (3.0), calculated from all grades and credits after the semester where the applicant reached 60 semester hours or 90 quarter hours and Graduate Record Examination (GRE) scores that are acceptable to the applicant's intended academic unit or, for select programs, at least 465 on the Graduate Management Admission Test (GMAT). These scores are used in the context of a holistic credential review process.
- For applicants from countries (including Puerto Rico) where English is not the official language, a minimum score on one of these English Language Skills tests: Test of English as a Foreign Language (TOEFL): 550 paper, or 80 internet; International English Language Testing System (IELTS): 6; Michigan English Language Assessment Battery (MELAB): 77, or documented successful completion of the University of Florida English Language Institute program.
Students failing to meet any admission conditions are barred from continued registration after their first semester.

Admission requirements of an academic unit are often more rigorous than the minimum requirements set by the Graduate School. Because of resource limitations, most academic units do not accept all qualified applicants.

UF is committed to creating a community that reflects the rich, racial, cultural, and ethnic diversity of the State of Florida and the United States of America. The greatest challenge in higher education is to enroll students and hire faculty and staff who are members of diverse racial, cultural, or ethnic minority groups. This pluralism enriches the University community, offers opportunity for robust academic dialogue, and contributes to better teaching and research. The University and its components benefit from the richness of a multicultural student body, faculty, and staff who can learn from one another. Such diversity empowers and inspires respect and understanding among us. The University does not tolerate the actions of anyone who violates the rights of another. By policy and practice, the University embodies a diverse community. Our collective efforts lead to a University that is truly diverse and a University that reflects the U.S. population.

The University encourages all qualified applicants to apply for admission. See UF’s Commitment to Equity and Diversity for more information. Should you feel you have been discriminated against or need further information regarding this policy, feel free to contact the Office of Institutional Equity and Diversity. The Title IX Coordinator's mailing address is Box 115010, Gainesville, FL 32611-5010, and their website can be found here: http://www.hr.ufl.edu/eoc/default.htm.

Admissions Examinations

**Graduate Record Examination (GRE):** Most applicants must submit GRE scores that are acceptable to the program of interest. In addition to the General Test of the GRE, some academic units encourage the applicant to submit scores on one or more advanced subject tests. Scores on all tests taken are considered for admission. Applicants with a previous graduate or professional degree or equivalent from a regionally accredited U.S. institution may be exempt from the GRE and undergraduate GPA requirements. Contact the academic unit for specific requirements.

**Graduate Management Admission Test (GMAT):** All MBA applicants must submit satisfactory scores on the GMAT. GMAT scores may also be accepted by certain MHA, Sport Management, and Food and Resource Economics programs.

**Graduate study in Engineering:** Some programs may use the Fundamentals of Engineering (FE) examination in lieu of the GRE for admitting students into the non-thesis master's degree programs.

Medical Immunization

Students must complete the University of Florida Mandatory Immunization Health History Form. Specific details and explanations for how to complete the form successfully are included. Read the directions carefully. Please be aware that students will not be able to register for classes until this form is received and approved by the SHCC immunization staff.

UF's Student Health Care Center offers vaccine counseling and education in addition to administering required and recommended vaccinations in accordance with best medical practices for disease prevention. There is a fee for these services.

Computer Requirement

Access to and on-going use of a computer is required for all students to complete their degree programs successfully. The University of Florida expects each undergraduate student entering the junior year, as well as each student new to the university, to acquire computer hardware and software appropriate to his or her degree program. Competency in the basic use of a computer is a requirement for graduation. Class assignments may require use of a computer, academic advising and registration can be done by computer, and official university correspondence is often sent via e-mail.

While the university offers limited access to computers through its computer labs, most students will be expected to purchase or lease a computer that is capable of wireless and wired network connection to the Internet, graphical access to the World Wide Web, and productivity functions such as word processing and spreadsheet calculation. Costs of meeting this requirement will be included in financial aid considerations.

Conditional Admission

Academic units may, at their discretion, grant conditional admission to up to 10% of an incoming class.

Conditional admission candidates must have all application materials submitted: a valid prior degree, admission exam scores, English test scores (if required), transcripts, statement of purpose and recommendation letters, along with records of postbaccalaureate grades or work histories of pertinent prior professional experience, if the academic unit is justifying conditional admission on the basis of either.

Academic units granting conditional admission must include the terms of admission in the acceptance letter they send to the student. When the conditions are met, the academic unit must notify the student in writing, sending a copy to Graduate School Data Management (graddata@ufl.edu) for scanning into the student's file.

Conditional admission cases due to graduate admission grade point averages below 3.0, missing or unofficial test scores, and English test scores (if required) below the stated minimums (6 for IELTS, 80 for Internet TOEFL, 77 for MELAB, 550 for Paper TOEFL or 320 [for tests prior to August 1, 2011] or 140 [for tests after August 1, 2011] for verbal GRE) must have final approval from the Graduate School. No acceptance letter can be sent without this final approval from the Graduate School.

In cases of students conditionally admitted with missing or unofficial test scores, final admission is deferred for one semester, until required test scores or final credentials are posted in the UF Office of Admissions database before the end of the first term of enrollment.

English Language Institute (ELI) Conditional Admission

Students failing to meet any admission conditions are barred from continued registration after their first semester.
International applicants, who require additional English Language training in order to meet the Graduate School’s English Language minimum requirements, may be offered English Language Institute (ELI) Conditional Admission. Academic programs will assess an application for ELI Conditional Admission based on all of the materials in an applicant’s file. If an applicant has a low or missing score on the ELTS, MELAB or TOEFL test, or does not have a satisfactory score on the GRE Verbal section, but is otherwise academically qualified, a program may grant ELI Conditional Admission.

Such an offer of admission does not guarantee an applicant can enroll in graduate coursework. All ELI Conditionally Admitted students must complete one of the following two options before they can enroll: 1) he/she must complete the ELI Intensive English Program and receive an exit certificate from it, or; 2) he/she must provide satisfactory verbal GRE and ELTS, MELAB or TOEFL scores. An offer of ELI Conditional Admission may also contain additional conditions set by an applicant’s prospective academic program. ELI will coordinate with an applicant’s academic program, in order to assist the student’s entry into the Intensive English Program, and obtain an appropriate visa.

International Students

All international students seeking admission to the Graduate School must submit satisfactory scores on the GRE General Test (with at least 320 [old scoring scale] or 140 [new scoring scale] on the verbal portion) or GMAT for selected programs.

International applicants (including those from Puerto Rico) must submit a satisfactory score on one of the following: TOEFL (Test of English as a Foreign Language: paper=550, internet=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77) or an exit certificate from the University of Florida’s English Language Institute (UF ELI) program.

Students who meet the following conditions may be exempt from the English language test requirements:

- International students whose native language is English
- International students who have spent at least 1 academic year enrolled full-time in a baccalaureate or post-baccalaureate degree program at a college or university in a country where English is the official language

To be eligible for graduate teaching assistantships, students must score at least 55 on the SPEAK Test or 28 on the Speaking Section of the Internet TOEFL to teach in the classroom, laboratory, or other instructional setting. Those who score 45 to 50 on the SPEAK Test, or 23 to 27 on the Speaking Section of the Internet TOEFL, may teach if they concurrently enroll in EAP 5356 to help their personal interaction and public speaking skills. Those who have scores below these minimums are not eligible to teach.

Applicants who require English Language training should contact the Office of Admissions website, http://www.admissions.ufl.edu/grad/postbacc.html for additional information.

Postbaccalaureate Students

Postbaccalaureate study is for students who have already received a baccalaureate degree and have not been admitted to the Graduate School. Admission for postbaccalaureate enrollment requires a recognized baccalaureate degree (or higher) from a regionally accredited college or university, or an international equivalent based on a 4-year curriculum, a minimum C (2.0) GPA on all junior and senior year undergraduate work, as computed by UF, and a satisfactory conduct record.

International applicants (including those from Puerto Rico) must submit a satisfactory score on one of the following: TOEFL (Test of English as a Foreign Language: paper=550, internet=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77).

Applicants who meet the following conditions may be exempt from the English language test requirements:

- International students whose native language is English
- International students who have spent at least 1 academic year enrolled full-time in a baccalaureate or post-baccalaureate degree program at a college or university in a country where English is the official language prior to your anticipated term of enrollment at UF.

The Postbaccalaureate Application

Applicants must ensure that official transcripts are sent to the Office of Admissions from each postsecondary institution attended. Applications will not be reviewed until transcripts have been received by the Office of Admissions. Postbaccalaureate applicants may apply for Distance Education programs. Only students who have completed a baccalaureate degree in the College of Education may be admitted to postbaccalaureate status for the purpose of completing a teacher certification program. Other applicants may be admitted to postbaccalaureate status only for a limited time to fulfill prerequisites for admission to a master's program. Applicants with degrees in other fields who are seeking teacher certification, should apply for admission to a master's program in the College of Education.

Postbaccalaureate students may enroll in graduate courses, but graduate credit is not generally accepted by the Graduate School for transfer. It is possible to transfer up to 15 semester credits of graduate course work earned with a grade of A, A-, B+, or B by petition in clearly justified cases and in conformance with regulations on courses and credit.

Proof of immunization for measles and rubella or a tuberculosis skin test is required before registering for coursework.

For more information, visit the Office of Admissions website, http://www.admissions.ufl.edu/grad/postbacc.html.

Nondegree Registration

Nondegree enrollment is restricted to participants in special programs, off-campus programs, University-affiliated exchange programs, and those students with nondegree educational objectives at UF. Students denied admission to UF for any term are not eligible for nondegree registration. Students need prior approval from the academic unit(s) to take courses in a nondegree status. That course work normally is not applied toward the graduate degree if the student is admitted to the Graduate School. By petition in clearly justified cases and in
conformance with regulations on courses and credit, it is possible to transfer up to 15 credits of graduate course work earned with the grade of A, A+, B+, or B. A student should not remain in this classification for more than 1 term before being admitted as a post-baccalaureate or graduate student.

For a nondegree registration request form, click on this link: [http://www.registrar.ufl.edu/pdf/nondgreeapp.pdf](http://www.registrar.ufl.edu/pdf/nondgreeapp.pdf)

**Readmission**

This information applies only to students who have previously been enrolled in a graduate, postbaccalaureate or professional UF program. Former students who do not enroll at the university for two consecutive terms, including any summer term, must apply for readmission at the same level of their previous enrollment.

Students who wish to take a leave of absence for two or more consecutive terms should obtain written approval from their academic units before they leave. Students who skip a single term will be scheduled automatically for a registration appointment for one additional term.

All readmission applicants must meet the current admission requirements of the college or school they expect to enter. Readmission is not guaranteed and is subject to availability at the level, college and major. Consult the appropriate program's admission requirements. Readmission is for a specific term. If you are unable to enroll for the term for which you have been admitted, you must apply for readmission again for a different term.

Applicants must present a satisfactory record of conduct. Regardless of other qualifications, applicants who have experienced major or continuing difficulties with school or other authorities since their last enrollment at the University of Florida may find their application for readmission denied.

The readmission application must be completed via a PDF copy and mailed to the Office of Admissions. A non-refundable $30.00 application fee is required. The application requires you to indicate the college and program major of your last enrollment at the university as well as the college and major you want to re-enroll or apply to:

Office of Admissions
P.O. Box 2946, University of Florida
Gainesville, FL 32602-2946

For further information:
[http://www.reg.ufl.edu/readmit.htm](http://www.reg.ufl.edu/readmit.htm)

**Faculty Members as Graduate Students**

UF faculty in tenured or tenure-accruing lines, as designated by Regulations of the University of Florida, 7.003, normally may not pursue graduate degrees from this institution. Exceptions are made for the Florida Cooperative Extension Service (IFAS) county personnel, the faculty of the P. K. Yonge Laboratory School, and University Libraries faculty. Under certain restrictions established by the Graduate Council, persons holding nontenure- or nonpermanent-status-accruing titles may pursue graduate degrees at UF. Any other exceptions to this policy must be approved by the Graduate Council. Such exceptions, if given, are rare and will only be approved when it is determined to be in the best interest of the University.

**Residency for Tuition**

**Policy and the Guidelines on Florida Residency for Tuition Purposes**

Florida Residency for Tuition Purposes is a policy comprised by state statute, and the residency rule adopted by the State Board of Education and the Board of Governors for the State University System. To implement Section 1009.21, Florida Statutes, Rules 6A-10.044 and 6A-20.003, Florida Administrative Code, and 7.005 Board of Governors (BOG) Regulation, the Articulation Coordinating Committee (ACC) adopted a Residency Guidelines document which is maintained by the Statewide Residency Committee, a subcommittee of the ACC. The Guidelines on Florida Residency for Tuition Purposes are used for the determination of Initial Residency Classifications and Residency Reclassifications.

**Florida Residency for Tuition Purposes Eligibility**

A Florida "resident for tuition purposes" is a person who has, or a dependent person whose parent or legal guardian has, established and maintained legal residence in Florida for at least twelve consecutive months preceding the first day of classes of the term for which Florida residency is sought. Residence in Florida must be as a bonafide domicile rather than for the purpose of maintaining a residence incident to enrollment at an institution of higher education. To qualify as a Florida resident for tuition purposes, you must be a U.S. citizen, permanent resident alien, or legal alien granted indefinite stay by the U.S. Citizenship and Immigration Services (USCIS).

Other persons not meeting the twelve-month legal residence requirement may be classified as Florida resident for tuition purposes only if they fall within one of the limited special categories authorized by the Florida Legislature and State Board of Education. All other persons are ineligible for classification as a Florida "resident for tuition purposes."

Living in or attending school in Florida will not, in itself, establish legal residence. Students who depend on out-of-state parents for support are presumed to be legal residents of the same state as their parents. Residence for tuition purposes requires the establishment of legal ties to the state of Florida. Students must verify that they have broken ties to other states if the student or, in the case for dependent students, his or her parent, has moved from another state.

**Initial Residency Classification**

The initial residency classification is determined by the Office of Admissions for all new students, and current or former students who have applied for a new level (e.g. undergraduate to graduate or professional programs) and for those submitting a readmission application after a period of non-enrollment. These applicants must complete the Initial Residency Classification form with supporting documentation when requested by the institution.

**Residency Reclassification**

A student wishing to establish residency reclassification should pick up the Request for Change in Residency Status form from the Office of the University Registrar, 222 Criser Hall, to review the information and items that may be requested when the student files for Florida residency for tuition purposes. The deadline for applying for a change in residency status, including receipt of all documentation, is each term's fee payment deadline. Residency reclassification cannot be applied for retroactively for previous terms.

**Guidelines on Florida Residency for Tuition Purposes**

You may view the full content of the Guidelines on Florida Residency for Tuition Purposes online. Excerpts from these guidelines are provided below.

**Exceptions and Qualifications**
The following categories are statutory exceptions and qualifications for certain applicants who do not meet the twelve month legal residency requirement. Documentation in support of any of the following exceptions will be required.

- Dependent children residing continuously with a legal resident adult relative other than the parent for at least 5 years immediately prior to the first day of classes of the term for which Florida residency is sought.
- Persons married to legal Florida residents and who intend to make Florida their permanent home, and who relinquish their legal ties to any other state.
- Persons who were enrolled as Florida residents for tuition purposes at a Florida public institution of higher education, but who abandon Florida residency and then re-enroll in Florida within 12 months of the abandonment - provided that he/she continuously maintains the re-established domicile during the period of enrollment. (This benefit only applies one time.)
- Active duty members of the Armed Services of the United States residing or stationed in Florida (and spouse/dependent children); active duty members of the Florida National Guard (and spouse/dependent children) who qualify under 250.10(7) and (8); or military personnel not stationed in Florida whose home of record or state of legal residence certificate, DD Form 2058, is Florida (and spouse/dependent children).
- Active duty members of the Armed Services of the United States and their spouses/dependent children attending a public community college or university within 50 miles of the military establishment where they are stationed, if such military establishment is within a county contiguous to Florida.
- United States citizens living on the Isthmus of Panama, who have completed 12 consecutive months of college work at the Florida State University Panama Canal Branch, and their spouses and dependent children.
- Full time instructional and administrative personnel employed by the State public school system, community colleges, and institutions of higher education (and spouse/dependent children).
- Students from Latin America and the Caribbean who receive scholarships from the federal or state government. The student must attend, on a full-time basis, a Florida institution of higher education.
- Southern Regional Education Board's Academic Common Market graduate students attending Florida's state universities.
- Full-time employees of state agencies or political subdivisions of the state when the student fees are paid by the state agency or political subdivision for the purpose of job-related law enforcement or corrections training.
- McKnight Doctoral Fellows and Finalists who are United States citizens.
- United States citizens living outside the United States who are teaching at a Department of Defense Dependent School or in an American International School and who enroll in a graduate level education program which leads to a Florida teaching certificate.
- Active duty members of the Canadian military residing or stationed in this state under the North American Air Defense (NORAD) agreement, and their spouses and dependent children, attending a public community college or university within 50 miles of the military establishment where they are stationed.
- Active duty members of the Armed Services of the United States and their spouses/dependent children attending a public community college or university within 50 miles of the military establishment where they are stationed, if such military establishments is within a county contiguous to Florida.
- Active duty members of a foreign nation's military who are serving as liaison officers and are residing or stationed in this state, and their spouses and dependent children, attending a community college or state university within 50 miles of the military establishment where the foreign liaison officer is stationed.
- Qualified beneficiaries under the Florida Pre-Paid Postsecondary Expense Program per s. 1009.98(2). (Pre-Paid ID Card Required.)
- Linkage Institute participants receiving partial or full exemptions from S. 1009.21, FS, based on criteria approved by the Florida Department of Education per S. 288.8175, FS, which establishes linkage institutes between postsecondary institutions in this state and foreign countries.

**Eligible Categories for non-U.S. Citizens**

Residency rule 6a-10.044, FAC, and the BOG Residency Regulation Resolution allow certain non-U.S. Citizens such as lawful permanent residents, temporary permanent residents, asylees, parolees, and refugees who have applied for and been approved for such status and who otherwise meet the 12 month legal residency requirements, to be eligible to establish Florida residency for tuition purposes. Provided that the non-U.S. citizen has proof of his or her permanent immigration status, he or she may be classified as a Florida resident 12 months from the time he or she establishes legal Florida residence for tuition purposes (e.g., 12 months from the time he or she purchases a Florida home, obtains a Florida driver's license, etc.). It is not necessary to wait 12 months from the date he or she becomes an eligible alien (e.g., the date of the resident alien card (I-551) is issued).

Review the [Guidelines on Florida Residency for Tuition Purposes](#) for a list of nonimmigrant categories which are eligible to establish Florida residency for tuition purposes.

**Dependent or Independent Student**

The determination of dependent or independent student status is important because it is the basis for whether the student has to submit his/her own documentation for residency (as an independent) or his/her parent's or guardian's documentation of residency (as a dependent). Evidence that the student meets one of the following criteria will be requested by the higher education institution.

**Independent Student**

A student who meets any one of the following criteria shall be classified as an independent student for the determination of residency for tuition purposes:

- The student is 24 years of age prior to the start of the term for which residency is sought.
- The student is married.
- The student has children who reside more than half of their support from the student.
- The student has other dependents who live with and receive more than half of their support from the student.
- The student is a veteran of the United States Armed Forces or is currently serving on active duty in the U.S. Armed Forces for purposes other than training.
- Both of the student's parents are deceased or the student is or was (until age 18) a ward/dependent of the court of the court or in foster care.
- The student is determined an unaccompanied homeless by a school district homeless liaison, emergency shelter or transitional housing program.
- The student is working on a master's or doctoral degree during the term for which residency status is sought at a Florida institution.
- A student who does not meet one of the criteria outlined above may be classified as an independent student only if he or she submits documentation that he or she provides fifty (50) percent or more of the cost of attendance for independent, in-state students as defined by the financial aid office at Florida State University (exclusive of federal, state, and institutional aid or scholarships). When tax returns are collected for the purpose of proving independent status by virtue of providing more than fifty (50) percent of his/her support for the year, the social
security number should be blacked out. However, the income information must be provided to show that this requirement has been met.

**Dependent Student**

A student, whether or not living with his or her parent, who is eligible to be claimed by his or her parent under the federal income tax code shall be classified as a dependent student. When tax returns are collected for the purpose of proving independent status by virtue of providing support to others, the social security numbers and income figures should be blacked out as the only relevant information of this form relates to whether or not an exemption has been claimed for the student.

**Appeals Process**

In cases where the applicant expresses a desire to appeal the residency classification, the matter will be referred to the designated residency appeal committee at the institution of higher education, in accordance with the institution's official appeals process.

The residency appeal committee will be comprised of at least three members to consider student appeals in accordance with the institution's official appeal policy. The committee will render to the applicant the final residency determination in writing. The college and/or state university will advise the applicant of the reasons for the determination.

**Tuition payments**

*Florida resident tuition payments* are available to graduate assistants and fellows who meet the eligibility requirements. Any change in the student's academic or employment status after processing a tuition payment will result in the original payment being updated, reduced, or voided as appropriate.

*Non-Florida resident tuition payments* are available to out-of-state students who hold graduate assistantships or fellowships and who meet the eligibility requirements. Any change in the student's academic or employment status after processing a tuition payment will result in the original payment being updated, reduced, or voided as appropriate.

**General Regulations**

The information in this catalog is current as of July 2014. Please contact individual departments or programs for any additional information or updates.

The student is responsible for becoming informed and observing all program regulations and procedures. The student must be familiar with Graduate Catalog general regulations and requirements, specific degree program requirements, and offerings and requirements of the major academic unit. *Rules are not waived for ignorance.* Any exceptions to the policies stated in the Graduate Catalog must be approved by the Dean of the Graduate School. After admission to the Graduate School, but before the first registration, the student should consult the college and/or the graduate coordinator in the major academic unit about courses and degree requirements, deficiencies if any, and special regulations of the academic unit. The dean (or representative) of the college where the degree program is located must oversee all registrations. Once a supervisory committee is appointed, registration approval is the responsibility of the committee chair.

Key information is contained or disseminated through several electronic sites. Each student must regularly check the Graduate Information Management System (GIMS) for accuracy and currency of the degree program and associated milestones. In addition, each student is required to create, maintain, and regularly check a GatorLink e-mail account. Critical information is sent directly to GatorLink accounts.

- Catalog Year
- Classification of Students
- Confidentiality of Student Records
- Academic Honesty
- Student Conduct Code
- Registration Requirements
- Tuition/Fee Waivers
- Attendance Policies
- Change of Graduate Degree Program
- Courses and Credits
- Grades
- Unsatisfactory Progress or Unsatisfactory Scholarship
- Foreign Language Examination
- Examinations
- Preparation for Final Term
- Verification of Degree Candidate Status
- Awarding of Degrees
- Attendance at Commencement

**Catalog Year**

The catalog year determines the set of academic requirements that must be fulfilled for graduation. Students graduate under the catalog in effect when they first enroll as degree-seeking students at UF provided they maintain continuous enrollment. Students who are not registered for 2 or more consecutive terms (including any summer term) must reapply for admission and will be assigned the catalog in effect when enrollment is resumed. With the approval of their college dean's office, students may opt to graduate under the requirements of a later catalog, but they must fulfill all graduation requirements from that alternative year. The University will make every reasonable effort to honor the curriculum requirements appropriate to each student's catalog year. However, courses and programs are sometimes discontinued and requirements may change as a result of curricular review or actions by accrediting associations and other agencies.

**Classification of Students**

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<table>
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<tbody>
<tr>
<td>6</td>
<td>Postbaccalaureate students: Degree-holding students who have been admitted to postbaccalaureate status</td>
</tr>
<tr>
<td>7</td>
<td>Graduate students seeking a first master's degree</td>
</tr>
<tr>
<td>8</td>
<td>Graduate students who have earned a master's degree, or who have earned 36 or more credits while seeking a graduate degree, and who have not been admitted to doctoral candidacy</td>
</tr>
<tr>
<td>9</td>
<td>Graduate students who have been admitted to doctoral candidacy</td>
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</tbody>
</table>
Confidentiality of Student Records

The University ensures the confidentiality of student educational records in accordance with State University System rules, state statutes, and FERPA, the Family Educational Rights and Privacy Act of 1974, as amended, also known as the Buckley Amendment.

Student directory information that can be released to the public is limited to:

- Student name
- Local permanent addresses
- Listed telephone number(s)
- Email address
- Class and college
- Major
- Enrollment status (e.g., undergraduate or graduate level; full time or part time)
- Dates of attendance at UF
- Degree(s) and awards received at UF
- Most recent previous educational institution attended
- Weight and height of university athletes
- Publication titles (theses and dissertations)
- Nature and place of employment at UF

Currently enrolled students must contact the appropriate agency/agencies to restrict release of directory information. The Office of the University Registrar, the Department of Housing and Residence Education, and Human Resource Services routinely release directory information to the public. Directory information may also be released by other university departments and/or employees.

- Students who want to restrict directory information must do so at the Office of the University Registrar in 222 Criser Hall.
- Students who live on campus also must request this restriction from the Department of Housing and Residence Education (next to Beatty Towers).
- Students who are university employees also must request this restriction from Human Resource Services.
- Students who do not want their addresses, phones or personal information published on the Web should update their directory profile.

Student educational records may be released without your consent to school officials who have a legitimate educational interest in accessing the records. School officials shall include:

- An employee, agent or officer of the university or State University System of Florida in an administrative, supervisory, academic, research or support staff position;
- Persons serving on university committees, boards and/or councils; and
- Persons employed by or under contract to the university to perform a special task, such as an attorney or an auditor.

Legitimate educational interest shall mean any authorized interest or activity undertaken in the name of the university for which access to an educational record is necessary or appropriate to the operation of the university or to the proper performance of the educational mission of the university.

The university also may disclose information from your educational record without your consent to individuals or entities permitted such access under applicable federal and state law.

You have the right to review your own educational records for information and to determine accuracy. A photo I.D., other equivalent documentation or personal recognition by the custodian of record will be required before access is granted. Parents of dependent students, as defined by the Internal Revenue Service, have these same rights upon presentation of proof of your dependent status. Each spring when the catalog is published, students are notified of their FERPA rights.

If you believe your educational record contains information that is inaccurate, misleading or in violation of your rights, you can ask the institution to amend the record. The UF Student Guide outlines the procedures for challenging the content of a student record, as well as the policies governing access to and maintenance of student records.

If you who believe the university has not maintained the confidentiality of your educational record as required by law, you may file a complaint by contacting the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue SW, Washington, D.C. 20202-5901.

Academic Honesty

In 1995 the UF student body enacted an honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students.

Preamble: In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

On all work submitted for credit by students at the university, the following pledge is either required or implied:

On my honor, I have neither given nor received unauthorized aid in doing this assignment.

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.

Student Responsibility: Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean, Student Honor Council or Student Conduct and Conflict Resolution in the Dean of Students Office.

Faculty Responsibility: Faculty members have a duty to promote honest behavior and to avoid practices and environments that foster cheating in their classes. Teachers should encourage students to bring negative conditions or incidents of dishonesty to their attention. In their own work, teachers should practice the same high standards they expect from their students.

Administration Responsibility: As highly visible members of our academic community, administrators should be ever vigilant to promote academic honesty and conduct their lives in an ethically exemplary manner.

Student Conduct Code

Students enjoy the rights and privileges that accrue to membership in a university community and are subject to the responsibilities that accompany that membership. For a system of effective campus governance, it is incumbent upon all members of the campus community to notify appropriate officials of any violations of regulations and to assist in their enforcement. The university’s conduct regulations, available to all students, are set forth in Florida administrative code. Questions can be directed to the Dean of Students Office.
Alcohol and Drugs

The use of alcohol and other drugs can have a negative impact on judgments and reactions, health and safety, and may lead to legal complications as well. The university's principal role is to engage in education that leads to high standards and respectful conduct. When those are compromised, the university will take disciplinary action against organizations and individuals violating either the law or the unreasonable use of alcohol. It also must provide help for students who are alcohol-dependent. The university will deal severely with students convicted of the illegal possession, use or sale of drugs.

What the university community can do to prevent alcohol abuse and drug use: Students can help control substance abuse by declining to use or to condone the use of drugs and by insisting that organizations and individuals use alcohol within the bounds of the law and reasonable conduct. Students should make an effort to prevent persons who have abused alcohol or used drugs from harming themselves or others, especially while driving a motor vehicle. They should encourage those needing professional help to seek it. The same standards and regulations apply equally to faculty, staff and administration.

Relations between People and Groups

One of the major benefits of higher education and membership in the university community is greater knowledge of and respect for other religious, racial and cultural groups. Indeed, genuine appreciation for individual differences and cultural diversity is essential to the environment of learning. Another major aspect of university life involves sexual relationships. Sexual attitudes or actions that are intimidating, harassing, coercive or abusive, or that invade the right to privacy of the individual are not acceptable. Only in an atmosphere of equality and respect can all members of the university community grow.

Service to Others

An important outcome of a University of Florida education should be a commitment to serving other people. This sense of service should be encouraged throughout the institution by faculty, administration, staff and students. Through experience in helping individuals and the community, students can put into practice the values they learn in the classroom.

Standard of Ethical Conduct

Honesty, integrity and caring are essential qualities of an educational institution, and the concern for values and ethics is important to the whole educational experience. Individual students, faculty and staff members, as well as the university’s formal organizations, must assume responsibility for these qualities. The concern for values and ethics should be expressed in classes, seminars, laboratories and in all aspects of university life. By definition, the university community includes members of the faculty, staff and administration as well as students.

Education at the University of Florida is not an ethically neutral experience. The university stands for, and seeks to inculcate, high standards. Moreover, the concern for values goes well beyond the observance of rules.

A university is a place where self-expression, voicing disagreement and challenging outmoded customs and beliefs are prized and honored. However, all such expressions need to be civil, manifesting respect for others.

As a major sector in the community, students are expected to follow the university's rules and regulations that, by design, promote an atmosphere of learning. Faculty, staff and administrators are expected to provide encouragement, leadership and example. While the university seeks to educate and encourage, it also must restrict behavior that adversely affects others. The Standard of Ethical Conduct summarizes what is expected of the members of the university community.

Registration Requirements

The University of Florida operates on a semester system consisting of two 16-week terms and two 6-week summer terms. One semester credit equals 1.5 quarter credits. "Term" is used hereafter, instead of "semester".

Required Full-Time Registration

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<tr>
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<th>Fall and Spring</th>
<th>Summer</th>
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<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
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<tr>
<td>Full-time graduate students not on appointments</td>
<td>9-12</td>
<td>4</td>
</tr>
<tr>
<td>Fellows receiving $4,000 or more per term*, and trainees</td>
<td>12</td>
<td>4</td>
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<tr>
<td>Assistants on .25 to .4 FTE</td>
<td>9</td>
<td>3</td>
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<tr>
<td>Assistants on .4 to .7 FTE</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

Full-time assistants:

1.00 Fall & Spring 3
1.00 Summer A 2 or 2
1.00 Summer B 2 or 2
1.00 Summer C 1 and 1 or 2

Graduate students on appointment: Required registration for fellows and trainees with stipends of $4,000 or greater per term ("*prorated for summer as $1,500 for Summer A, or $1,500 for Summer B, or $3,000 for Summer C) is 12 credits for fall and spring, 8 credits for summer. Fellows whose stipends are less than $4,000 must register for at least 3 credits during fall and
Students on appointment are financially liable for excess credits beyond the required registration. If a student on appointment drops below the required registration at any time in the semester, the student becomes financially liable for the entire registration. Students who do not register properly are not permitted to remain on appointment.

**Full-time registration** is 9 to 12 credits. However, most fellows must be registered for 12 credits in fall or spring and 8 credits in summer. Students not on an appointment may want to enroll full time to finish their degrees in the minimum time frame or may be required to enroll full time by external funding agencies or their academic units.

Registration for fewer than 9 to 12 credits may be considered equivalent to full-time enrollment in specific circumstances, such as internships or fieldwork required for all students within the degree program, or lockstep programs (e.g., M.B.A.). On academic unit request, the Graduate School will certify specified students as full-time equivalent under the circumstances stated in the Graduate Council Policies Manual.

**Part-time registration:** Students not on an appointment and without a specific registration requirement by the academic unit, external funding agency, or government may register as a part-time student. Minimum registration is 3 credits in fall or spring and 2 credits in summer.

**Part-time registration and financial aid:** Graduate students should be aware that in order to qualify for most financial aid programs (federal, state, or institutional), students must be enrolled at least half time. For financial aid purposes, a grad student must be enrolled for five hours during fall or spring term, four hours during summer term. In addition, due to limited funds, priority is generally given to full-time students.

For more information: [http://www.sfs.ufl.edu/receivingenrollment-requirements](http://www.sfs.ufl.edu/receivingenrollment-requirements)

**Employee registration:** UF staff employed on a permanent, full-time basis may be permitted to waive fees up to a minimum of 6 credits per term on a space-available basis. Enrollment is limited to courses that do not increase direct costs to the University. Courses that increase direct costs can include TBA (to be arranged), computer courses, individualized courses, distance learning, internships, and dissertation and master's thesis courses. Laboratory courses are permitted on a space available basis.

For updated information: [http://www.hr.ufl.edu/](http://www.hr.ufl.edu/)

**Undergraduate registration in graduate courses:** Upper-division undergraduate students may enroll in 5000-level courses with consent of the instructor. Normally, a student must have a GPA of at least 3.00. To enroll in 6000-level courses, a student must have senior standing, consent of the instructor, and an upper-division GPA of at least 3.00.

After a student is accepted to graduate school, up to 15 credits of graduate-level courses earned with a letter grade of B or better taken under this provision may be applied toward a graduate degree at UF, if the credit for the course has not been used for an undergraduate degree, and if the transfer is approved by the academic unit and made as soon as the student is admitted to a graduate program.

**Final term registration:** During the term the final examination is given and during the term the degree is awarded, a student must be registered for at least 3 credits in fall or spring and 2 credits in summer. Thesis students must enroll in 6971 and doctoral students must enroll in 7980. Non-thesis students must enroll in course work that counts toward the graduate degree. Students on a fellowship, traineeship, or assistantship must be registered appropriately for their appointments.

**Clear prior:** Clearing prior status is only possible for thesis and dissertation students who have met all published deadlines for the current term except Final Submission and/or Final Clearance from the Graduate Editorial Office. No other students are eligible. Clear Prior permits students to be exempt from registration for the term in which the degree will be awarded. Although not required to register during the term of degree award, students are required to file a new degree application for that term within all published deadlines for doing so, as degree applications do not carry over from semester to semester and are essential for the degree to be awarded.

A student requesting to clear prior must meet ALL of the following criteria:

1. Student has successfully submitted a degree application for the current term within the published deadlines, as confirmed by print screen available from ISIS.
2. Student has appropriately satisfied the current term registration.
3. Student has successfully met the current term first submission deadlines for the thesis or dissertation, as confirmed by the Editorial Office, via a confirmation e-mail to the student and committee chair.
4. Student has successfully met all other degree and administrative requirements, within the published deadlines for the current term, except Final Submission and/or Final Clearance with the Graduate Editorial Office.
5. Student is in the process of finalizing the thesis or dissertation with the Graduate School Editorial Office. No other students are eligible.

**Drop/add:** Courses may be dropped or added during drop/add without penalty. This period usually lasts 5 UF business days in the fall and spring semesters or 2 business days for summer semesters, starting with the first day of the term. Classes that meet for the first time after drop/add may be dropped without academic penalty or fee liability by the end of the next business day after the first meeting. This does not apply to laboratory sections. After this period, a course may be dropped and a W appears on the transcript. Students become financially liable for any course added or dropped after the deadline, including students with tuition waivers. Prior to the last day of classes for each term, students should personally verify all registration changes and any required adjustments online on ISIS. Retroactive drop/add will not be permitted.

**Retaking courses:** Graduate students may repeat courses in which they earn failing grades. Grade points from both the initial failed attempt and the first attempt earning a grade of C or better are included in computing the grade point average. The student receives credit for the satisfactory attempt only.

**Tuition/Fee Waivers**

The appointment must be awarded through the UF payroll system. Each term a payment is received: 1) the appointment must conform with the published academic year appointment calendar dates, 2) an assistant or associate appointment must be a minimum of 25 FTE (quarter-time) but not more than 1.0 FTE (full-time), 3) a fellowship must pay a minimum of $4,000 per term (prorated for summer term at $1,500 for Summer A, $1,500 for Summer B, or $3,000 for Summer C).

These tuition waivers will apply toward the number of registration credits required for the appointment. Credits to which the tuition waiver applies must count toward the degree and may not include audited courses, correspondence work, DOCE courses, or courses designated as "self-funded" by the Registrar.

**Attendance Policies**

Students are responsible for meeting all academic objectives as defined by the instructor. Absences count from the first class meeting. In general, acceptable reasons for absences include illness, serious family emergencies, special curricular requirements, military obligation, severe weather conditions, religious holidays, and participation in official University activities. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) must be excused. Other reasons also may be approved.

Students may not attend classes unless they are registered officially or approved to audit with evidence of having paid audit fees. After the end of drop/add, the Office of the University Registrar provides official class rolls/addenda to instructors. Students who do not attend at least one of the first two class meetings of a course or laboratory in which they are registered and who have not contacted the academic unit to indicate their intent may be dropped from the course. Students must not assume that they will automatically be dropped if they fail to attend the first few days of class. The academic unit will notify students dropped from courses or laboratories by posting a notice in the academic unit office. Students may request reinstatement on a space-available basis if documented evidence is present. The University recognizes the right of the individual professor to make attendance mandatory. After due warning, professors may prohibit further attendance and then assign a failing grade for excessive absences. Students who have registration changes, at any time during the semester, should verify their registrations before the last day of class of the term. Retroactive drop/add or other registration changes will not be permitted.
Change of Graduate Degree Program

To change majors or degree level (same or different college), the academic unit must add the degree segment for graduate students via the Graduate Information Management System (GIMS). Only an authorized representative of the new academic unit and college can add the degree segment to a graduate student's record in GIMS. In order to do this, pull up the student's record in GIMS and click the green plus button that says "Add Degree Segment." A wizard-like interface will open up that will guide you through the adding segment process.

If the student is no longer pursuing a graduate degree program, an academic unit must drop the degree segment via GIMS. Only an authorized representative of the academic unit and college can drop the degree segment on a graduate student's record. In order to do this, pull up the student's record in GIMS and click the Drop Segment under the Actions icon of the degree segment. A pop-up smaller window will appear that will guide you through the dropping segment process.

Any changes to degree programs, including thesis/non-thesis/project option, MUST occur before the published midpoint deadline of the student's final term.

Courses and Credits

Undergraduate courses (1000-2999) may not be used to satisfy any graduate degree requirements. All 1000- and 2000-level courses may be taken on a satisfactory/unsatisfactory (SU) basis. S/U credits of undergraduate courses (3000-4999) outside the major may count when taken as part of an approved graduate program. Consult the Academic Unit before registering.

Courses numbered 5000 and above are limited to graduate students, with the exception described under Undergraduate Registration in Graduate Courses. Courses numbered 7000 and above are normally for advanced graduate students.

No more than 5 credits each of 6910 (Supervised Research) and 6940 (Supervised Teaching) may be taken by a graduate student at UF. Students who have taken 5 credits of 6910 cannot take 7910; the rule also applies to 6940 and 7940. Courses numbered 7979 and 7980 are not eligible to count toward a master-level degree program.

Audited courses at any level do not count toward any graduate degree requirements.

For a complete list of approved graduate courses, see the Programs Section of this catalog. Academic units decide which of these graduate courses to offer in a given term. Contact the academic unit for information on available courses.

Generally, graduate courses may not be repeated for credit. However, there is no limit on courses numbered 6971 (but the Graduate School will only count a maximum of 6 credits of 6971 toward a thesis master's-level degree), 6972, 6979, 7979, and 7980. Other courses repeated for credit indicate "trac" after the single term credit, as listed in the Programs Section of this catalog.

Professional course work: Graduate students may receive credit toward their degrees for courses in professional programs (e.g., J.D., D.V.M., or M.D.) when their advisers and graduate coordinators certify that the course work is appropriate for their programs and when the students receive permission from the academic units and colleges offering the courses. The courses must be letter-graded and earn a grade of B or better. However, the associated grades in these professional courses are not included in the calculations of the overall GPA, major GPA, or minor GPA. A list of UF professional courses for each student must be filed with Graduate Student Records (106 Grinnell) on or before the midpoint deadline within the intended term of degree award. Professional courses earned at other institutions must be approved by the Graduate School via the transfer credit process. In all cases, these credits are limited to a maximum of 9 credits toward the master's degree and 30 credits toward the doctorate.

Grades

Passing, Non-Punitive and Failing Grades: The Office of the University Registrar records student grades. The word "credit" refers to one semester hour, generally representing one hour per week of lecture or two or more hours per week of laboratory work.

The only passing grades for graduate students are A, A-, B, B+, B-, C+, C, and S. Grades of B-, C+, or C count toward a graduate degree if an equal number of credits in courses numbered 5000 or higher have been earned with grades of B+, A-, and A, respectively. Grade points are not given for S and U grades; S and U grades are not used to calculate grade point averages. All letter-graded courses eligible to count toward the graduate degree, except 1000- and 2000-level courses, are used to calculate the cumulative grade-point average. Letter grades of C-, D+, D, D- or E are not considered passing at the graduate level, although the grade points associated with these letter grades are included in grade point average calculations.

Satisfactory/Unsatisfactory: Grades of S and U are the only grades awarded in courses numbered 6910 (Supervised Research), 6940 (Supervised Teaching), 6971 (Research for Master's Thesis), 6972 (Engineer's Research), 7979 (Advanced Research), and 7980 (Research for Doctoral Dissertation). Additional courses for which S and U grades apply are noted in the academic unit offerings in the Programs Section of this catalog.

All language courses regardless of level may be taken S/U if the student's major is not a language and the courses are not used to satisfy a minor, with approval from the student's supervisory committee chair and the instructor of the course. S/U approval should be made by the published deadline date. All 1000- and 2000-level courses may be taken S/U. No other courses (graduate, undergraduate, or professional) may be taken for an S/U grade.

Deferred grade H: The grade of H is not a substitute for a grade of S, U, or I. Courses for which H grades are appropriate must be so noted in their catalog descriptions, and must be approved by the Graduate Curriculum Committee and the Graduate School. This grade may be used only in special situations where the expected unit of work may be developed over a period of time greater than a single term. All grades of H must be removed before a graduate degree can be awarded.

Incomplete grades: Grades of I (incomplete) received during the preceding term should be removed as soon as possible. Grades of I carry zero grade points and become punitive after 1 term. All grades of I must be removed or petitioned before a graduate degree can be awarded.

Grades and Grade Points Prior to Summer A 2009

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
<th>D-</th>
<th>E</th>
<th>WF</th>
<th>I</th>
<th>NG</th>
<th>S-U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>4.0</td>
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<td>3.0</td>
<td>2.5</td>
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<td>0</td>
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</table>

Grades and Grade Points Effective Summer A 2009

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<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
<th>D-</th>
<th>E</th>
<th>WF</th>
<th>I</th>
<th>NG</th>
<th>S-U</th>
</tr>
</thead>
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<tr>
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<td>3.33</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The degree-granting college may require a minimum grade of C in particular courses. GPA calculations are truncated (not rounded) and displayed on the transcript to the hundredths place.

Non-Punitive Grades and Symbols:

Zero Grade Points—Not Counted in GPA
W = Withdraw
U = Unsatisfactory
H = Deferred grade assigned only in approved sequential courses or correspondence study
N* = No grade reported
I = Incomplete

Failing Grades:
Zero Grade Points–Counted in GPA
E = Failure
WF = Withdraw failing
NG = No grade reported
I = Incomplete

Unsatisfactory Progress or Unsatisfactory Scholarship

Any graduate student may be denied further registration if progress toward completing the program becomes unsatisfactory to the academic unit, college, or Dean of the Graduate School. Unsatisfactory scholarship is defined as failure to maintain a B average (3.00) in all work attempted. Graduate students need an overall GPA of 3.00 truncated and a 3.00 truncated GPA in their major (and in the minor, if a minor is declared) at graduation. Students with less than a 3.00 GPA may not hold an assistantship or fellowship.

Foreign Language Examination

A foreign language examination is not required for all degree programs. For specific information on foreign language requirements, contact the graduate coordinator of your academic unit.

Examinations

The student must register for sufficient and appropriate graduate credits during the term any examination is taken. The student's supervisory committee is responsible for administering the written and oral qualifying examinations and the final oral examination for the defense of the thesis, project, or dissertation.

On rare occasion by virtue of scheduling conflicts beyond the control of the student, examinations may occur on days between terms (break period) with the approval of the supervisory committee. This approval does not, by any means, replace existing requirements to meet published registration and deadlines for degree certification in a particular term.

Qualifying Examinations and Final Examinations administered during a break period are only valid if the student was enrolled in at least one of the terms on either side of the break. The examination will always be associated with the term immediately preceding the break; provided the student was enrolled for that term. Otherwise, the examination will be associated with the term immediately following the break.

All members of the supervisory committee must sign the appropriate forms, including the Electronic Thesis and Dissertation (ETD) Signature Page, for the student to meet the requirements of the examination. The signed forms are to remain in the student's folder in the academic unit. Electronic information will be sent to the Graduate School via the Graduate Information Management System (GIMS) for the Final Exam Form and UF Publishing Agreement, once the student successfully defends. The signed ETD Signature Page should be held by the Academic Unit until all Committee stipulations have been met regarding the document, however, it should be posted electronically to GIMS no later than the Final Submission Deadline for the intended term of degree award.

The qualifying and comprehensive oral examinations and the oral defense of a thesis, project or dissertation may be conducted using video and/or telecommunications. It is required that the student and chair or co-chair must be in the same physical location. All other members may participate from remote sites via technological means.

Supervisory Committees or academic units may set their own standards for attendance at oral examinations that exceed the minimum requirement stated above.

Students are responsible for coordinating the scheduling of oral examinations with their committee or academic unit and must follow the policies set by their committee or academic unit, and the Graduate School.

The written comprehensive examination for the non-thesis master's degree may be taken at a remote site.

Preparation for Final Term

The student is responsible for meeting all requirements and observing every deadline. Deadlines are given in this catalog, in the Graduate Student Handbook, and online at the Graduate School website.

Thesis and Dissertation students: When the thesis or dissertation is ready to be put in final form for submission to the Graduate School, the student should review the Format Requirements of the Graduate School Editorial Office and should work with the Application Support Center to format the document in order to meet the minimum submission requirements of the Editorial Office. The Application Support Center offers students assistance with troubleshooting their documents free of charge. The Center also provides more extensive formatting and pdf-conversion services for reasonable fees to the student. It is highly recommended that all students writing theses and dissertations use their services, in order to alleviate some of the stress felt during the approval process.

All students: Students must submit a Degree Application on ISIS before the published deadline of the term and must meet minimum registration requirements. Degree Applications do not carry over from one semester to the next. If the degree is not awarded, the student must 1) request that his or her academic unit remove their name from the current term degree list 2) re-apply for the degree award via ISIS in a subsequent term, by the published deadline for that term; and 3) meet all other requirements for the term the degree will be awarded. These requirements also apply when a thesis or dissertation student has been approved to clear prior by the Graduate School Editorial Office.

Verification of Degree Candidate Status

This service is provided until 3 weeks before graduation. However, students who before that time have completed all requirements for the degree, filed the fully signed final examination report in GIMS and achieved final clearance of the thesis or dissertation, may request verification to that effect. Verification of Degree Candidate Status Request Forms are filled out by the candidate signed by the supervisory committee chair, department chair, college dean, and the Graduate School Editorial Office (224 HUB); then given to Graduate Student Records (106 Griner Hall), for verification and processing.

Although a student may have fulfilled academic requirements, the degree is not awarded until the Graduate School certifies the degree to the University Registrar. That is done at the end of fall, spring, and summer terms for all students who completed degree requirements and applied to graduate. Some employers and licensure boards require the degree statement on the transcript, which is available the day after certification in December, May, and August.

Awards of Degrees
The Graduate School authorizes a candidate to be awarded the degree appropriate to the course of study under the following conditions (see degree descriptions for details):

- The candidate must have completed all course requirements, including an internship or practicum if required, in the major and minor fields while observing time limits and limitations on transfer credit, on nonresident work, and on level of course work.
- The candidate's grade point averages must be at least B (3.00, truncated) in the major and overall (all courses eligible to count toward the graduate degree), including a minor where appropriate.
- All grades of I, H, and X must be resolved. Grades of I, X, C-, D+, D, D-, E, and U require a written petition from the Academic Unit to the Dean of the Graduate School.
- The candidate must have satisfactorily completed all required examinations (qualifying, comprehensive, and final) and be recommended for the degree by the supervisory committee, major academic unit, and college.
- The dissertation or thesis must have been approved by the supervisory committee and accepted by the Graduate School. Projects must be approved by the academic unit, which then certifies completion to the Graduate School.
- Recommendations for awarding a degree include meeting all academic and professional qualifications as judged by the faculty of the appropriate academic unit.
- All requirements for the degree must be met while the candidate is a registered graduate student. Degrees are certified 3 times per year: December, May, and August.

Attendance at Commencement

Graduates who are to receive advanced degrees are urged to attend Commencement to accept in person the honor indicated by the appropriate hood. Through the University Bookstore, the student may arrange to rent or buy the proper academic attire to be worn at Commencement.

Financial Information

The information in this catalog is current as of July 2014. Please contact individual programs for any additional information or changes.

Fees

Application Fee

An individual who applies for admission to the University of Florida shall pay a non-refundable application fee of $30.00. While personal checks are accepted, the preferred method of payment is an online MasterCard, Visa, or American Express credit card payment, which can be transmitted electronically on ISIS, the university's secure web site. Please note that if paying by credit card, a $1.75 service fee will automatically be added to the $30 fee, so the total application fee is $31.75.

Registration and Tuition Fees Liability

Pursuant to Section UF-3.037(1) Regulations of the University of Florida, registration shall be defined as consisting of two components: a) formal enrollment in one or more credit courses approved and scheduled by the university; and b) fee payment or other appropriate arrangements for fee payment (deferment or third-party billing) for the courses in which the student is enrolled as of the end of drop/add date.

Registration must be completed on or before the date specified in the university calendar. Students are not authorized to attend class unless they are on the class roll or have been approved to audit. Unauthorized class attendance will result in tuition fee liability.

In addition to the matriculating term, a student must be registered during the terms of the qualifying examination and the final examination, and during the term the degree is awarded.

Tuition Fee Liability – Pursuant to Section UF-3.037(2) Regulations of the University of Florida, a student is liable for all tuition fees associated with all courses for which the student is registered, at the end of the drop/add period or for which the student attends after that deadline. The fee payment deadline is 3:30 p.m., on the second Friday after classes begin.

Assessment of Tuition Fees

Pursuant to Section UF-3.0375 Regulations of the University of Florida, tuition shall be assessed on residency, first enrolled term of the current degree, course level and degree program. In some instances, tuition waivers accompanying assistantships or fellowships include only the matriculation fee and where applicable the non-resident fee. All other fees must be paid by the student.

To estimate your tuition fees and determine your student status, visit the University Bursar website.

Students can pay their own tuition fees on the secure myUFL portal: my.ufl.edu. Login then select Main Menu > My Campus Finances > Make a Payment.

To estimate your tuition fees and determine your student status, visit the University Bursar website.

Lack of written notification of the tuition fee debt does not negate the student's responsibility to pay by the published fee payment deadline.

University personnel will not be held accountable for assessment or accuracy of calculations.

For purposes of discussion, the word term refers to the fall semester, the spring semester and any of the summer semesters. Definitions of first enrolled term of the current degree program are as follows: (UF-3.0375 Regulations of the University of Florida):

Fall 2014 Tuition Fee Criteria

- A first-time admitted and enrolled degree-seeking student registered for Fall 2014, Spring 2015 or Summer 2015 term.
- A UFL graduate admitted to a new degree program or upon the student's admission or readmission to a degree program requiring a new application for Fall 2014, Spring 2015 or Summer 2015 term.
- A former student who is readmitted for Fall 2014, Spring 2015 or Summer 2015 term after an absence of two or more consecutive terms, excluding military withdrawals.
- A non-degree seeking student.
**Fall 2013 Tuition Fee Criteria**

- A first-time admitted and enrolled degree-seeking student registered for Fall 2013, Spring 2014 or Summer 2014 term.
- A UF graduate admitted to a new degree program for Fall 2013, Spring 2014 or Summer 2014 term.
- A former student who is readmitted for Fall 2013, Spring 2014 or Summer 2014 term after an absence of two or more consecutive terms, excluding military withdrawals.

**Fall 2012 Tuition Fee Criteria**

- A first-time admitted and enrolled degree-seeking student registered for Fall 2012, Spring 2013 or Summer 2013 term.
- A UF graduate admitted to a new degree program for Fall 2012, Spring 2013 or Summer 2013 term.
- A former student who is readmitted for Fall 2012, Spring 2013 or Summer 2013 term after an absence of two or more consecutive terms.

**Fall 2011 Tuition Fee Criteria**

- A first-time admitted and enrolled degree-seeking student registered for Fall 2011, Spring 2012 or Summer 2012 term.
- A UF graduate admitted to a new degree program for Fall 2011, Spring 2012 or Summer 2012 term.
- A former student who is readmitted for Fall 2011, Spring 2012 or Summer 2012 term after an absence of two or more consecutive terms.

**Fall 2010 and Prior Term Tuition Fee Criteria: Refer to UF-3.0375 Regulations of the University of Florida.**

**Assessment of Student Fees**

**Activity and Service Fee** (UF-3.3072 Regulations of the University of Florida) - All students must pay an activity and service fee that is assessed on a per credit hour basis and is included in the basic rate per credit hour.

**Athletic Fee** (UF-3.3072 Regulations of the University of Florida) - All students must pay an athletic fee that is assessed on a per credit hour basis and is included in the basic rate per credit hour. Graduate research and teaching assistants enrolled for eight (8) or more credit hours during the fall or spring semesters and all other students enrolled for nine (9) or more credits can purchase athletic tickets at the student rate.

**Health Fee** (UF-3.3072 Regulations of the University of Florida) - All students must pay a health fee that is assessed on a per credit hour basis and is included in the basic rate per credit hour. The health fee maintains the university's Student Health Care Center and is not part of any health insurance a student may purchase.

**Technology Fee** (UF-3.3075 Regulations of the University of Florida) - All students must pay a technology fee that is assessed on a per credit hour basis and is included in the basic rate per credit hour.

**Transportation Access Fee** (UF-3.3072 Regulations of the University of Florida) - All students must pay a transportation access fee that is assessed on a per credit hour basis and is included in the basic rate per credit hour.

**Material and supply fee** (UF-3.3074 Regulations of the University of Florida) - Material and supply fees are assessed for certain courses to offset the cost of materials or supply items consumed in the course of instruction. Material and supply fee information is available from the academic departments or from the course schedule.

**Audit Fee** (UF-3.0376(18) Regulations of the University of Florida): Tuition is assessed at the applicable resident or non-resident per credit hour cost as set forth in Regulation UF-3.0375.

**Diploma Replacement Fee** (UF-3.0376(13) Regulations of the University of Florida): Each diploma ordered after a student's initial degree application can result in a diploma replacement charge not to exceed $10.

**Transcript Fee** (UF-3.0376(12) Regulations of the University of Florida): An official transcript for current undergraduate, graduate and professional students can be purchased for a fee of $6. Cost for a non-enrolled student and a student who has not been registered at the university for two or more terms is $12. The university releases only complete academic records.

**Registration for Zero Hours** (UF-3.0376(17) Regulations of the University of Florida): The student is assessed the applicable resident or non-resident cost as set forth in Rule 6C1-3.0375, for one credit hour.

**Off-campus Educational Activities** (UF-3.3076(19) Regulations of the University of Florida): The president of the University of Florida or the president's designee will establish fees for off-campus course offerings when the location results in specific identifiable increased costs to the university. These fees will be in addition to the regular tuition fees charged to students enrolling in these courses on campus. The additional fees charged are for the purpose of recovering the increased costs resulting from off-campus vs. on-campus offerings. As used herein, off-campus refers to locations other than regular main campus, branch campuses and centers.

**Library processing fee**: Students pay $12.80 in their final term for the administrative costs of processing the thesis or dissertation through the UF Libraries. This fee will appear and is payable on the student account on my.ufl.edu only after making first submission of their thesis or dissertation to the Graduate School Editorial Office.

**Architecture project students** should contact their department regarding the project option fee and how this fee will be processed.

**Microfilm fee**: Dissertations must pay a $25.00 microfilm fee for ProQuest/UMI for archiving and publication services. This fee will appear and is payable on the student account on my.ufl.edu only after making first submission to the Graduate School Editorial Office.

**Payment of Tuition Fees**

Tuition fees are payable on the dates listed in the academic calendar. Deadlines are enforced. Tuition fee payments are processed by University Bursar. Payments sent via U.S. mail must be received in the university cashier's office by the established fee payment deadline. The deadline date is a receipt date, not a postmark date.

According to university policy, university cashiers will accept checks only for the amount due in payment of tuition fees, accounts receivable such as laser print, parking decals, library fines, loans and other student debts. International checks from other countries must be payable through a United States bank in U.S. dollars. The university can refuse two-party checks, altered checks and checks that will not photocopy. The university does not have the authority to waive late payment fees unless extraordinary circumstances warrant such a waiver or the university is primarily responsible for the delinquency.

Online payment navigation for tuition fees and other charges can be made via the my.ufl.edu portal by selecting Main Menu > My Campus Finances > Make-a-Payment.

Students making payments with a mobile device should access my.ufl.edu and then select Make a Payment.

Payment options on my.ufl.edu:
Electronic checks: there is no service charge for the electronic check payments.

Credit cards: MasterCard, Discover, American Express, or Visa will include a 2.6 percent service charge for tuition fees and accounts receivable charges (e.g., laser print, library fines, parking decals, etc.).

International wire transfer: The International Payment option, which is a wire transfer, provides a competitive rate of exchange for many international currencies.

In-person payments: Check, money order, or cashier's check. International paper checks or demand drafts must be drawn on a U.S. bank in U.S. dollars and amounts cannot be greater than the amount due. Any payment that is more than the amount due will not be refunded and automatically will be applied to a future debt.

Cash and debit cards are not payment options.

Returned Payments

Returned checks or paper checks will be charged a service fee of $25 if the returned payment is less than $50; $30 if the returned payment is $50.01 - $299.99 and $40 if the returned payment is $300 or more. Payments for returned electronic check payments returned paper checks, and the returned service fee must be paid by money order or cashier's check.

A $10 service fee will be charged if the bank information provided for the electronic check payment is inaccurate for electronic funds transfer. Payment for this type of return does not require a money order or a cashier's check.

All financial obligations to the University will be applied on the basis of the age of the debt. The oldest debt will be paid first.

All charges noted in this catalog may be subject to change without notice.

Late Registration/Late Payment Fees

Late Registration Fee (UF-3.037(3) Regulations of the University of Florida): Any student who fails to register prior to the late registration date published in the academic calendar will be subject to the late registration fee of $100.

Late Payment Fee (UF-3.037(4) Regulations of the University of Florida): Any student who fails to pay all tuition fees due or to make appropriate arrangements for tuition fee payment (deferment or third party billing) by the tuition fee-payment deadline published in the academic calendar will be subject to the $100 late payment fee.

Waiver of Late Fees: A student who believes that a late fee should not be assessed because of university error or extraordinary circumstances that prevented all conceivable means of compliance by the deadline may petition for a waiver. Late registration - Office of the University Registrar; Late payment fee - University Bursar. The university reserves the right to require documentation to substantiate these circumstances.

Deadlines are enforced. The University does not have the authority to waive late payment fees unless extraordinary circumstances warrant such waiver or the University is primarily responsible for the delinquency.

Deferments/Waivers

Deferment of Tuition Fees: Deferment of tuition fees extends the payment deadline for a specific term. A tuition fee deferment is granted based on information from Student Financial Affairs (financial aid deferments), the Office of the University Registrar (veterans), or HR Academic Personnel/Provost (graduate students with an active letter of appointment-LOA). Refer questions on eligibility to the appropriate office.

Waiver of Tuition Fees

Graduate and Fellowship Waivers: Departments may provide Letters of Appointment (LOA) and tuition waivers to teaching, research, graduate assistants, and fellowship students. Contact your department personnel with questions on these waivers.


State of Florida Waiver Eligibility: As provided by State of Florida Statutes; http://www.leg.state.fl.us/statutes; 1009.26 and UF Regulations; http://regulations.ufl.edu/.

The non-Florida student financial aid fee may not be waived for students receiving an out-of-state fee waiver.

Nonpayment of Tuition Fees (UF-3.037 Regulations of the University of Florida) - The university shall temporarily suspend further academic progress of any student who has not satisfied the entire balance of his/her fee liability by the established deadlines. This will be accomplished by placing a financial hold on the student's record, which will prevent the student from receiving grades, transcripts and/or diploma, and the student's registration will be denied for future terms until the account has been satisfied.

Students who have not paid any portion of their tuition fee liability by the established university payment deadline will continue to be held fee liable for these courses, but will not be allowed to attend these courses until payment is made in full and the student has been re-registered.

To re-register for courses, students must submit a completed petition to the Office of the University Registrar for review by the University Student Petitions Committee. Students who re-register after being withdrawn for nonpayment of tuition fees will be subject to both late registration and late payment fees.

Refund of Tuition Fees

The following may constitute a tuition refund:

- Credit hours dropped during drop/add.
- Courses cancelled by the university.
- Call to active military duty.
- Death of the student or member of the immediate family (parent, spouse, child, sibling).
- Illness of the student of such severity or duration, as confirmed in writing by a physician, that completion of the semester is precluded.
- Exceptional circumstances, upon approval of the university president or his designee.

A refund of 25% of the total fees paid (less late fees) is available for withdrawal of enrollment from the university prior to the established deadlines listed in the academic calendar.

Refunds are issued by University Bursar and will be applied against any university debts. The university reserves the right to set minimum amounts for which refunds will be produced for overpayments on student accounts.

Tuition overpayments due to cancellation, withdrawal or termination of attendance for students receiving financial aid will first be refunded to the appropriate financial aid programs. If the student is a recipient of federal financial aid, federal rules require that any unearned portion of the federal aid must be returned to the U.S. Department of Education.
The amount the student has earned is based on the number of days the student attended classes as compared to the number of days in the entire term (first day of classes to the end of finals week). Any remaining overpayment then will be returned according to university policy.

**Direct Deposit Requirement**: Due to the university's continuing support for sustainable practices, as well as the costs associated with producing, mailing, and tracking undelivered checks, direct deposit is now required for the delivery of refunds, whether financial aid or student overpayments. This electronic method will deposit any overpayments to the student's checking account. Students must give authorization their my.ufl.edu, select Main Menu, My Campus Finance, then Direct Deposit - Student or PLUS to have overpayments electronically credited to a U.S. bank or other U.S. financial institution checking account.

**General Fiscal Information**

Students can pay online at my.ufl.edu the exact amount of tuition fees and/or other amounts owed the university. The online payment system at my.ufl.edu accepts the following payment methods: American Express, MasterCard, Discover, or Visa credit cards and electronic checks from checking and international payments via wire transfers. Students making payments with a mobile device should access: myufl.edu and then select Make a Payment. Students can pay at the University Bursar office with personal checks, cashier's checks and money orders, which can be placed in the 24-hour drop box located outside 113 Criser Hall. Payments on all financial obligations to the university will be applied on the basis of age of the debt. The oldest debt will be paid first.

University Bursar is not able to accept cash or debit card payments and does not cash checks or make cash refunds.

It is the student's responsibility to maintain a correct current address in the UF directory.

**Address changes should be made online at my.ufl.edu** from the Main Menu > My Campus Finance > Student Center.

**Past-Due Student Accounts** – All student accounts are payable at the University Bursar office or on my.ufl.edu at the time such charges are incurred. Graduating students with outstanding financial obligations will have a hold placed on their records withholding release of a diploma, transcript and other university services until the debt is satisfied.

University regulations prohibit the following for any student whose account with the university is delinquent until the debt has been satisfied:

- Registration  
- Release of transcript, diploma, grades or schedules  
- Loans  
- The use of UF facilities and/or services  
- Admission to UF functions and athletic events

Delinquent accounts, including those debts for which the student's records have a financial hold, may require payment by cashier's check or money order.

Delinquent debts may be placed with a billing agent, reported to a credit bureau and referred to collection agencies without further notice or litigation, at which time additional collection costs will be assessed in accordance with UF-3.0376(20) Regulations of the University of Florida. All payments received are applied to the oldest debt first.

**Financial Aid**

_The information in this catalog is current as of July 2014. Please contact individual programs for any additional information or changes._

**Graduate Assistantships and Fellowships**

**University-wide Fellowships**

Graduate School Fellowships  
Grinter Fellowship  
Title VI-Foreign Language and Area Studies Fellowships  
Veterans Administration & Social Security Administration Benefits Information  
External Fellowships for Graduate Students

**Office of Graduate Minority Program Student Support**

Graduate School Support Programs  
Office of Graduate Minority Program (OGMP) Student Support

**Dissertation Completion Assistance**

**Office for Student Financial Affairs**

Loans  
Part-time Employment

**Academic Progress Policy for Financial Aid Recipients**

**Graduate Assistantships and Fellowships**

Graduate Assistantships are available through individual academic units. Stipend rates paid are determined by the employing academic unit. Interested students should ask their academic unit office about the availability of assistantships and the procedure for applying. Early inquiry is essential to be assured of meeting application deadlines. Appointments are made on the recommendation of the academic unit chair, subject to admission to the Graduate School and to the approval of the Dean of the Graduate School. Initial appointment requires clear evidence of superior ability and promise. Reappointment to assistantships requires evidence of continued good scholarship.

For full appointments, apply to the appropriate academic unit chair, on or before February 15th of each year, unless otherwise specified. Deadlines for appointments for other terms are determined by the employing unit.

Fellows, trainees, and graduate assistants must pay appropriate tuition and fees. Fellows receiving stipends of $4,000 or greater per term (prorated for summer) are expected to devote full time to their studies. Students who accept fellowships and traineeship are required to register appropriately. Trainees are also expected to devote full time to their studies. Graduate assistants have part-time teaching or research duties; they are required to register for reduced credit loads, according to the schedule for their appointment. Students on appointment are financially liable for excess credits beyond the required registrations. _If a student on appointment drops below the required registration at any time in the semester, the student becomes financially_
Graduate School Fellowship Program

The Graduate School Fellowship program (GSF) represents the most prestigious graduate student award available at the University. Funded at nationally competitive levels, these highly desirable awards support students in all programs and departments of the University, awarding a Ph.D. or MFA.

To ensure that Graduate School Fellows receive every opportunity to succeed, the GSF will provide four years of support through a nationally competitive stipend and tuition waiver for qualifying new students in Ph.D. programs. The awards are for three years for students in MFA programs. Students may be appointed as Graduate Assistants, Research Assistants, Teaching Assistants, or Fellows.

The University expects Graduate School Fellows to demonstrate high standards of academic achievement and active participation in university life. Applicants for the GSF apply through the departments or programs of their major field of study. Successful applicants will have outstanding undergraduate preparation, a strong commitment to their field of study, and demonstrated potential in research and creative activities. For more information on the fellowships available, please contact the graduate coordinator for the degree program of interest.

Grinter Fellowship

Named in honor of Dr. Linton E. Grinter, Dean of the Graduate School from 1952 to 1969, this fellowship helps recruit truly exceptional graduate students. Currently enrolled graduate students are not eligible; except when entering a Ph.D. (or other terminal degree) program. Stipends range from $2000 to $4000 per year for up to three years. Continuing the Grinter Fellowship beyond the first year depends on satisfactory student progress. Students in the Colleges of Engineering and Law are not eligible.

For details, contact the appropriate major academic unit.

Title VI: Foreign Language and Area Studies Fellowship

Title VI fellowships are available to graduate students whose academic programs are Latin America, Africa, or Europe oriented.

Applicants must be U.S. citizens or permanent residents and must be registered for a full-time course load including a language relevant to the area of their choice: specifically, Portuguese or Haitian Creole for recipients through the Center for Latin American Studies; Akan, Amharic, Arabic, Swahili, Wolof, Yoruba, Zulu or other African languages for which appropriate instruction can be arranged, for recipients through the Center for African Studies; and Czeck, Greek (modern), Hungarian, Italian, Polish, Portuguese, Russian, Turkish, or other lesser and least commonly taught European languages for which appropriate instruction can be arranged, for recipients through the Center for European Studies. The fellowships provide a $15,000 stipend for the academic year and $2,500 for the summer plus payment of all tuition and fees up to 12 credits. Academic year and summer fellowship programs have separate application processes.

For more information, contact:
Center for Latin American Studies (319 Grinter Hall, http://www.latan.ufl.edu);
Center for African Studies (427 Grinter Hall, http://www.africa.ufl.edu); or

Veterans Administration and Social Security Administration Benefits Information

Veterans Benefits

For information regarding veteran education benefits please visit the UF Office of Veterans Affairs.

For further GI Bill information, please visit veterans.ufl.edu.

Social Security Benefits

For information regarding Social Security benefits please visit the Social Security Administration. The Office of the University Registrar will complete enrollment certificates issued by the Social Security Administration for students eligible to receive educational benefits. A full-time graduate load is nine hours.

External Fellowships for Graduate Students

For information on external fellowships, small grants, and other funding opportunities:
http://research.ufl.edu/faculty-and-staff/funding-finding/external-funding-opportunity-resources.html

The COS/Pivot Funding Opportunities database and the GrantForward Database are keyword searchable and highly recommended as information resources http://guides.uflib.ufl.edu/content.php?pid=215478&sid=1953084.

The Graduate School posts information concerning external funding opportunities at http://research.ufl.edu/faculty-and-staff/funding-finding/financial-aid-bulletin-board

Office of Graduate Minority Program (OGMP) Student Support

The following fellowships and programs are administered by the Graduate School's Office of Graduate Minority Programs (OGMP) http://www.graduateschool.ufl.edu/student-life-and-support/diversity-programs

Florida Board of Education (BOE) Summer Program: BOE is held during Summer B and is an orientation program for ethnically diverse students, first-generation college students, students from a low socio-economic background, and students who are underrepresented in various academic disciplines. This program provides opportunities for newly admitted PhD students to build support networks and become acclimated to UF and the Gainesville community. Participants receive a $1,500 stipend and payment of 4 credits for Summer B. All participants must be registered as full-time students for the next academic year. U.S. citizens and permanent residents who meet criteria for eligibility and who have been admitted to a UF graduate program are invited to apply online at: http://www.graduateschool.ufl.edu/finances-and-funding/florida-boe-summer-fellowship-program
Florida A&M University (FAMU) Feeder Program: UF is 1 of 47 universities in the FAMU Feeder Program aimed at increasing the number of FAMU students in graduate programs. FAMU nominates students with at least a 3.0 GPA to participating feeder institutions for admission into their graduate programs. OGMP is UF’s main contact for the feeder program. UF offers five fellowships every year to qualified FAMU Feeder students who have been admitted to a PhD program. Each fellow receives a $12,000 annual stipend, in-state tuition and health insurance for up to three years. For information please visit: http://www.graduateschool.ufl.edu/finances-and-funding/famu-feeder-program

McKnight Doctoral Fellowship Program: The Florida Education Fund (FEF) awards McKnight Doctoral Fellowships (MDF) to African American and Hispanic students who are U.S. citizens and newly admitted into PhD programs at Florida institutions. However, students must submit an application for the McKnight Doctoral Fellowship to FEF by January 15. Awardees are then selected from those students who are newly admitted to PhD programs and who have submitted a complete application to FEF. The Fellowship provides a $12,000 annual stipend, in-state tuition, fees, and health insurance for up to 5 years, provided there is satisfactory progress toward completing the degree. To apply for the McKnight Doctoral Fellowship, students should contact FEF for applications and more information and visit the MDF website: http://www.fefonline.org/mdf.html

Application deadline: January 15
Florida Education Fund
201 East Kennedy Blvd.
Suite 1525
Tampa, FL 33602
Phone (813) 272-2727

University of Florida/Santa Fe College Faculty Development Project: This partnership initiative allows UF doctoral students to teach as adjunct professors at Santa Fe College. Participants who teach 3 courses per year at SFC and help SFC recruit and retain minority students, are appointed on an annual basis. The program provides a $12,000 stipend for 9 months, in-state tuition, fees and health insurance for fall and spring semesters. Students are selected for participation based on the academic and personnel needs of Santa Fe College Faculty Development Project applicants must be U.S. citizens, from a minority or underrepresented group, and hold a master's degree or 18 credit hours of graduate level credit in one of the approved disciplines. For additional information: http://www.graduateschool.ufl.edu/finances-and-funding/sfcc-development-project

National Consortium for Graduate Degrees for Minorities in Engineering and Sciences, Inc. (GEM) Fellowship: This fellowship program supports African American, Native American, and Hispanic students in pursuing the Master of Science degree in engineering and the Doctor of Philosophy degree in engineering and science disciplines. The GEM Fellowship Program provides funding for under-represented minority students at the master's and PhD level through fellowships and paid summer internships. The GEM Consortium assists in the matching of industry to the students for the paid internship. Students matched for a paid internship are eligible to receive a stipend for both master's and doctoral fellowship recipients. Each M.S. applicant must be a junior, senior, or graduate of an engineering program with at least a 2.8 GPA. Each PhD applicant must be a junior, senior, or graduate of an engineering program with at least a 3.0 GPA. For additional information: http://www.gemfellowship.org or call (703) 562-3646

Delores Auzenne Dissertation Award: The Delores Auzenne Dissertation Award is a competitively awarded program for underrepresented PhD students in the advanced writing stages of their dissertation. Applicants may not receive a fellowship, assistantship, or other funding with this award. The award provides half year (one 6-week summer semester plus one full-length semester) of support, which includes in-state tuition assistance of up to 3 hours of in-state dissertation credit hours, and up to $11,000 stipend. This award does not provide health insurance coverage. Recipients may only receive the award once. The application deadline is in mid-April. Students must adhere to the following application guidelines to qualify for full consideration: Awarded will be expected to participate in at least 2 Professional Development Programs organized by the Graduate School, and provide regular updates of their writing progress. For more information: http://www.graduateschool.ufl.edu/finances-and-funding/delores-auzenne-dissertation-award

Ronald E. McNair Graduate Assistantship Program: UF provides a limited number of one-year research assistantships for newly enrolled McNair scholars who are entering a PhD program. It provides a stipend of $12,000, in-state tuition, fees, and health insurance. It assists students who have successfully completed the McNair Post-Baccalaureate Achievement Program as undergraduates. The student will be appointed and perform research assistant duties under faculty supervision. Since this program is intended to increase enrollment in PhD programs, currently enrolled doctoral students are not eligible. Interested students who meet the eligibility requirements are invited to apply. For more information and application: http://www.graduateschool.ufl.edu/finances-and-funding/mcnair-graduate-assistantships

Bridge to the Doctorate Fellowship: The Bridge to the Doctorate (BD) Grant was awarded to UF by the National Science Foundation through the Florida-Georgia Louis Stokes Alliance for Minority Participation (FG-LSAMP) to enhance recruitment and retention of underrepresented minority students in Science, Technology, Engineering and Mathematics (STEM) disciplines. The BD provides stipends of $30,000 per year for the first two years of doctoral studies for former LSAMP students who are entering PhD programs after completing baccalaureate degrees. In addition, the grant provides funding for those two years for each BD student's cost of education (in-state tuition, fees and health insurance). The grants are awarded to institutions in two-year cycles.

Campus Visitation Program (CVP): This program invites prospective students who are underrepresented in graduate studies to visit the University of Florida campus. During the visitation, participants learn more about UF's graduate programs and meet with administrators, faculty members, and current graduate students. CVP is held for 2 days during fall and spring semesters. OGMP provides housing and some meals. Participants are reimbursed for a portion of their travel expenses. Students must meet the minimum UF requirements of an undergraduate GPA (3.0), must have taken the graduate entrance examination (GRE, GMAT, etc.), and must have applied to the Graduate School to be considered for acceptance. Program applicants must be U.S. citizens or permanent residents. For more information: http://graduateschool.ufl.edu/admission/campus-visitation-program

Please note: The UF Office of Graduate Minority Programs is not involved in processing applications or making admissions decisions. The student’s academic unit is the primary contact for both. For questions about the online application process, please contact the UF Office of Admissions directly through the “Contact Us” link at the bottom of that webpage.

For additional information you may contact the OGMP office at
115 Grinter
P.O. Box 115500
Gainesville, FL 32611
Phone: (352) 392-6444, (800) 753-9798
E-mail: ogmp@ufl.edu

Professional Development Workshops: During the academic year, the Office of Graduate Minority Programs plans monthly professional development workshops on topics related to graduate student and professional development success (getting your work published, financial management, choosing a mentor, etc.). These workshops are free and open to all UF students.

For dates: http://www.graduateschool.ufl.edu/student-life-and-support/professional-development

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115 Grinter
P.O. Box 115500
Gainesville, FL 32611
Phone: (352) 392-6444, (800) 753-9798
E-mail: ogmp@ufl.edu

University of Florida » 2014-2015 Graduate Catalog
Phone: (352) 392-6444, (800) 753-9798
Gainesville, FL 32611
115 Grinter
http://www.graduateschool.ufl.edu/student-life-and-support/professional-development

For dates:
http://www.graduateschool.ufl.edu/finances-and-funding/delores-auzenne-dissertation-award
http://www.graduateschool.ufl.edu/finances-and-funding/uf-sfcc-development-project
http://www.graduateschool.ufl.edu/finances-and-funding/mcnair-graduate-assistantships

ogmp@ufl.edu

http://www.graduateschool.ufl.edu/finances-and-funding/delores-auzenne-dissertation-award
http://www.fefonline.org/mdf.html
http://graduateschool.ufl.edu/admission/campus-visitation-program
http://www.fefonline.org/mdf.html
http://www.fefonline.org/mdf.html

ogmp@ufl.edu

Dissertation Completion Assistance

Graduate School Dissertation Awards: The Graduate School Dissertation Award is a competitive award to provide final term funding for UF PhD candidates in selected majors in the humanities, arts, and social sciences to complete their dissertations through defense, final clearance by the Editorial Office, and graduation. This program is for students who have exhausted all funding and need to allow recipients time and resources to focus exclusively on completing their dissertation by the end of the award period.

The program provides a stipend for approximately 4-6 months. The award period begins 1) Summer B + Fall, 2) Fall, 3) Spring, or 4) Spring + Summer A. Up to 5 credits of tuition at the in-state rate will be provided, depending on the award period. Students are expected to graduate at the end of the award period. Applicants may not receive a fellowship, assistantship, or other funding with this award.

The application and deadlines are posted on the website [http://www.graduateschool.ufl.edu/finances-and-funding/dissertation-award](http://www.graduateschool.ufl.edu/finances-and-funding/dissertation-award)

Application submission deadlines for 2012-13:
November 2, 2012 for Spring, or Spring + Summer A
May 17, 2013 for Summer B + Fall, or Fall

Graduate School Doctoral Research Travel Awards: The Graduate School Doctoral Research Travel Award provides support for research-related travel expenses for UF PhD students in the humanities, arts, and social sciences. This program is for students who have inadequate departmental funding to effectively conduct doctoral dissertation research away from UF.

Students selected for the Graduate School Doctoral Research Travel Award can receive up to $5,000 for doctoral research-related travel for one semester—Fall Semester, Spring Semester, or Summer Semester C. A limited number of awards will be available each semester, depending on the level of available funding. This award is limited to travel and expenses to conduct the research. Students must be registered appropriately. It does not include coverage for tuition, fees, or health insurance. Nor does it include costs associated with attending research conferences or non-travel, direct research costs. A student may receive this award only one time. The research travel must start in the semester the award is given. Funds must be expended in the award semester and by the end of the following semester. A final 1-2 page summary report, including expenses, must be received by the Graduate School no later than the end of the second semester.

Applicants must be UF PhD students in good standing in the humanities, arts, and social sciences. They must have completed all academic coursework, and be actively engaged in their dissertation research. They must have a demonstrated need for travel funds in order to conduct their dissertation research, and their research travel must have the full support and endorsement of their research advisors or doctoral dissertation chairs.

For more information and application process and deadlines, see website [http://www.graduateschool.ufl.edu/finances-and-funding/doctoral-research-travel](http://www.graduateschool.ufl.edu/finances-and-funding/doctoral-research-travel)

Application submission deadlines for 2012-13:
November 2, 2012 for Spring 2013 award
March 29, 2013 for Summer C 2013 award
May 17, 2013 for Fall 2013 award.

Office for Student Financial Affairs

Financial aid is available to qualified graduate students through the Office for Student Financial Affairs (SFA) in S107 Criser Hall, mainly through work or loan programs.

Applying for financial aid at UF, including loans, begins with the FAFSA, the Free Application for Federal Student Aid. Apply on or soon after January 1. Students whose financial aid files are complete by the March 15 "On-Time" application deadline are automatically considered for the most, and best aid.

Complete your application several weeks earlier than the March 15 deadline to ensure that UF has time to process the results of your FAFSA.

Applicants must be UF PhD students in good standing in the humanities, arts, and social sciences. They must have completed all academic coursework, and be actively engaged in their dissertation research. They must have a demonstrated need for travel funds in order to conduct their dissertation research, and their research travel must have the full support and endorsement of their research advisors or doctoral dissertation chairs.

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Complete your application several weeks earlier than the March 15 deadline to ensure that UF has time to process the results of your FAFSA.

Applicants should not forget to reapply each year. Financial aid is not renewed automatically.

Although you must be accepted for enrollment at UF before you receive financial aid, you should apply for aid before being admitted.

Loans

UF primarily offers student loans through the Federal Direct Loan Program, but there are a number of other loan programs available at UF, including UF Long Term Loans, UF Short Term Loans, and Alternative Loans. These programs offer long-term, low-interest loans. Your eligibility will be determined based on your classification, cost of attendance, and a number of other factors.

Short-term loans: UF has an emergency short-term loan program to help students meet temporary financial needs related to educational expenses. Graduate students may borrow up to $1,000 or the amount of in-state tuition if they have an acceptable repayment source. Interest is 1% per month and these loans must be repaid by the first day of the last month in the term the money is borrowed. Processing takes about 48 hours. For applications, visit SFA in S107 Criser Hall.

For more information regarding specific loan programs, please visit SFA's loan page at [http://www.sfa.ufl.edu/programs/loans](http://www.sfa.ufl.edu/programs/loans).

Part-Time Employment

UF offers part-time student jobs through three employment programs: Federal Work-Study jobs, including the Federal Community Service component; Other Personnel Services (OPS); and off-campus jobs.

Federal Work-Study jobs are based on financial need. To apply for Federal Work-Study jobs, students must complete a FAFSA. OPS jobs are not based on financial need.

To search and apply for on-campus jobs, including all Federal Work-Study (FWS), Federal Community Service, and OPS positions, go to GatorJobs. Choose "Search Postings." For "Job Category," choose "Student."

Search for off-campus jobs through the Career Resource Center website, [http://www.crc.ufl.edu](http://www.crc.ufl.edu), using your Gator CareerLink Account.

For more information and how to apply:
Academic Progress Policy for Financial Aid Recipients

Students receiving financial aid must be making satisfactory academic progress under UF’s published standards. UF's financial aid academic progress policy is available on the Office for Student Financial Affairs (SFA) website at http://www.sfa.ufl.edu/additional/academic-progress.

Research and Teaching Services

The information in this catalog is current as of July 2014. Please contact individual programs for any additional information or changes.

Art Galleries
Biological Sciences
Clinical and Translational Science
Computer Facilities
Electronic Delivery of Graduate Engineering (EDGE)
Engineering Research
Florida Agricultural Experiment Station
Florida Museum of Natural History
Health Science Center
Libraries
Oak Ridge Associated Universities
Office of Research
Performing Arts Venues
Quantum Theory Project
Toxicology
Tropical Agriculture
Tropical Conservation and Development
Tropical Studies
University Press of Florida
Vision Sciences

In addition, a number of graduate programs offer interdisciplinary enhancements in the form of Interdisciplinary Concentrations, field research, and Graduate Certificates. Many colleges, departments, and individual programs across UF come together to serve the entire community.

Art Galleries

The 86,800-square-foot Samuel P. Harn Museum of Art in the University of Florida Cultural Plaza is one of the Southeast's largest university art museums and the only art museum in North Central Florida accredited by the American Association of Museums. Admission is free. The Harn's five collection galleries focus on African, Asian, modern, and contemporary art and photography. Diverse temporary exhibitions are also presented. Performances, family programs, lectures and films increase art appreciation. Museum hours are 11 a.m. to 5 p.m. Tuesday through Friday; 10 a.m. to 5 p.m. Saturday; 1 to 5 p.m. Sunday; select Thursdays 5 to 9 p.m. for Museum Nights. Free docent-led tours Saturday and Sunday at 2 p.m.

The University Gallery, established in 1965, is an essential component of the teaching, research, and service missions of the School of Art + Art History. The Gallery's primary purpose is to present high-quality visual-arts exhibitions that reach a diverse cross-section of the University's many academic disciplines and core research areas and to provide rich first-hand interaction with cutting-edge artwork for students, faculty, staff and the north-central Florida region.

Focus Gallery (in the lobby of the School of Art + Art History offices in the Fine Arts Complex) was established in 1963. Public exhibition space is used by students and faculty sponsors in the School of Art + Art History to experiment with artwork and have hands-on experiences in the production of art exhibitions.

Grinter Galleries (in the lobby of Grinter Hall) was established in 1972. This venue is reserved for exhibitions of international art and artifacts that teach about world culture. Several of the University's international centers are located in Grinter Hall, and their programs provide content for the galleries' exhibitions.

and the Institute of Food and Agricultural Sciences

The Archie Carr Center for Sea Turtle Research conducts research on all aspects of the biology of sea turtles. Researchers at the Center for Sea Turtle Research, collaborating with students and faculty of various academic units, take a multidisciplinary approach to address the complex problems of sea turtle biology and conservation. Scientists from the Center have investigated questions of sea turtles biology around the world, from the molecular level to the ecosystem level, from studies of population structure based on mitochondrial DNA to the effects of ocean circulation patterns on the movements and distribution of sea turtles. Long-term field studies of the Center are conducted mainly at two research stations in the Bahamas and the Azores. For more information, contact the Director, Archie Carr Center for Sea Turtle Research, 223 Bartram Hall, Phone (352) 392-1126, Website http://acctr.ufl.edu.

The Whitney Laboratory for Marine Bioscience is a UF research center for biomedical research and biotechnology. Founded in 1974, the Whitney Lab is dedicated to using marine model animals for studying fundamental problems in biology and applying that knowledge to issues of human health, natural resources, and the environment. The academic staff of the Whitney Laboratory consists of 10 tenure-track faculty members, together with over 50 associates, students, and visiting scientists. The Laboratory is led by Director Dr. Mark Q. Martindale.

Fields of research conducted at the Whitney Laboratory include biomechanics/neuroethology, chemosensory and visual physiology, neurogenomics and comparative marine genomics, synaptogenesis and synaptic physiology, regenerative biology, and the evolution of development. This research uses the techniques of modern cell and molecular biology, for which the Laboratory is particularly well equipped and recognized. The Laboratory provides research support to students on campus and collaborates with several national studies focused on marine genomics.

Research at Whitney Laboratory attracts graduate students, postdocs, and scientists from all over the United States and abroad. Students enroll in the graduate programs of academic units on campus and complete their course work before moving to the Whitney Laboratory, where they conduct their dissertation research under the supervision of resident faculty. An NSF undergraduate research training program at the Whitney Laboratory is also available for 11-week periods in the summer. Whitney also has an active K-12 STEM outreach program, and a public lecture series (Evenings at Whitney) offering community educational opportunities for graduate students.

For more information, contact the Director, Mark Q. Martindale, PhD, Whitney Laboratory for Marine Bioscience, 9505 Ocean Shore Blvd, St. Augustine, FL 32080-8610, Phone (904) 461-4000; Fax (904) 461-4052; Website: www.whitney.ufl.edu

The UF Marine Laboratory at Seahorse Key Located off northeastern Florida, is a field station providing (a) support for research by students, faculty, and visiting scientists; (b) an outstanding teaching program in marine and coastal related subjects; and (c) public education outreach programs related to marine, estuarine, and coastal resources of Florida. Seahorse Key is 57
The Clinical & Translational Science (CTS) predoctoral training program of the UF CTSI provides clinical and translational research training for predoctoral students performing research in health-related fields at UF using a team science approach. This program is part of the fully integrated approach of the UF CTSI to advance education and career development by early identification, recruitment, and training of a critical mass of multidisciplinary, clinical and translational investigators working to improve human health. The program is intended to increase motivation of graduate students for selection into health-relevant multidisciplinary clinical and translational research careers among the participating students. The CTS predoctoral program is aligned with the focus of the NIH on translational research to bridge the gap between basic science and improved human health, and is supported in part by the UF Clinical & Translational Science Award (CTSA). Trainees will develop skills set to lead and participate effectively in team oriented translational science. Participation in the program will give trainees an advantage in preparing for successful careers in a variety of settings, including academia, industry, biotech, and government. The UF CTSI exists to enhance the ability of the University of Florida to develop new therapies, test those therapies in real-world settings, promote therapies found to be of value, and continuously evaluate the effectiveness of therapies. In this context, a "therapy" can be any approach to bettering human health--from lifestyle changes to genetic interventions, from drug discovery to public health.

Find out more here: https://www.ctsi.ufl.edu/ or for additional information about the UF CTSI, please call 352-273-8700 or email info@ctsi.ufl.edu.

College of Engineering Research

The College of Engineering performs research that benefits the state's industries, health, welfare, and public services. The College also works to enhance our nation's global competitive posture by developing new materials, devices, and processes. There are significant opportunities for undergraduate and graduate engineering students to participate in hands-on, cutting-edge research.

The college addresses a wide variety of state and national research issues through the college's academic departments and engineering research centers. It takes an interdisciplinary approach to research by involving talents from diverse areas of the College and the University. Particle science and technology, nanoscience and technology, materials, intelligent machines, transportation, biomedical engineering, computer technologies and systems, communications, information systems, energy systems, robotics, construction and manufacturing technologies, computer-aided design, process systems, a broad spectrum of research related to the "public sector" (agricultural, civil, coastal, and environmental) represent some of the broad-based research programs.

Computer Facilities

Office of Academic Technology (AT) at the Hub

Services available to graduate students include electronic thesis and dissertation computing support, phone and walk-in application support, printer printing, technical & mobile device consulting, email support, software distribution (including statistical software), and the use of computer classrooms. The AT computer classrooms are available for personal and academic use. They are equipped with both Windows and Macintosh-compatible computers, laser printers, plotters, and scanners.

Instructors may use the site-licensed E-Learning course management system to provide online course tools such as syllabuses, content and secure grade posting. Instructors may reserve an AT computer classroom or multimedia lecture classrooms for class sessions. For more information about these and other Academic Technology services, contact the UF Computing Help Desk, 132 Hub, http://helpdesk.ufl.edu, (352) 392-HELP (4357).

Florida Agricultural Experiment Station

The Florida Agricultural Experiment Station conducts statewide research programs in food, agriculture, natural resources, and the environment. Research deals with agricultural production, processing, marketing, human nutrition, veterinary medicine, renewable natural resources, and environmental issues. This research program includes activities by faculty on the Gainesville campus and on the campuses of Research and Education Centers throughout the state. Close cooperation with numerous Florida agricultural and natural resource related agencies and organizations is maintained to provide research support for 300 agricultural commodities and Florida's rich natural resources.

The land-grant philosophy of research, extension, and teaching is strongly supported and administered by the Senior Vice President for Agriculture and Natural Resources. The Institute of Food and Agricultural Sciences, under his leadership, is comprised of the Florida Agricultural Experiment Station, the Florida Cooperative Extension Service, the College of Agricultural and Life Sciences, and elements of the College of Veterinary Medicine, each functioning under a dean. Most IFAS faculty have joint appointments involving teaching, research, and/or extension.

Research and graduate programs are conducted in 14 departments and two schools: Agricultural and Biological Engineering, Agricultural Education and Communication; Agronomy; Animal Sciences; Entomology and Nematology; Environmental Horticulture; Food and Resource Economics; Food Science and Human Nutrition; Family, Youth and Community Sciences; Horticultural Sciences; Microbiology and Cell Science; Plant Pathology; Soil and Water Science; Wildlife Ecology and Conservation; the School of Forest Resources and Conservation; and the School of Natural Resources and Environment. Additional support units vital to research programs include IFAS Information and Communication Services, the Office of Facilities Planning and Operations, the Office of Budget and Finance, IFAS International Programs, the Office of Human Resources, and the Office of Governmental Affairs.

Outside of Gainesville, IFAS faculty and graduate students are located at 12 Research and Education Centers throughout Florida, from Homestead in the extreme south, to Jay in the extreme west. Extension personnel are located in all of Florida's 67 counties.

Additional research is conducted through the Center for Environmental and Human Toxicology; the Center for Agricultural and Natural Resource Law; the Center for Aquatic and Invasive Plants; the Center for Food Distribution and Retailing; the Center for Nutritional Sciences; the Center for Remote Sensing; the Center for Sustainable and Organic Food Systems; the Center for Tropical Agriculture; the Florida Center for Renewable Chemicals and Fuels; the International Agricultural Trade and Policy Center; the Center for Landscape Conservation and Ecology, the Center for Public Issues Education in Agriculture and Natural Resources; the Oraby-Swisher Biological Station; the Plant Science Research and Education Unit; the Florida Sea Grant Program; the Florida Cooperative Fish and Wildlife Research Unit; the Fisheries and Aquatic Sciences and Marine Sciences Programs; the Tropical Aquaculture Laboratory, the Emerging Pathogens Institute; the UF Genetics Institute; the Florida Climate Institute; and the UF Water Institute.

Oraby-Swisher Biological Station. The Oraby-Swisher Biological Station (http://oraby-swisher.ufl.edu) is a biological field station established for the long-term study and conservation of unique ecosystems through research, teaching, and management. It is managed for the University of Florida by the UF/IFAS Office of the Dean for Research. The 9300-acre facility is located in Putnam County, Florida (roughly 26 miles from Gainesville) and it is not open to the general public. The property is a mosaic of wetlands and uplands that include sandhills, xeric hammock, upland mixed forest, swamps, mashes, elastic upland lakes, sandhill upland lakes, and marsh lakes. A variety of fauna inhabit the preserve, including a number of state and federally listed species. Wildlife and prescribed burning have had a strong influence on the landscape. The station is a member of the Organization of Biological Field Stations (OBFS) and serves as the southeastern core site for the National Ecological Observatory Network (NEON).

Florida Museum of Natural History

The Florida Museum of Natural History was created by the Legislature in 1917 as a department of the University of Florida. Through its affiliation with the University, it carries dual responsibility as the official State Museum of Florida and as the University museum. The public education and exhibits division of the Museum is in Powell Hall, on Hull Road at the western edge of campus, situated between the Harn Museum of Art and the Phillips Center for the Performing Arts. Powell Hall is devoted exclusively to permanent and traveling exhibits, educational and public programs, special events, and includes the Butterfly Rainforest. It is staffed by specialists in interpreting natural history through exhibits and educational programs. Consult the website for hours and admission fees (http://www.fhmnh.ufl.edu). The Museum also operates as a center of research in anthropology and natural science. The research and collections division is in Dickinson Hall, at the corner of Museum Road and Newell Drive. This building is not open to the public. The Department of Natural History houses the state's natural history...
collections and is staffed by library staff and support personnel concerned with the study of modern and fossil plants and animals, and historic and prehistoric people and their cultures; scientific and educational faculty (curators) hold appointments in appropriate UF academic units. Through these appointments, they participate in both undergraduate and graduate teaching programs. The Museum's newest addition is the McGuire Center for Lepidoptera and Biodiversity. This world-class facility features a 46,000-square-foot Lepidoptera center devoted to housing one of the world's largest and most comprehensive Lepidoptera collections, and state-of-the-art research facilities for their study. It also contains dynamic public exhibitions and a live butterfly Rainforest with a walking trail, educational exhibits, and hundreds of living butterflies.

The Randell Research Center at the PineLand archeological site near Fort Myers, Florida, is dedicated to learning and teaching the archeology, history, and ecology of Southwest Florida. The Herbarium at UF is also a division of the Museum. It contains specimens of vascular and non vascular plants. The research collections are in the care of curators who encourage scientific study of the Museum's holdings. Collections are constantly being added to the collections both through gifts from friends and as a result of research activities of the Museum staff. The archeological and ethnographic collections are noteworthy, particularly in the aboriginal and Spanish colonial material remains from the southeastern United States and the Caribbean. There are extensive study collections of birds, mammals, mollusks, reptiles, amphibians, fish, invertebrate and vertebrate fossils, and plant fossils, and a bioacoustic archive consisting of original recordings of animal sounds. Opportunities are provided for students, staff, and visiting scientists to use the collections. Research and field work are presently sponsored in the archeological, paleontological, and zoological fields.

Students interested in these specialties should apply to the appropriate academic units. Graduate assistantships are available in the Museum in areas emphasized in its research programs.

Health Science Center Interdisciplinary Research

The HSC is a world leader in interdisciplinary research. The Clinical and Translational Science Institute, McKnight Brain Institute, UF Health Cancer Center, UF Genetics Institute, UF Institute on Aging and the UF Emerging Pathogens Institute are designed to create synergies and collaborative research opportunities that focus on the translational nature of biomedical research, following the continuum from fundamental research to clinical research to patient care. In the summer of 2009, UF became the only university in Florida to receive the National Institutes of Health’s Clinical and Translational Science Award. This $26 million five-year grant is geared toward accelerating scientific discovery, enhancing medical care, producing highly skilled scientists and physicians and fostering partnerships with industry; it supports multidisciplinary research in a wide range of fields such as biomedical informatics, gene therapy, aging, nanotechnology and infectious diseases.

For more information, please visit health.ufl.edu/health-science-center/overview.

Libraries

The libraries of the University of Florida (UF Libraries) form the largest information resource system in the state of Florida and include seven libraries. Six are in the system known as the George A. Smathers Libraries, and one (Legal Information Center) is attached to the law school's administrative unit. All of the libraries serve the entire community, but each has a special mission to be the primary support of specific colleges and degree programs. Because of the interdisciplinary nature of research, scholars may find collections built in one library to serve a specific discipline or constituency to be of great importance to their own research. The University of Florida Gator 1 card provides access to library services.

The library home page offers a wealth of information about the libraries and links to a vast array of resources. Print and electronic collections can be accessed through the library catalog as well as through general and subject specific databases. Library Guides are available by subject to guide the user to appropriate resources. Materials not held on campus can be quickly located and borrowed through Interlibrary Loan. Reference service is available in each library as well as via phone, email and chat. All of the libraries provide special services to help students and faculty with disabilities.

For Library Hours

http://www.library.ufl.edu/hours/.

Workstations in UF libraries provide access to the whole array of electronic resources and services. Licensing for library databases, e-journals and e-books restricts off-campus access to staff, students and faculty.

Library orientation programs are offered at the beginning of each term. In addition, instruction librarians will work with faculty and teaching assistants to develop and present course-specific library instruction sessions for their students. Subject specialists, who work closely with faculty and graduate students to select materials for the collections, also advise graduate students and other researchers who need specialized bibliographic knowledge to define local and global information resources available to support specific research.

Library West houses most of the humanities and social science collections; professional collections in support of business, health and human performance, journalism and public relations; the African Studies Collection; the Asian Studies Collection; and the Isser and Rae Price Library of Judaica. Library West includes 84 individual graduate study carrels that are assigned for the academic year. An online application form is available here: http://apps.uf.lib.ufl.edu/assign. In addition, the sixth floor of Library West is a study area reserved for graduate students. Access is provided after students register at the Circulation Desk.

Marston Science Library houses collections in agriculture, life sciences, engineering, physical sciences, mathematics and earth sciences. The newly renovated first floor Collaboration Commons includes a multipurpose conference room featuring a multi-touch visualization wall. The first floor is also home to MADE@UF, a collaboration space created by the Libraries and Academic Technology to be used for creative activities such as mobile app development, 3D scanning and other "maker" initiatives.

Health Science Center Libraries serve the academic, research and clinical information needs of the Colleges of Dentistry, Medicine, Nursing, Pharmacy, Public Health and Health Professions and Veterinary Medicine. The Bonelli Library (2nd floor, Learning Resource Center) is the Jacksonville branch, and the Veterinary Medicine Reading Room is located in room V1-110 in the College of Veterinary Medicine Building.

Smathers Library (formerly known as Library East) holds the Latin American Collection and the Special Collections: rare books and manuscripts, The Baldwin Library of Historical Children's Literature, P. K. Yonge Library of Florida History and University Archives (custodian of the university's historically significant public records including the administrative files of its past presidents).

Architecture & Fine Arts Library (201 Fine Arts Building A) holds visual arts, art history, architecture, landscape architecture, interior design, building construction and urban planning materials and the music collection — music scores, books, periodicals and other music sources, as well as a non-circulating collection of recordings.

Education Library (1500 Norman Hall) holds education, child development, higher education, psychology and counseling collections. In addition to electronic and print research materials, there are other specialized collections such as the Children's Literature Collection, the K-12 Textbook Collection, and the ERIC Documents Microfiche and other multimedia collections.

Lawton Chiles Legal Information Center holds resources for law and related social sciences with over 595,000 volumes and equivalents. It is named in honor of the former governor and senator and housed in a completely renovated facility that is the largest in the Southeast. The Lawton Chiles Legal Information Center occupies the bottom three floors of Holland Hall with computer support on the top floor. The facility includes 13 student study rooms, a lecture/meditation room, lounge seating, open reserve area and carrels.

UF Digital Collections (http://ufdc.ufl.edu/) comprise a constantly growing collection of digital resources from the University of Florida's library collections, as well as partner institutions. The Libraries participate in UlBorrow which allows users to download materials through the online library catalog directly from participating Florida state university libraries. If a book is unavailable in the University of Florida collection, but is available elsewhere in the state, the UlBorrow icon will appear on the library catalog search page. Clicking this link will take the user to the statewide catalog, where they can provide their library credentials, and specify a pickup site. UlBorrow loans usually arrive within a few days. This immediate borrowing service creates a virtual statewide library of over 16 million items.

Office of Research

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2/2/2015
The University of Florida’s Office of Research facilitates and manages the university’s external research funding enterprise. The office provides many services for UF faculty, staff and students, from identifying a grant opportunity to managing proposals and awards and promoting and protecting intellectual property. The Division of Sponsored Programs facilitates institutional approval for all extramural proposal submissions, accepts and administers grant awards, and negotiates contracts and other research-related agreements on behalf of the University of Florida. The Division of Research Program Development identifies funding opportunities for faculty, manages internal funding programs and assists in planning and coordinating large, interdisciplinary research initiatives.

The Division of Research Compliance assists faculty, staff and students in conducting research in compliance with applicable research regulatory requirements and institutional policies. The goal of the Division of Research Compliance is to promote compliance while facilitating research. The Division of Research Operations and Services provides support that underpins the campus-wide services that are part of the Office of Research portfolio.

The University of Florida Research Foundation is a non-profit, direct-support organization that manages the university’s royalty and licensing enterprise. The Office of Technology Licensing handles patenting, marketing and licensing of intellectual property. OTL works closely with UF inventors in identifying and protecting new inventions. All patents, copyrights and trademarks are processed and managed by OTL, which also helps researchers develop confidentiality, mutual secrecy, and material transfer agreements.

For more information, contact:
The Office of Research
P.O. Box 115500
(352) 392-1582

Since 1948, UF students and faculty of the University of Florida have benefited from its membership in Oak Ridge Associated Universities (ORAU). ORAU is a consortium of 98 colleges and universities and a contractor of the U.S. Department of Energy in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education (ORISE), the DOE facility that ORAU operates, undergraduates, graduates, postgraduates, and faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program lengths range from 1 month to 4 years. Many of these programs aim to increase the number of underrepresented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive list of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the ORISE Catalog of Education and Training Programs, which is available at http://www.orau.gov/orise/education.html or by calling either of the contacts below.

ORAU’s Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU’s members, private industry, and major federal facilities. Activities include faculty development programs, such as the Ralph E. Powe Junior Faculty Enhancement Awards, the Visiting Industrial Scholars Program, consortium research funding initiatives, faculty research, and support programs as well as services to chief research officers.

For more information:
The Office of Institutional Planning and Research website provides access to the Florida ExpertNet searchable database of Centers and Institutes. Go to the search function and choose “University of Florida” from the “Limit By” drop-down menu toward the bottom of the page. Finally, click “search” for a complete list of UF Interdisciplinary Research Centers.

For more information about ORAU and its programs, visit the ORAU home page at http://www.orau.org.

Performing Arts Venues

University of Florida Performing Arts brings a diverse range of events to its venues each season, including theater, chamber, classical, dance, jazz, world performances and more. The 1,700-seat Phillips Center features computerized lighting and sound systems. The Squireen Studio Theatre is used for experimental or small musical productions, recitals and receptions. The historic University Auditorium seats 859 and provides a classic setting for chamber and solo concerts, musical performances, lectures and more. The Baughman Center, a breathtaking pavilion on the shores of Lake Alice, is an inspirational setting for both contemplation and celebration.

UFPA offers discounted tickets (for most events) to students with a valid Gator 1 card. For more information about student tickets, please visit the website.

For information about UFPA:
Administrative offices,
Phone (352) 273-2457.

For event information or tickets:
Phillips Center Box Office,
Phone (352) 392-ARTS
Website http://www.performingarts.ufl.edu

QTP is an interdisciplinary group of 12 faculty plus graduate students, postdoctoral associates, and staff in the Departments of Physics and Chemistry in the College of Engineering and in the Department of Materials Science and Engineering in the College of Engineering. The computationally oriented theoretical research investigates electronic structure, conformation, properties, and dynamics of molecules and materials. The work covers large areas of modern chemistry, condensed matter and materials physics and engineering, and molecular biology. Essentially all the effort is supported by substantial extramural funding, both individual and collaborative. Since 1960, the Institute has organized a major international meeting, the annual Sanibel Symposium. Visit http://www.qtp.ufl.edu/sanibel for details on the next symposium.

Graduate students in chemistry and physics are eligible for this specialization and follow a special curriculum. For more information, contact the Director, Quantum Theory Project, email director@qtp.ufl.edu, P.O. Box 118035 (New Physics Building); or visit the QTP website http://www.qtp.ufl.edu.

The Center for Environmental and Human Toxicology serves as the focal point for activities concerning the effects of chemicals on human and animal health. The Center's affiliated faculty includes 20 to 30 scientists and clinicians interested in elucidating the mechanisms of chemical-induced toxicity, and is drawn from the Colleges of Medicine, Veterinary Medicine, Pharmacy, Public Health and Health Professions, Engineering, and the Institute of Food and Agricultural Sciences. The broadly based, interdisciplinary expertise provided by this faculty is also used to address complex issues related to protecting public health and the environment.

Students who wish to receive graduate training in interdisciplinary toxicology leading to a Ph.D. enroll through one of the participating graduate programs. The number of graduate programs involved in interdisciplinary toxicology, and the variety of perspectives provided by their disciplines, allows a great deal of flexibility in providing a plan of graduate study to meet an individual student's interests and goals in toxicology. Student course work and dissertation research are guided by the Center's researchers and affiliated faculty who are also Graduate Faculty members in the student's major academic unit. Dissertation research may be conducted either in the student's academic unit, or at the Toxicology Laboratory facilities, at the Center. For more information, please write to the Director, Center for Environmental and Human Toxicology, P.O. Box 110885, University of Florida, Gainesville, FL 32611; or visit their website (http://toxicology.ufl.edu/).
The Center for Tropical Agriculture, in the Institute of Food and Agricultural Sciences, seeks to stimulate interest in research and curriculum related to the tropical environment and its development. Website: http://cta.ufl.edu.

Research: International agricultural development assistance contracts frequently have research components. The Center helps coordinate this research.

Minor in tropical agriculture: An interdisciplinary minor in tropical agriculture is available for both master's and doctoral students majoring in agriculture, forestry, and other fields where knowledge of the tropics is relevant. The minor may include courses treating specific aspects of the tropics such as natural resource management (e.g., soils, water, biodiversity), climate, agricultural production, and the languages and cultures of those who live in tropical countries.

Requirements for the minor at the master's level include a minimum of 7 letter-graded credit hours. Six letter-graded credit hours are chosen from the list of approved courses with the guidance of the supervisory committee. Selected courses must be from outside the student's major and may not include courses from other academic units which qualify for graduate credit within the home department. One letter-graded credit hour must be a "hands-on" experience in the student's selected focus in tropical agriculture. This experience may take the form of a study abroad, internship, field trip, or special project and must have a time equivalent at least equivalent to a 1-credit graded course.

Requirements for the minor at the Ph.D. level include a minimum of 12 letter-graded credits. Selected courses must be from outside the student's major and may not include courses from academic units which qualify for graduate credit within the home department. One letter-graded credit hour must be a "hands-on" experience in the student's selected focus in tropical agriculture. This experience may take the form of a study abroad, internship, field trip or special project that must have a time equivalent to a 1 credit letter-graded course. An intent of the minor at the Ph.D. level is to ensure each student has an appreciation of the social context within which tropical agriculture is often practiced. To that end, at the discretion of the CTA faculty member on the supervisory committee, if the student does not have a background that addresses the social context, 3 letter-graded credits may be selected from the social science section of the approved list.

Other activities: The Center seeks broad dissemination of knowledge about tropical agriculture by sponsoring conferences, short courses, and seminars featuring leading authorities on the tropics; publishing books, monographs, and proceedings; and by acquiring materials for the library and the data bank.

The Tropical Conservation and Development Program (TCD), in the Center for Latin American Studies, offers an interdisciplinary graduate certificate and graduate concentration focused on integrative approaches to conservation and development in Latin America and other tropical regions. Both the certificate and concentration are open to students who are interested in acquiring interdisciplinary knowledge and technical skills to pursue a career in conservation and development research and practice. These students must be enrolled in master's or Ph.D. programs in TCD's affiliated academic units at the University of Florida.

For more information on the TCD certificate and concentration program, and for a list of approved courses, visit the TCD website (http://www.tcd.ufl.edu), or contact Bette Loiselle, TCD Director, 347 Grinter Hall, (352) 273-4706, E-mail BLoiselle@latam.ufl.edu, or Patricia Sampio, TCD Program Coordinator, 343 Grinter Hall, (352) 273-4734, Email PSampio@latam.ufl.edu.

The Organization for Tropical Studies (OTS) is a consortium of 50 major educational and research institutions in the United States and abroad, created to promote understanding of tropical environments and their intelligent use by people. The University of Florida is a charter member. Graduate field courses in tropical biology and ecology, agricultural ecology, population biology, and forestry are offered in Costa Rica and Brazil during spring and summer terms. Students are selected on a competitive basis from all OTS member institutions.

**UF Electronic Delivery of Graduate Engineering (UF EDGE)**

UF EDGE offers online graduate engineering master's degrees, courses and certificates from the College of Engineering. The UF EDGE program allows engineers to obtain their master's degrees from any location without the need to travel to the UF campus. All course lectures and materials are delivered online and distance students submit homework via e-mail and have exams proctored at their places of work to be faxed in for grading. A master's degree is comprised of 10 courses totaling 30 credit hours. Students can take as many courses per semester as their work and life schedules permit, thus setting their own pace toward their degrees. Employers may provide financial support for these graduate courses. Students wishing to participate in the UF EDGE program should contact the UF EDGE office at (352) 392-9670 or visit the website at www.ufedge.ufl.edu for more detailed information. Students pursuing a degree through UF EDGE and the College of Engineering are governed by the College's requirements, the academic unit to which they have been admitted, and the Graduate School.

**University Press of Florida**

The University Press of Florida is the official scholarly publishing agency of the State University System of Florida. The Press (just off campus, at 15 NW 15th Street) reports to the President of the University, who supervises the Press on behalf of the 11 state universities. The statewide Council of Presidents is the governing board for the Press.

An advisory board, consisting of representatives from each of the 11 state universities, determines whether manuscripts submitted to it reflect appropriate academic, scholarly, and programmatic standards of the Press.

The Press publishes scholarly works of intellectual distinction and significance, books that contribute to improving the quality of higher education in Florida, and books of general and regional interest and usefulness to the people of Florida, reflecting their rich historical, cultural, and intellectual heritage and resources. The Press publishes works in the following fields: the Caribbean and Latin America; the Middle East; North American archaeology, American history, and culture; Native Americans; literary theory; medieval studies; architecture; ethnicity; natural history; conservation biology; the fine arts; and Floridiana.

Submit manuscripts to:

The Editor-in-Chief,
University Press of Florida,
15 NW 15th Street,
Gainesville, FL 32611

An interdisciplinary specialization in vision sciences is available through the College of Medicine. The Department of Ophthalmology serves as the administrative and logistical center. However, most of the faculty are from the IDP advanced concentrations. Current interests include retinal gene therapy, gene expression in the mammalian retina and lens, especially during fetal development, biochemistry of vision in vertebrates and invertebrates, biochemistry and neurobiology of wound healing and neural tissue degeneration, and molecular and cell biology of animal model retinal degeneration.

For more information, contact the Program Director, Dr. W. Clay Smith, P.O. Box 100284, College of Medicine, Gainesville FL 32610-0284, Phone (352) 273-8794, Email wcsmith@ufl.edu.

A number of graduate programs offer interdisciplinary enhancements in the form of Interdisciplinary Concentrations, field research, or Graduate Certificates. Many colleges, departments, and individual programs across UF come together to serve the university and our entire community. The information in this catalog is current as of July 2013. Please contact individual programs for any additional information or changes.

**Student Services**
The information in this catalog is current as of July 2014. Please contact individual units for any additional information or changes.

Career Resource Center

The Career Resource Center, known as the CRC, is a comprehensive career planning facility located on the 1st floor of the J. Wayne Reitz Union. The CRC is the only centralized unit on campus providing resources for all graduate students across all disciplines. Information specifically for graduate students is located at http://www.crc.ufl.edu/students/studentGraduateGlance.html to help students explore career paths as well as make connections to employers.

The CRC provides opportunities for students to EXPLORE career paths with resources from career planning appointments, where you can discuss interests one-on-one with a staff member to workshops for careers inside and outside of academia. You can also PREPARE for and START an internship or job search. Activities include online instruction in creating a curriculum vitae or resume to applying for jobs with employers recruiting UF students. Graduate students also learn to ADAPT for changing work activities by acquiring diverse skills and experiences and making short-term flexible goals.

Get started with the Career Resource Center, visit us online www.crc.ufl.edu, stop into our office for quick questions Monday through Friday or schedule a career planning appointment online. The CRC works with students in all disciplines and best of all, it's free.

Centers and Institutes

As a major research institution, UF has a number of research areas designated as Centers or Institutes. There are more than 150 Centers and more than 30 recognized institutes. Ten of these centers and institutes with campus-wide missions report to the Vice President for Research: http://www.research.ufl.edu/or/about/centers-and-institutes.html

For more information, contact the unit directly.

Counseling and Wellness Center

The Counseling and Wellness Center (CWC) offers services to currently enrolled graduate students for personal and educational concerns.

Professional counselors offer short-term individual, couples, and group counseling. There is no charge for the Center's confidential services. Topics of services for graduate students often include help with concerns related to academic success, time and stress management skills, anxiety and depression, personal and family relationships, adjustment to the culture, and other issues associated with transition.

Counseling and Wellness Center clinicians also provide a range of consultation and outreach programs to the campus community. Phone or in-person consultation is available for students, parents, faculty, and staff regarding any issues related to student development. The CWC clinicians serve as program resources for a wide variety of student organizations and academic departments. The Center has an extensive training program for selected graduate students. The clinical staff teaches undergraduate and graduate courses in the Departments of Psychology and Counselor Education and guest lecture on a variety of psychological and wellness topics.

All CWC activities are conducted with sensitivity to the diversity of the students on a large, multicultural campus.

For more information, phone (352) 392-1575, or visit http://www.counseling.ufl.edu.
The CWC is located at 3190 Radio Road (down the street from Lakeside and SW Rec Center).

English Skills for International Students

The University of Florida makes available English language programs to help international graduate students improve their proficiency in English. These programs are 1) the English Language Institute, 2) Academic Written English, and 3) Academic Spoken English.

Applicants whose command of English is not as good as expected may be requested by their departments to attend the English Language Institute (ELI), an intensive English program designed to provide rapid gain in English proficiency. An ELI student may require one, two, or occasionally three semesters of full-time English study before entering Graduate School. Information about ELI is available in 315 Norman Hall.

The Academic Written English (AWE) program is designed to help foreign graduate students improve their writing ability. Applicants whose verbal GRE scores are below 320, or students who have been admitted provisionally with a score lower than required on a TOEFL (550 paper, 80 internet), IELTS (6), or MELAB (77) may be required to take a writing test. Those demonstrating a lower proficiency than needed for successful performance in written tasks as determined by their academic unit may be required to take courses in written English. Information about the AWE program is available at the coordinator's office, 4131 Turlington Hall, telephone (352) 392-0639.

The Academic Spoken English (ASE) program consists, primarily, of the 03 credit supervised ITA teaching course – EAP 5836. This course is required of all international teaching assistants (whose first language is not English) during their first semester of teaching at UF, whose TOEFL-IBT Speaking score is between 23 – 27 or UF SPEAK score is 45 – 50. A 04 credit EAP 5835 course is also offered for students who need to make rapid progress in their oral proficiency in English or who desire to improve their performance on a UF SPEAK test. These two credit-bearing courses are eligible for a graduate tuition waiver. Non-credit ASE classes intended to help with general oral communication in English skills (fluency, pragmatics, pronunciation) are offered each semester if there is sufficient student demand. Information about ASE can be found at http://ase.ufl.edu.
**Gator 1 Card**

The Gator 1 Card is the official University of Florida picture ID card. A valid Gator 1 Card must be presented to transact business at University Financial Services, athletic event tickets, Gator Dining centers, CircA computer labs, University Libraries, and all recreational facilities. The Gator 1 Card can be obtained and purchased for $15.00 at the Gator 1 Central Office located at the UF Bookstore and Welcome Center at the Museum Road entrance. An official picture ID (military ID, passport, or driver's license) is required. A student's spouse or domestic partner may also obtain a Gator 1 ID; verification of eligibility for a spouse or domestic partner is performed by Student Legal Services. For information and instructions visit their website at [https://www.studentlegalservices.ufl.edu/gator1-registration.aspx](https://www.studentlegalservices.ufl.edu/gator1-registration.aspx). After Student Legal Services approves the request, contact the Gator 1 Central Office to obtain the ID Card. The cost of the card is $15.00; payment may be made with cash, check or a credit card. The Gator 1 Central Office may be contacted at 352-392-8343.

**Graduate Student E-mail Listserv, GatorLink, and myUFL Portal**

The Graduate School communicates directly with enrolled graduate students via e-mail using GatorLink e-mail addresses. Students must establish their GatorLink account and must check it regularly. GatorLink has a website at [http://www.gatorlink.ufl.edu](http://www.gatorlink.ufl.edu) to create and modify an account. The Graduate School cannot maintain personal e-mail addresses.

The Gatorlink e-mail addresses of all currently enrolled graduate students are automatically added to the Graduate School's Graduate Student listserv. A student cannot opt out of receiving these messages. Messages contain time-sensitive information about important deadlines. If you choose to forward GatorLink messages to another e-mail address, be aware that some commercial e-mail clients may filter out these messages. Therefore, you must actively check your GatorLink account separately. An archive of messages is available at [http://lists.ufl.edu/archives/gradstudent-l.html](http://lists.ufl.edu/archives/gradstudent-l.html).

The myUFL Portal [http://my.ufl.edu](http://my.ufl.edu) has a student page that contains a graduate student section. Information about grants and fellowships, workshops, and other items relevant to graduate education are posted at this site. Students should subscribe to this section and check it regularly.

**Graduate Newsletter**

EXCEL, the Graduate School newsletter, is published online each spring to highlight graduate education at UF. For more information or to contribute a topic, contact the Graduate School Associate Director, phone 392-6622.

**Graduate Minority Programs**

The Office of Graduate Minority Programs (OGMP) is defined by its student-centered support services. The OGMP administers various multicultural educational programs that support and foster an intellectually and culturally diverse student population.

The OGMP's staff accomplishes this by actively working with academic units to recruit and retain students who are underrepresented in their field of study (women in engineering, men in nursing etc.), low-income, or first-generation students, as well as ethnic/cultural minorities (African Americans, Hispanics, Native Alaskans [Aleuts and Eskimos], Native Americans, and Native Pacific Islanders).

**Specialized Programs for Recruitment, Retention and Completion**

Activities include the Office of Graduate Minority Programs and the Office of Graduate Development, which work closely with the Graduate School. The Office of Graduate Minority Programs (OGMP) and the Office of Graduate Development (OGPD) provide funding to support students and faculty in their research and scholarly activities. The Office of Graduate Minority Programs (OGMP) provides funding to support students and faculty in their research and scholarly activities. The Office of Graduate Development (OGPD) provides funding to support students and faculty in their research and scholarly activities.

**Graduate Professional Development**

The Office of Graduate Professional Development (OGPD) helps graduate students gain information, insights and skills they can use in academia and the job market. OGPD works closely with the Graduate Student Advisory Council (GSAC) to host professional development workshops each fall and spring semester. These workshops cover topics such as effective time management, research strategies, preparing for examinations and final defenses, publishing manuscripts, and obtaining student grants. Announcements of these events, and deadlines for all award programs, are made through the Graduate Student Listserv.

For more information, visit the website at [http://graduate.ufl.edu/student-life-and-support/diversity-programs](http://graduate.ufl.edu/student-life-and-support/diversity-programs).

**Graduate School Editorial Office**

The Graduate School Editorial Office provides format requirements for theses and dissertations on the editorial page of the Graduate School website in order to help students prepare their manuscripts for submission to the Editorial Office. The Graduate School Editorial Office facilitates the thesis and dissertation process, by providing clear guidelines and checklists, and by outlining the procedures to follow when completing the dissertation or thesis. In order to complete degree requirements, all thesis and dissertation students must gain clearance status with the Editorial Office by each of the posted deadlines for the term in which they intend for the degree to be awarded.

The following procedures apply to the Graduate School's editorial services to students:

- Upon submission to the Graduate School Editorial Office, a thesis or dissertation should be near-final and must be completely formatted. It will not be accepted as meeting first submission requirements in draft form.

- Additionally, master's theses must be orally defended before making submission to the Graduate School Editorial Office. Accordingly, the Final Exam data must be posted to GIMS by the department, before the document can be submitted to the Editorial Office for review. Subsequently, a master's student who does not defend the thesis prior to the first submission deadline will not be eligible for a degree award in the current term; nor is the student a clear-prior candidate to the following term, since they were unable to meet the first submission requirement.

- The thesis or dissertation must be of publishable quality and must be in a form suitable for publication, using the Graduate School's format requirements found here.

- The student's department is responsible for quality and scholarship.

- Graduate Council requires the Graduate School Editorial Office, as agents of the Dean of the Graduate School, to briefly review theses and dissertations for acceptable format, and to make recommendations as needed.

The Application Support Center, although not a part of the Graduate School Editorial Office, provides assistance to students seeking help with the guidelines of the Editorial Office free of charge. Their services are invaluable to students concerned about meeting the submission standards of the Editorial Office. Students should avail themselves of these services long before making final submission to the Editorial Office. Appointments are encouraged, particularly well in advance of deadlines, because seats are extremely limited.
The Graduate School Editorial Office maintains a list of formatters, editors, and binders that students may hire for a fee, if needed; however, the Application Support Center also offers many formatting and conversion services at reasonable rates as well.

- Format examples: http://helpdesk.ufl.edu/application-support-center/graduate-editorial-office/format-requirements/examples/

For more information, contact:
Graduate School Editorial Office
224-B, The Hub
Gainesville, FL
32611-5500
Phone (352) 392-1282
E-mail gradedit@aa.ufl.edu
Website http://graduateschool.ufl.edu/graduationthesis-and-dissertation

Graduate Student Records

Graduate Student Records staff work with academic units to support students at all phases of their graduate careers, from admission through degree certification and graduation. The office is responsible for keeping the official graduate student record and ensuring compliance with all Graduate Council and University policies.

Graduate Student Council

The Graduate Student Council was formed in 1989 to foster interaction among graduate students on campus and to provide an agency for coordinating graduate student activities and programs. The GSC seeks the improvement of graduate student education through active and permanent communication with the Graduate School, the University administration, and the University of Florida Board of Trustees. It also represents the interests of graduate students at the student government, administration, local, state, and national levels. GSC is a dues-paying member of the National Association of Graduate and Professional Students.

Graduate Student Handbook


Housing

Graduate students and their families are housed in graduate and family housing villages. All applicants must apply to the University and have a UF ID number. Due to limited space, all students are not guaranteed on campus housing.

For information, go to the Housing website, http://www.housing.ufl.edu/gfh/choices/.

To be eligible for Graduate and Family housing, all residents must make normal progress toward a degree in consultation with academic departments and Graduate and Family Housing policies. Please inquire at villages@housing.ufl.edu for more information about general eligibility and/or eligibility as it relates to academic status.

Applying for Housing

Each student must make personal arrangements for housing, either by applying to the Department of Housing and Residence Education for assignment to University housing facilities or by obtaining accommodations off campus.

For application information and to submit an application:
http://www.housing.ufl.edu/apply/howto/

For off-campus housing information:
http://www.offcampus.ufl.edu/

Graduate and Family Housing

Village apartments are unfurnished. Residents in all villages must provide their own linens, dishes, rugs, curtains, or other similar items. Electricity is an additional expense and is billed with the rent. For questions about Graduate and Family Housing, please email villages@housing.ufl.edu, or call 352.392.2171 extension 10321.

The Continuum is UF affiliated off-campus Housing. To qualify for residency, Continuum residents must be matriculated, full-time or part-time (or equivalent) students enrolled in a graduate or professional school or a faculty or staff member at UF.

Additional information about all Graduate and Family Housing facilities is available at the following website:
http://www.housing.ufl.edu/gfh/choices/

Off Campus Life

The Office of Off Campus Life is part of the Division of Student Affairs and offers resources, services, education and support for students living off campus.
Located on 1765 Stadium Rd. Suite 170, Hub, the University of Florida International Center (UFIC), through Exchange Visitor Services, International Student Services, Study Abroad Services,
and Program Development, serves in a leadership and facilitation role to further the University's international agenda, providing assistance and support to faculty, staff, administrators, and students as well as external stakeholders in their international activities. In addition to assisting these clients, the Center also functions to enhance the University's ability to pursue and develop international activities and partnerships appropriate to its core mission, motivating and mobilizing the UF community to integrate and sustain high-impact global dimensions in learning, discovery, and engagement, and provides administrative support to assure leadership for this vision.

For more information:
Phone: (352) 392-5323
Fax: (352) 392-5575
E-mail: ufic@ufic.ufl.edu
Website: ufic.ufl.edu

Exchange Visitor Services offers administrative, liaison, and support services for foreign national faculty, scholars, researchers and professionals. Additionally Exchange Visitor Services ensures that the university is in compliance with immigration laws and regulations affecting immigration statuses for sponsored foreign nationals and visiting scholars by providing technical and advisory information to the university community. Support services include assistance with immigration regulations compliance, pre-arrival procedures, and orientation to the community.

International Student Services provides support services for international students through immigration document preparation, orientation, immigration services, and various workshops. These services include advising international students on academic, immigration, financial, cultural, and personal issues. All new international students are required to check-in with the International Student Services.

Study Abroad Services administers a wide range of programs that give students the opportunity to live and study abroad while fulfilling degree requirements. Students can choose among faculty-led summer programs, exchange programs, and independent programs for the summer, a semester, or an academic year as well as spring break, Thanksgiving break and other programs. Various scholarships and other financial aid can be applied to help finance the international academic experience. UF exchange programs enable students to pay UF tuition while studying abroad. Study Abroad program assistants advise applicants on all aspects of UF approved programs, provide pre-departure orientations, and process the foreign transcript on return of the student. Study Abroad program details are available in the UFIC library or on the UFIC website.

Program Development helps UF faculty and students develop programs in international applied research, technical cooperation, workshops, outreach, and other international activities. Working closely with other centers, academic units, and colleges, PD promotes programs and projects that capitalize on the strengths of UF's faculty and staff. UFIC administers the World Citizenship Program, an international internship program, which places students with nongovernmental organizations around the world.

University Writing Studio

The University Writing Studio (formerly the Writing Center) is part of the College of Liberal Arts and Sciences. Located in 302 Tigert Hall, the Studio's graduate student tutors offer one-on-one tutoring and writing help for both undergraduate and graduate students. The Studio often helps people with application essays and personal statements for graduate school applications. It also offers help on papers written for graduate school classes, and theses or dissertations. The Studio guarantees 30 minute sessions to look over a student's writing. Evening tutoring is also offered on the third floor of Library West. Students can make appointments--for either daytime sessions in Tigert or evening sessions in Library West--through our website, www.writing.ufl.edu. Phone (352) 846-1138.

Workshops for Teaching Assistants

The Graduate School and the Teaching Center offer an orientation and a series of workshops for teaching assistants to improve their instructional skills. The orientation and "getting started" workshop are mandatory for all graduate students starting teaching assignments. Some topics included in the workshop series are presentation skills, course and lecture planning, techniques for improving student attention and motivation, group dynamics, testing and grading, use of technology to enhance learning, and how to elicit and interpret feedback. TAs who complete a significant percentage of the workshops are awarded certificates. To register or for more information go to TA Development at https://www.teachingcenter.ufl.edu, call the Teaching Center, 392-2010, or visit the office on the ground level, Southwest Broward Hall. Teaching at the University of Florida: A Handbook for Teaching Assistants is available at https://www.teachingcenter.ufl.edu/ta_development.html.

Graduate Degrees

The information in this catalog is current as of July 2014. Please contact individual programs for any additional information or changes.

Definitions:
Listing of Degrees and Programs
Requirements for Master's Degrees
General Regulations for Master's Degrees
Master of Arts and Master of Science
Other Master's Degrees
Requirements for Doctoral Degrees
Doctor of Philosophy
Doctor of Audiology
Doctor of Education
Doctor of Nursing Practice
Doctor of Plant Medicine
Specialized Graduate Degrees
Engineer
Specialist in Education
Nontraditional Programs
Concurrent Graduate Programs
Joint Degree Programs
State University System Programs

Definitions

Degree is the title conferred by the University on completing the academic program, for example, Doctor of Philosophy. Some degrees include the name of the field of study (Master of Architecture, Master of Education). Others (Master of Arts, Master of Science) do not.

Program (also referred to as the major) is the student's primary field of study. Programs offered at UF are approved by the Graduate Council, Faculty Senate, Board of Trustees, and Florida Board of Governors (specialist and doctoral degrees). The degree and program name appear on the student's transcript. Available programs are identified under the degree name in the list of graduate degrees and programs.

Catalog year refers to the rules in effect during the first year a degree-seeking student enrolls in a program; the set of requirements a student must fulfill. If the student takes time off, then the catalog year is the academic year of readmission.
Co-major is a course of study allowing two majors for one Ph.D. degree. Each co-major must be approved by the Graduate Council.

Combined degree program is a combined bachelor's and master's degree program allowing an academically advanced undergraduate student to take graduate courses before completing the bachelor's degree to earn 12 graduate credits toward both degrees. Students admitted into a combined program normally have above-average GPAs and superior scores on the verbal, quantitative, and analytical writing portions of the GRE. Individual academic units determine whether a combined degree program is appropriate. Combined degree programs established before January 1, 2003, may have other requirements.

Concentration is a subprogram in a major. Concentrations offered at UF are approved by the Graduate Council. The concentration, degree, and program may appear on the student transcript.

Concurrent degree program is simultaneous study on an individualized basis that leads to two master's degrees in different graduate programs or two master's degrees in the same major. Such a program is initiated by the student and requires prior approval of each academic unit and the Graduate School. Graduate School approval for participation in a concurrent degree program must be obtained prior to the published mid-point deadline of the term in which the first degree is to be awarded. Retroactive requests will not be considered. Ultimately, it is the student's responsibility to follow up with the academic units to verify that all Graduate School approvals and deadlines have been met. If the student is approved to pursue two master's degrees, no more than 9 credits of course work from one program can be claimed toward the second master's degree.

Cooperative degree program leads to a graduate degree awarded by UF with more than one institution authorized to provide course work.

Graduate certificate is a formal collection of courses that form a coherent program of study offered through an academic unit. They are certified by the college, approved by the Graduate Council, and listed on the transcript.

Jointly conferred degree program leads to a graduate degree awarded jointly by UF and another institution.

Joint degree program is a course of study that leads simultaneously to a graduate degree and a professional degree (i.e., D.M.D., D.V.M., J.D., M.D., Pharm.D.). Normally 12 credits of professional courses are counted toward the graduate degree and 12 credits of graduate courses are counted toward the professional degree. Individual academic units determine whether a joint degree program is appropriate. Joint programs established before January 1, 2003, may have other requirements.

Lockstep programs are defined as cohorts who move together in the same enrollment sequence with courses taught in a particular order, on a particular schedule. Students have no flexibility in their program or sequence, and may not drop in and out of courses independently.

Minor is a block of course work completed in any academic unit outside the major. The minor must be approved by the student's academic unit and the academic unit offering the minor. If a minor is chosen, the supervisory committee must include a representative from the minor field. A minor requires at least 6 to 15 credits depending on the degree level. The minor appears on the student's transcript along with the program name and the degree awarded.

Multi-college program is a degree program offered through more than one college.

Specialization is an informal designation used by academic units to indicate areas of research or scholarly strength, and has no formal significance. Track and emphasis are similar unofficial terms. No tracks, emphases, or specializations appear in official listings in this catalog or on the student transcript.

Supervisory Committee (thesis and dissertation degrees): All graduate degrees must have graduate faculty oversee the student's program of study and progress. For thesis and dissertation degrees, this oversight authority is accomplished by a formal committee. These committees have slightly different criteria based on the particular degree. Thesis and dissertation committees are monitored by the Graduate School as part of degree certification using information entered into the Graduate Information Management System (GIMS).

Supervisory Committee (non-thesis degrees): For non-thesis degree programs, the oversight is at the academic unit/department/college level only. Non-thesis programs may choose to have a formal committee or an alternate structure as determined by the program's graduate faculty and consistent with academic unit policies. The oversight authority will be considered as the supervisory committee. Units are able to enter their internal information into GIMS as a convenience. Regardless of degree program, any student with a minor must have the name of the graduate faculty member overseeing the minor entered into GIMS.

All other degree combinations that involve a graduate degree as at least one component (not addressed in the above definitions) require a formal approval process through the academic units offering the degree programs and the Graduate School.

Taking multiple courses within a discipline does not constitute admission to that discipline's graduate programs.

The primary/home academic unit must contact the Graduate School's Student Records Unit for procedural details and deadlines. In all cases, each academic unit must submit appropriate programs of study to the Graduate School for review. Graduate School approval for participation must be obtained prior to the published Midpoint deadline of the term in which the first degree is to be awarded. Retroactive requests will not be considered. Ultimately, it is the student's responsibility to follow up with the academic units to verify that all Graduate School approvals and deadlines have been met.

Listing of Degrees and Programs

See the Majors Section of this catalog for specializations in the approved programs.

T=thesis or dissertation N=non-thesis or no dissertation.

Degree names and correct abbreviations are listed in bold.

Majors are listed in standard type.

Concentrations are listed under the major in italics.

Graduate Degrees Offered by the University of Florida

Master of Accounting (M.Acc.)

Accounting

Master of Advertising (M.Adv.)

Advertising

Master of Agribusiness (M.AGR.

Food and Resource Economics

Tropical Conservation and Development

Master of Architecture (M.Arch.)

Architecture

Historic Preservation
Sustainable Architecture
Sustainable Design

Master of Arts (M.A.)

Anthropology %
Art %
Art Education %
Art History %
Arts in Medicine %
Business Administration %
Marketing %
Classical Studies %
Communication Sciences and Disorders %
Criminology, Law, and Society %
Digital Arts and Sciences %
Economics %
English %
French and Francophone Studies %
Geography %
Geographic Information Systems %
Tropical Conservation and Development %
Wetland Sciences %
German %
History %
Historic Preservation %
Jewish Studies %
International Business %
Latin %
Latin American Studies %
Tropical Conservation and Development %
Linguistics %
Mathematics %
Museology %
Philosophy %
Political Science - International Relations %
Political Science %
International Development Policy and Administration %
Political Campaigning %
Public Affairs %
Tropical Conservation and Development %
Psychology %
Religion %
Jewish Studies %
Tropical Conservation and Development %
Women's/Gender Studies %
Sociology %
Tropical Conservation and Development %
Spanish %
Women's Studies %

Master of Arts in Education (MAE)

Curriculum and Instruction %
Early Childhood Education %
Educational Leadership %
Elementary Education %
English Education %
Marriage and Family Counseling %
Mathematics Education %
Mental Health Counseling %
Reading Education %
Research and Evaluation Methodology %
School Counseling and Guidance %
School Psychology %
Science Education %
Social Studies Education %
Special Education %
Student Personnel in Higher Education %

Master of Arts in Mass Communication (MAMC)
Master of Arts in Teaching (M.A.T.)

Anthropology
Tropical Conservation and Development
French and Francophone Studies
Latin
Latin American Studies
Tropical Conservation and Development
Mathematics
Philosophy
Political Science - International Relations
Spanish

Master of Arts in Urban and Regional Planning (MAURP)

Urban and Regional Planning
Geographic Information Systems
Historic Preservation
Sustainable Design
Tropical Conservation and Development
Wetland Sciences

Master of Business Administration (M.B.A.)

Business Administration
Competitive Strategy
Entrepreneurship
Finance
Global Management
Graham-Buffett Security Analysis
Human Resource Management
Information Systems and Operations Management
International Studies
Latin American Business
Management
Marketing
Real Estate
Sports Administration

Master of Construction Management (M.C.M)

Construction Management
Historic Preservation
Sustainable Construction
Sustainable Design

Master of Education (M.Ed.)

Curriculum and Instruction
Early Childhood Education
Educational Leadership
Elementary Education
English Education
Marriage and Family Counseling
Mathematics Education
Mental Health Counseling
Reading Education
Research and Evaluation Methodology
School Counseling and Guidance
School Psychology
Science Education
Social Studies Education
Special Education
Student Personnel in Higher Education

Master of Engineering (M.E.)

Aerospace Engineering
Agricultural and Biological Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Biomedical Engineering
Chemical Engineering
Civil Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Coastal and Oceanographic Engineering
Computer Engineering
Electrical and Computer Engineering
Environmental Engineering Sciences
Master of Fine Arts (M.F.A.)
  Art
  Creative Writing
  Theatre

Master of Fire and Emergency Services (MF.ES)
  Fire and Emergency Services

Master of Fisheries and Aquatic Sciences (MF.AS.)
  Fisheries and Aquatic Sciences
  Ecological Restoration
  Geographic Information Systems
  Natural Resource Policy and Administration
  Wetland Sciences

Master of Forest Resources and Conservation (MF.RC.)
  Forest Resources and Conservation
  Agroforestry
  Ecological Restoration
  Geographic Information Systems
  Geomatics
  Natural Resource Policy and Administration
  Tropical Conservation and Development
  Wetland Sciences

Master of Health Administration (M.H.A.)
  Health Administration

Master of Health Science (M.H.S.)
  Environmental and Global Health
  One Health
  Occupational Therapy

Master of Historic Preservation (M.H.P.)
  Historic Preservation

Master of Interior Design (M.I.D.)
  Interior Design
  Historic Preservation
  Sustainable Design

Master of International Business (M.I.B)
  International Business

Master of International Construction Management (M.I.C.M.)
  International Construction Management
  Historic Preservation

Master of Landscape Architecture (M.L.A.)
  Landscape Architecture
  Geographic Information Systems
  Historic Preservation
  Sustainable Design
  Wetland Sciences

Master of Latin (M.L.)
  Latin

Master of Laws in Comparative Law (LL.M.Comp.Law)
  Comparative Law
  Tropical Conservation and Development

Master of Laws in Environmental and Land Use Law (LL.M.EL.U)
  Environmental and Land Use Law

Master of Laws in International Taxation (LL.M.Tax)
  International Taxation

Master of Laws in Taxation (LL.M.Tax)
Taxation

Master of Music (M.M.)
Music
Choral Conducting
Composition
Electronic Music
Ethnomusicology
Instrumental Conducting
Music Education
Music History
Music Theory
Performance
Sacred Music

Music Education
Choral Conducting
Composition
Electronic Music
Ethnomusicology
Instrumental Conducting
Music History
Music Theory
Performance
Piano Pedagogy

Master of Occupational Therapy (M.O.T.)
Occupational Therapy

Master of Public Health (M.P.H.)
Public Health
Biostatistics
Environmental Health
Epidemiology
Health Management
Public Health Practice
Social and Behavioral Sciences

Master of Science (M.S.)
Aerospace Engineering
Agricultural and Biological Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Agricultural Education
Tropical Conservation and Development
Agronomy
Agroecology
Geographic Information Systems
Tropical Conservation and Development
Animal Molecular and Cellular Biology
Animal Sciences
Applied Physiology and Kinesiology
Athletic Training
Biobehavioral Science
Clinical Exercise Physiology
Exercise Physiology
Human Performance
Astronomy
Biochemistry and Molecular Biology
Biomedical Engineering
Medical Physics
Biostatistics
Botany
Tropical Conservation and Development
Wetland Sciences
Business Administration
Marketing
Retailing
Chemical Engineering
Chemistry
Civil Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Coastal and Oceanographic Engineering
Computer Engineering
Digital Arts and Sciences
Computed Sciences
Dental Sciences
  Endodontics
  Orthodontics
  Periodontics
  Prosthodontics
Digital Arts and Sciences
Electrical and Computer Engineering
  Entomology and Nematology
  Entrepreneurship
  Environmental Engineering Sciences
    Geographic Information Systems
    Hydrologic Sciences
    Wetland Sciences
  Epidemiology
    Biostatistics
    Health Management and Policy
  Family, Youth and Community Sciences
    Community Studies
    Family and Youth Development
    Nonprofit Organization Development
  Finance
  Fisheries and Aquatic Sciences
    Ecological Restoration
    Geographic Information Systems
    Natural Resource Policy and Administration
    Wetland Sciences
  Food and Resource Economics
    Agribusiness
    Hydrologic Sciences
    Toxology
    Tropical Conservation and Development
  Food Science and Human Nutrition
  Forest Resources and Conservation
    Agroforestry
    Ecological Restoration
    Geographic Information Systems
    Geomatics
    Hydrologic Sciences
    Natural Resource Policy and Administration
    Tropical Conservation and Development
    Wetland Sciences
  Geography
    Applications of Geographic Technologies
    Geographic Information Systems
    Hydrologic Sciences
    Tropical Conservation and Development
    Wetland Sciences
  Geology
    Hydrologic Sciences
    Tropical Conservation and Development
    Wetland Sciences
  Health Education and Behavior
  Horticultural Sciences
    Environmental Horticulture
    Horticultural Sciences
  Industrial and Systems Engineering
  Information Systems and Operations Management
  Supply Chain Management
  Interdisciplinary Ecology
  Agricultural and Biological Engineering
    Agricultural Education and Communication
    Agronomy
    Anthropology
    Architecture
    Biochemistry and Molecular Biology
    Botany
    Business Administration
    Chemistry
    Civil Engineering
    Climate Science
    Coastal and Oceanographic Engineering
    Economics
English
Entomology and Nematology
Environmental Engineering Sciences
Family, Youth and Community Sciences
Farming Systems
Fisheries and Aquatic Sciences
Food and Resource Economics
Food Science
Forest Resources and Conservation
Foundations of Education
Geographic Information Systems
Geography
Geology
Health and Human Performance
Horticultural Sciences
Hydrologic Sciences
Landscape Architecture
Mathematics
Microbiology and Cell Science
Nuclear and Radiological Engineering
Philosophy
Political Science
Religion
Sociology
Soil and Water Science
Statistics
Tropical Conservation and Development
Urban and Regional Planning
Veterinary Medical Sciences
Wetland Sciences
Women’s/Gender Studies
Zoology
Management
Health Care Risk Management
Materials Science and Engineering
Mathematics
Mechanical Engineering
Medical Sciences
Aging and Geriatric Practice
Clinical and Translational Science
Health Outcomes and Policy
Translational Biotechnology
Microbiology and Cell Science
Medical Microbiology and Biochemistry
Nuclear Engineering Sciences
Physics
Plant Molecular and Cellular Biology
Plant Pathology
Psychology
Real Estate
Recreation, Parks, and Tourism
Historic Preservation
Natural Resource Recreation
Therapeutic Recreation
Tourism
Tropical Conservation and Development
Soil and Water Science
Agroecology
Geographic Information Systems
Hydrologic Sciences
Tropical Conservation and Development
Wetland Sciences
Sport Management
Historic Preservation
Tropical Conservation and Development
Veterinary Medical Sciences
Forensic Toxicology
Shelter Medicine
Veterinary Forensic Sciences
Wildlife Ecology and Conservation
Geographic Information Systems
Tropical Conservation and Development
Wetland Sciences
Zoology
Tropical Conservation and Development\textsuperscript{T,N}
Wetland Sciences\textsuperscript{T,N}

**Master of Science in Architectural Studies (M.S.A.S.)\textsuperscript{T}**

- Architecture\textsuperscript{T}
- Historic Preservation\textsuperscript{T}
- Sustainable Architecture\textsuperscript{T}
- Sustainable Design\textsuperscript{T}

**Master of Science in Construction Management (M.S.C.M)\textsuperscript{T}**

- Construction Management\textsuperscript{T}
- Historic Preservation\textsuperscript{T}
- Sustainable Construction\textsuperscript{T}
- Sustainable Design\textsuperscript{T}

**Master of Science in Entrepreneurship (M.S.E.N.T)\textsuperscript{N}**

- Entrepreneurship\textsuperscript{N}

**Master of Science in Information Systems and Operations Management (M.S.I.S.O.M)\textsuperscript{N}**

- Information Systems and Operations Management\textsuperscript{N}
- Supply Chain Management\textsuperscript{N}

**Master of Science in Nursing (M.S.Nsg.)\textsuperscript{T,N}**

- Nursing\textsuperscript{T,N}

**Master of Science in Pharmacy (M.S.P.)\textsuperscript{T,N}**

- Pharmaceutical Sciences\textsuperscript{T,N}
- Clinical Pharmacy\textsuperscript{T,N}
- Clinical Toxicology\textsuperscript{T,N}
- Forensic DNA and Serology\textsuperscript{T,N}
- Forensic Drug Chemistry\textsuperscript{T,N}
- Forensic Science\textsuperscript{T,N}
- Medication Therapy Management\textsuperscript{T,N}
- Medicinal Chemistry\textsuperscript{T,N}
- Pharmaceutical Chemistry\textsuperscript{T,N}
- Pharmaceutical Outcomes and Policy\textsuperscript{T,N}
- Pharmacodynamics\textsuperscript{T,N}
- Pharmacy\textsuperscript{T,N}

**Master of Science in Statistics (M.S.Stat.)\textsuperscript{T}**

- Statistics\textsuperscript{T}

**Master of Science in Teaching (M.S.T.)\textsuperscript{N}**

- Astronomy\textsuperscript{N}
- Botany\textsuperscript{N}
- Tropical Conservation and Development\textsuperscript{N}
- Wetland Sciences\textsuperscript{N}
- Chemistry\textsuperscript{N}
- Geography\textsuperscript{N}
- Geographic Information Systems\textsuperscript{N}
- Tropical Conservation and Development\textsuperscript{N}
- Wetland Sciences\textsuperscript{N}
- Geology\textsuperscript{N}
- Tropical Conservation and Development\textsuperscript{N}
- Wetland Sciences\textsuperscript{N}
- Mathematics\textsuperscript{N}
- Physics\textsuperscript{N}
- Zoology\textsuperscript{N}
- Tropical Conservation and Development\textsuperscript{N}
- Wetland Sciences\textsuperscript{N}

**Master of Statistics (M.Stat.)\textsuperscript{N}**

- Statistics\textsuperscript{N}

**Master of Sustainable Development Practice (M.D.P.)\textsuperscript{N}**

- Sustainable Development Practice\textsuperscript{N}

**Engineer (Engr.)\textsuperscript{T,N}**

- Chemical Engineering\textsuperscript{T,N}
- Industrial and Systems Engineering\textsuperscript{T,N}

**Specialist in Education (Ed.S.)\textsuperscript{N}**

- Curriculum and Instruction\textsuperscript{N}
- Educational Leadership\textsuperscript{N}
- Higher Education Administration\textsuperscript{N}
- Marriage and Family Counseling\textsuperscript{N}
- Mental Health Counseling\textsuperscript{N}
Research and Evaluation Methodology
School Counseling and Guidance
School Psychology
Special Education
Student Personnel in Higher Education

Doctor of Audiology (Au.D.)
Audiology

Doctor of Education (Ed.D.)
Counseling and Counselor Education
Marriage and Family Counseling
Mental Health Counseling
School Counseling and Guidance
Curriculum and Instruction
Educational Leadership
Educational Policy
Higher Education Administration
Educational Policy
Marriage and Family Counseling
Mental Health Counseling
Research and Evaluation Methodology
School Counseling and Guidance
School Psychology
Special Education

Doctor of Philosophy (Ph.D.)
Aerospace Engineering
Agricultural and Biological Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Agricultural Education and Communication
Tropical Conservation and Development
Agronomy
Toxicology
Tropical Conservation and Development
Animal Molecular and Cellular Biology
Animal Sciences
Animal Molecular and Cellular Biology
Anthropology
Historic Preservation
Tropical Conservation and Development
Women's/Gender Studies
Art History
Astronomy
Biochemistry and Molecular Biology
Animal Molecular and Cellular Biology
Imaging Science and Technology
Mammalian Genetics
Toxicology
Biomedical Engineering
Clinical and Translational Science
Medical Physics
Bioscience
Botany
Tropical Conservation and Development
Wetland Sciences
Business Administration
Accounting
Finance
Information Systems and Operations Management
Insurance
Management
Marketing
Quantitative Finance
Real Estate and Urban Analysis
Chemical Engineering
Chemistry
Clinical and Translational Science
Imaging Science and Technology
Civil Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Classical Studies
Coastal and Oceanographic Engineering
Communication Sciences and Disorders
Computer Engineering
Counseling and Counselor Education
Marriage and Family Counseling
Mental Health Counseling
School Counseling and Guidance
Counseling Psychology
Criminology, Law, and Society
Curriculum and Instruction
Design, Construction, and Planning
Construction Management
Historic Preservation
Interior Design
Landscape Architecture
Urban and Regional Planning
Economics
Educational Leadership
Educational Policy
Electrical and Computer Engineering
English
Entomology and Nematology
Environmental Engineering Sciences
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Epidemiology
Clinical and Translational Science
Fisheries and Aquatic Sciences
Ecological Restoration
Geographic Information Systems
Natural Resource Policy and Administration
Wetland Sciences
Food and Resource Economics
Hydrologic Sciences
Toxicology
Tropical Conservation and Development
Food Science
Toxicology
Forest Resources and Conservation
Agroforestry
Geographic Information Systems
Geometrics
Hydrologic Sciences
Natural Resource Policy and Administration
Toxicology
Tropical Conservation and Development
Wetland Sciences
Genetics and Genomics
Clinical and Translational Science
Geography
Geographic Information Systems
Hydrologic Sciences
Tropical Conservation and Development
Wetland Sciences
Geology
Hydrologic Sciences
Tropical Conservation and Development
Wetland Sciences
German
Women's/Gender Studies
Health and Human Performance
Applied Physiology and Kinesiology
Biobehavioral Science
Clinical and Translational Science
Exercise Physiology
Health Behavior
Historic Preservation
Recreation, Parks, and Tourism
Sport Management
Health Services Research
Higher Education Administration
Educational Policy
History
Historic Preservation
Women's/Gender Studies
Horticultural Sciences
Environmental Horticulture
Horticultural Sciences
Toxicology
Industrial and Systems Engineering
Quantitative Finance
Interdisciplinary Ecology
Agricultural and Biological Engineering
Agricultural Education and Communication
Agronomy
Anthropology
Architecture
Biochemistry and Molecular Biology
Botany
Business Administration
Chemistry
Civil Engineering
Climate Science
Coastal and Oceanographic Engineering
Economics
English
Entomology and Nematology
Environmental Engineering Sciences
Family, Youth and Community Sciences
Farming Systems
Fisheries and Aquatic Sciences
Food and Resource Economics
Food Science
Forest Resources and Conservation
Foundations of Education
Geographic Information Systems
Geography
Geology
Health and Human Performance
Environmental Engineering Sciences
Horticultural Sciences
Landscape Architecture
Mathematics
Microbiology and Cell Science
Nuclear and Radiological Engineering
Philosophy
Political Science
Religion
Sociology
Soil and Water Science
Statistics
Tropical Conservation and Development
Urban and Regional Planning
Veterinary Medical Sciences
Wildlife Ecology And Conservation
Women's/Gender Studies
Zoology
Linguistics
Marriage and Family Counseling
Mass Communication
Clinical and Translational Science
Materials Science and Engineering
Clinical and Translational Science
Mathematics
Imaging Science and Technology
Quantitative Finance
Mechanical Engineering
Medical Sciences
Biochemistry and Molecular Biology
Clinical and Translational Science
Genetics
Health Outcomes and Policy
Imaging Science and Technology
Immunology and Microbiology
Molecular Cell Biology
Neuroscience
Physiology and Pharmacology
Toxicology
Mental Health Counseling
Microbiology and Cell Science
Microbiology
Music
Composition
Music History and Literature
Music Education
Nuclear Engineering Sciences
Imaging Science and Technology
Nursing Sciences
Clinical and Translational Science
Nutritional Sciences
Clinical and Translational Science
Pharmaceutical Sciences
Clinical and Translational Science
Clinical Pharmaceutical Sciences
Medicinal Chemistry
Pharmaceutical Outcomes and Policy
Pharmacodynamics
Pharmacy
Toxicology
Philosophy
Physics
Imaging Science and Technology
Plant Molecular and Cellular Biology
Toxicology
Plant Pathology
Toxicology
Political Science
Educational Policy
Tropical Conservation and Development
Psychology
Clinical and Health Psychology
Clinical and Translational Science
Women's/Gender Studies
Public Health
Environmental Health
One Health
Social and Behavioral Sciences
Rehabilitation Science
Clinical and Translational Science
Religion
Tropical Conservation and Development
Women's/Gender Studies
Research and Evaluation Methodology
Romance Languages
French and Francophone Studies
Spanish
School Counseling and Guidance
School Psychology
Sociology
Tropical Conservation and Development
Women's/Gender Studies
Soil and Water Science
Geographic Information Systems
Hydrologic Sciences
Tropical Conservation and Development
Wetland Sciences
Special Education
Statistics
Quantitative Finance
Veterinary Medical Sciences
Animal Molecular and Cellular Biology
Clinical and Translational Science
Toxicology
Wildlife Ecology and Conservation
Geographic Information Systems
Tropical Conservation and Development
Wetland Sciences
Zoology
Animal Molecular and Cellular Biology
Tropical Conservation and Development
Wetland Sciences
Doctor of Plant Medicine (D.P.M)
Requirements for Master's Degrees

The master's degree is conferred only on completing a coherent and focused program of advanced study. Each academic unit sets its own minimum degree requirements beyond the minimum required by the Graduate Council.

General Regulations for Master's Degrees

Graduate School regulations are as follows. Colleges and academic units may have additional regulations beyond those stated below. Unless otherwise indicated in the next sections on master's degrees, these general regulations apply to all master's degree programs at the University.

Course requirements: Graduate credit is awarded for courses numbered 5000 and above. The program of course work for a master's degree must be approved by the student's adviser, supervisory committee, or faculty representative of the academic unit. No more than 9 credits from a previous master's degree program may apply toward a second master's degree. These credits are approved only with the written approval of the Dean of the Graduate School.

Major: Work in the major must be in courses numbered 5000 or above. For work outside the major, 6 credits of courses numbered 3000 or above may be taken if part of an approved plan of study.

Minor: Minor work must be in an academic unit other than the major. If an academic unit contributes more than one course (as specified in the curriculum inventory and/or the Graduate Catalog) to the major, the student is not eligible to earn a minor from the contributing academic unit. If a minor is chosen, at least 6 credits of work are required in the minor field. Two 6-credit minors may be taken with the major academic unit's permission. A 3.00 (truncated) GPA is required for minor credit.

Degree requirements: Unless otherwise specified, for any master's degree, the student must earn at least 30 credits as a graduate student at UF. No more than 9 of the 30 credits (earned with a grade of A, A-, B+, or B) may be transferred from institutions approved for this purpose by the Dean of the Graduate School. At least half of the required credits (not counting 6971) must be in the major.

Transfer of credit: Only graduate-level (5000-7999) work with a grade of B or better, is eligible for transfer of credit. A maximum of 15 transfer credits are allowed. These can include no more than 9 credits from institutions approved by UF, with the balance obtained from postbaccalaureate work at the University of Florida. Credits transferred from other universities are applied toward the degree requirements, but grades earned are not computed in the student's grade point average. Acceptance of transfer of credit requires approval of the student's supervisory committee and the Dean of the Graduate School.

Academic units must submit petitions for transfer of credit for a master's degree during the student's first term of enrollment in the Graduate School.

Supervisory committee: The student's supervisory committee must be appointed as soon as possible after the student is admitted to the Graduate School and no later than the second term of graduate study.

Supervisory committees for graduate degree programs are initiated by the student, nominated by the respective academic unit chair, approved by the college dean, and appointed by the Dean of the Graduate School. The Dean of the Graduate School is an ex-officio member of all supervisory committees. Only Graduate Faculty may serve on a supervisory committee. If a student takes fewer than 12 credits in the first term, the deadline is the end of the term during which the student has accumulated 12 or more credits or the end of the second term. If a minor is designated for any degree, a representative from that minor is needed on the supervisory committee. If two minors are designated, two representatives are needed.

The supervisory committee for a master's degree with a thesis should consist of at least two Graduate Faculty members, unless otherwise specified. If a minor is designated, the committee must include a Graduate Faculty member from the minor department.

For a master's degree without thesis, oversight is at the academic unit/department/college level only. Non-thesis programs may choose to have a formal committee or an alternate structure as determined by the program's graduate faculty and consistent with academic unit policies. The oversight authority will be considered as the supervisory committee. Units are able to enter their internal information into GIMS as a convenience. Any student with a minor must have the name of the graduate faculty member overseeing the minor entered into GIMS.

Changes to existing supervisory committee: A student, in consultation with his or her academic unit, may seek changes to an existing supervisory committee. Changes to a student's committee are allowed until midpoint of the term of degree award if the defense has not occurred. No changes are allowed after the defense. For procedural details, contact the major academic unit.

Language requirements: (1) Each academic unit determines whether a reading knowledge of a foreign language is required. The requirement varies from one academic unit to another, and the student should check with the appropriate academic unit for specific information. (2) All candidates must be able to use the English language correctly and effectively, as judged by the supervisory committee.

Examination: Each candidate must pass a final comprehensive examination. Some programs use different terminology, such as capstone course. This examination must cover at least the candidate's field of concentration. It must occur no earlier than the term before the degree is awarded.

Time limitation: All work (including transferred credit) counted toward the master's degree must be completed within 7 years before the degree is awarded.

Leave of absence: Any student who will not register at UF for a period of more than 1 term needs prior written approval from the supervisory committee chair for a leave of absence for a designated period of time. This approval remains in the student's departmental file. The Graduate School does not require notification. The student must reapply for admission on return. See Readmission and Catalog Year.

Master of Arts and Master of Science

The general requirements for the Master of Arts and the Master of Science degrees also apply to the following degrees: Master of Arts in Education, Master of Arts in Mass Communication, Master of Science in Construction Management, Master of Science in Pharmacy, and Master of Science in Statistics. There are additional requirements for specialized degrees.

Course requirements: A master's degree with thesis requires at least 30 credits including up to 6 credits of Research for Master's Thesis (6971). All thesis students must register for an appropriate number of credits in 6971. A non-thesis Master of Arts or Master of Science degree requires at least 30 credits. No more than 6 of those credits can be from SU courses. Non-thesis students cannot use Research for Master's Thesis (6971). For all master's programs, at least half the required credits (not counting 6971) must be in the major. One or two minors of at least 6 credits each may be taken, but a minor is not required by the Graduate School. Minor work must be in an academic unit other than the major.

Non-thesis MS. engineering program: Students in engineering, if working at off-campus centers, must take half the course work from full-time UF faculty members and must pass a comprehensive written examination by a committee recommended by the Dean of the College of Engineering. This written comprehensive examination may be taken at an off-campus site.

Master's thesis requirements: Each master's thesis candidate must prepare and present a thesis that shows independent investigation. It must be acceptable, in form and content, to the
supervisory committee and to the Graduate School. The work must be of publishable quality and must be in a form suitable for publication, guided by the Graduate School's format requirements. The academic unit is responsible for quality and scholarship. Graduate Council requires the Graduate School Editorial Office, as agents of the Dean of the Graduate School, to briefly review theses and dissertations for acceptable format, and to make recommendations as required.

Format requirements and example pages:
[link]

Checklist:
[link]  [link]

Application Support Center/Electronic Theses and Dissertation Lab:
[link]

Graduate School Editorial Office Information:
[link]

Gatorlink e-mail requirement: UF requires students to maintain access to their Gatorlink e-mail accounts. Accordingly, the Editorial Office only communicates with students through official Gatorlink e-mail.

Thesis first submission: When first presented to the Graduate School Editorial Office, the thesis must be successfully defended. Therefore, the final examination data must be posted in Graduate Information Management System (GIMS), prior to the student attempting to submit their thesis document for review by the Graduate School's editorial staff. Directly after the oral defense, the Academic Unit must submit the Final Exam Form and the UF Publishing Agreement through (GIMS). Before presentation to the Editorial Office, the thesis should be virtually complete and completely formatted (not in a draft format). Students must be completely familiar with the format requirements of the Graduate School and should work with one of the consultants in the Application Support Center, to troubleshoot the thesis, before attempting to make submission to the editors in the Graduate School Editorial Office. Students who fail to first meet with one of the Lab Consultants often find their document rejected upon First Submission to the Editorial Office, for not meeting the minimum submission standards required for an editorial review.

Should the document pass the submission requirements and appear acceptable for review, the Editorial Office will e-mail the student, using their Gatorlink email address, confirming the submission, and responding with an acceptance e-mail. Should the document not pass first submission requirements, a denial e-mail will instead be sent, advising the student of their options at that time. This notice must be addressed immediately. Once a successful first submission has been achieved and the document has been reviewed by one of the Graduate School's editors, another e-mail is sent, providing editorial feedback to the student and committee chair. The student is responsible for retrieving the thesis, review comments, and resolving any defects related to the format requirements. Students should promptly make all required changes.

Uploading and submitting the final pdf for Editorial Final Submission: After changes have been made to the satisfaction of the supervisory committee, the Electronic Thesis or Dissertation (ETD) Signature Page is submitted electronically to the Graduate School Editorial Office, via the Graduate Information Management System (GIMS). This must be completed by the Editorial Office's Final Submission Deadline. Once submitted, the student should upload and submit the final pdf of the electronic thesis, using the Electronic Document Management (EDM) system. The document will undergo a final review by one of the Graduate School Representatives. The Editorial Office ensures that the format is acceptable, that all indicated changes were made, and that all of the hyperlinks work within the document. The Graduate School Representative then e-mails the student regarding the status of the ETD. If accepted, no further changes are allowed. If changes are still required, the student should resubmit the corrected document as soon as possible. All documents must be confirmed with final approval emails from the Graduate School Editorial Office by the Final Clearance deadline. When all changes have been made and approved, the Editorial Office will email the Committee Chair and the student with a message, indicating the student has achieved Editorial Final Clearance with the Graduate School's Editorial Office.

Editorial Final Clearance: Among other requirements (see Checklist above), the final thesis must be confirmed as accepted, by email, by 5:00 p.m. on this deadline. This deadline only applies if all other posted deadlines for the term have been appropriately met. Since there are hundreds of students concurrently completing the process, most students complete all requirements well in advance, in order to ensure they do not face the chance of not graduating within their intended term.

Copyright: The student is automatically the copyright holder, by virtue of having written the thesis. A copyright page should be included immediately after the title page to indicate this.

Thesis language: Theses must be written in English, except for students pursuing degrees in Romance or Germanic languages and literatures. Students in these disciplines, with the approval of their supervisory committees, may write in the topic language. A foreign language thesis should have the Acknowledgments, Abstract, and Biographical Sketch written in English. All page titles before Chapter 1 should also be in English.

Journal articles: A thesis may include journal articles as chapters, if all copyright considerations are addressed appropriately. In such cases, Chapter 1 is a general introduction, tying everything together as a unified whole. The last chapter contains the general conclusions, once again tying everything together into a unified whole. Any chapter representing a journal article requires a footnote at the bottom of the first page of the chapter: “Reprinted with permission from...” giving the source, just as it appears in the list of references. The thesis must have only 1 abstract and 1 reference list.

Change from thesis to non-thesis option: Permission of the supervisory committee is needed to change from thesis to non-thesis option. This permission must be forwarded to the Graduate School by midpoint of the final term via the Graduate Information Management System (GIMS). The candidate must meet all the requirements of the non-thesis option as specified above: A minimum of 3 credits earned with a grade of Sin 6971 (Research for Master's Thesis) can be counted toward the degree requirements only if converted to credit as A, A-, B+, or B in Individual Work. The supervisory committee must indicate that the work was productive in and by itself and that the work warrants credit as a special problem or special topic course.

Supervisory committee: The student's supervisory committee should be appointed as soon as possible after the student is admitted to the Graduate School and no later than the second term of graduate study. Supervisory committees for graduate degree programs are initiated by the student, nominated by the respective academic unit chair, approved by the college dean, and appointed by the Dean of the Graduate School. The Dean of the Graduate School is an ex-officio member of all supervisory committees. Only Graduate Faculty may serve on a supervisory committee. If a student takes fewer than 12 credits in the first term, the deadline is the end of the term during which the student has accumulated 12 or more credits or the end of the second term. If a minor is designated for any degree, a representative from that minor is needed on the supervisory committee. If two minors are designated, two representatives are needed.

Thesis final examination: When most of the student's course work is completed, and the thesis is in final form, the supervisory committee must examine the student orally or in writing on (1) the thesis, (2) the major subjects, (3) the minor or minors, and (4) matters of a general nature pertaining to the field of study.

The candidate and the supervisory committee chair or co-chair must be physically present together at the same location. With approval of the entire committee, other members may attend the defense remotely, using modern communication technology. If a supervisory committee member cannot be present at the student's final defense, a Graduate Faculty member in the same academic unit may substitute for the absent committee member. No substitutions are allowed for the Chair.

The substitute should sign the Final Exam Form on the left side, in the space provided for committee members, notting the name of the absent member. The chair of the student's major academic unit also must indicate the reason for the absence and state that the absent member agreed to this substitution at the final examination. The substitute should not sign the ETD signature page. The original committee member must sign.

The defense date must be fewer than 6 months before degree award. All forms should be signed at the defense: the candidate and the supervisory committee chair sign the UF Publishing Agreement form, and the entire supervisory committee signs the ETD Signature Page and the Final Examination Report. If thesis changes are requested, the supervisory Committee Chair or the Committee's designee may hold the ETD Signature Page, until all requirements are met regarding the thesis. Once all stipulations of the Committee members are satisfied, and before the Editorial Office's Final Submission deadline for the term of intended degree award, verification of completion of this form must be submitted electronically via GIMS.

Non-thesis final comprehensive examination: Non-thesis students must pass a comprehensive written or oral examination on the major and on the minor if a minor is designated. This comprehensive examination must be taken no more than 6 months before the degree is awarded.

Other Master's Degrees
Although the general requirements for the Master of Arts and the Master of Science degrees also apply to the following discipline-specific degrees, there are some important differences. For detailed requirements, see the Programs Section of this catalog. In addition, the Graduate School monitors the following requirements for these specialized degrees.

**Master of Accounting**

The Master of Accounting (M.Acc.) is the graduate degree for students seeking professional careers in public accounting, business organizations, and government. The M.Acc. program offers three tracks: Audit, Tax, and Generalist.

The recommended curriculum to prepare for a professional career in accounting is the 32 five-year program with a joint awarding of the Bachelor of Science in Accounting and the Master of Accounting degrees on satisfactory completion of the 150-credit program. The entry point into the 32 is the start of the senior year.

Students who have already completed an undergraduate degree in accounting may enter the 1-year M.Acc. program, which requires 34 credits of course work. At least 20 credits must be in graduate-level accounting, excluding preparatory courses. All students must take a final comprehensive examination. For details about requirements, see General Regulations for master's degrees.

**M.Acc./J.D. program** This joint program culminates in both the Juris Doctor (J.D.) degree awarded by the College of Law and the Master of Accounting (M.Acc.) degree awarded by the Graduate School. The program is for students with an undergraduate degree in accounting, who are interested in advanced studies in both accounting and law. About 20 credits fewer are needed for the joint program than if the two degrees were earned separately. The two degrees are awarded after completing curriculum requirements for both degrees. Students must take the GMAT (or the GRE), and also the LSAT before admission, and must meet the admission requirements for the College of Law (J.D.) and the Fisher School of Accounting (M.Acc.).

**Master of Advertising**

The Master of Advertising (M.Adv.) program develops leaders in the profession by giving students theoretical, research, and decision-making skills essential for strategic advertising and integrated communications planning, and the opportunity to develop expertise in an area such as account management, research, creative strategy, media planning, international and cross-cultural advertising, new technology, and advertising sales management.

Students without a basic course or substantial professional experience in marketing or advertising must complete articulation courses before entering the program. All students must complete a basic statistics course before entering. The M.Adv. requires at least 33 credits and a thesis. Some areas allow a terminal project in lieu of thesis (with permission from the academic unit's Graduate Faculty).

Students select a supervisory committee to guide selection of courses, selection of thesis topic (or project in lieu of thesis), and completion of the thesis or project. At least one committee member must be from the Department of Advertising's Graduate Faculty.

Students complete and orally defend their theses or projects. The student's supervisory committee is responsible for evaluating the thesis or project and the final defense.

**Master of Agribusiness**

The Master of Agribusiness (M.A.B.) is a one-year, thirty-credit hour non-thesis degree program designed for students with no educational background in economics and offers advanced study for students seeking careers in sales, marketing, and management with organizations that operate mainly in the food industry and agribusiness sector. The courses complement the student's undergraduate education and prepare them for careers in private industry, state and federal government, education at secondary and post-secondary institutions, entrepreneurial pursuits, professional schools, financial analysis, agricultural production and marketing, food and consumer goods, and sales firms. The program includes a diversity of students from areas such as Animal Science, Food Science, Horticulture, Agricultural Education and Communication, Wildlife Ecology and Conservation, Agricultural and Biological Engineering, Turfgrass Management, Business Administration and Agronomy.

Contact the Graduate Program in 1170 McCarty Hall for information.

**Master of Architecture**

The Master of Architecture (M.Arch.) is an accredited graduate degree meeting the professional requirements of the National Architectural Accrediting Board for students who wish to qualify for registration and practice as architects. Candidates are admitted from architectural, related, and unrelated undergraduate backgrounds; professional experience is encouraged but not required.

The M.Arch. requires at least 52 credits, including no more than 6 credits in ARC 6971 or 6979. All students must take the Architectural Registration Test (ARE) before graduation. Students without a basic course or substantial professional experience in architecture must complete articulation courses before entering the program. All students must complete a first-year comprehensive examination. For details about requirements, see General Regulations for master's degrees.

Students with an architectural degree must be from the Department of Architecture's Graduate Faculty.

Students select a supervisory committee to guide selection of courses, selection of thesis topic (or project in lieu of thesis), and completion of the thesis or project. At least one committee member must be from the Department of Architecture's Graduate Faculty.

Students complete and orally defend their theses or projects. The student's supervisory committee is responsible for evaluating the thesis or project and the final defense.

**Master of Arts in Teaching and Master of Science in Teaching**

These degrees (M.A.T., M.S.T.) combine graduate study in a discipline with selected education courses and a teaching internship, providing flexible curricula that prepare students for a variety of options including teaching and further graduate work.

Requirements for the degrees are as follows:

- A reading knowledge of one foreign language if required by the student's major.
- Satisfactory completion of at least 36 credits while registered as a graduate student, with work distributed as follows:
  - At least 18 credits in the major and 6 credits in the minor.
  - Six credits in an academic unit internship in teaching (6943 Internship in College Teaching). Three years of successful teaching experience in a state-certified school may be substituted for the internship requirement, and credits thus made available may be used for further work in the major, the minor, or in education.
- At least one course selected from three or more of the following social and/or psychological foundations of education: education technology; counselor education; special education; and community college curriculum. Other areas may be added or substituted at the discretion of the supervisory committee. These courses may be used to comprise a minor.
- Of-campus work: At least 8 to 16 credits (at the academic unit's discretion), including at least 6 credits in one term, must be earned on the Gainesville campus. Beyond that, credits earned in off-campus UF courses approved by the Graduate School are accepted if they are appropriate to the student's degree program as determined by the supervisory committee.
- At degree completion, the student needs at least 36 credits in the major for certification purposes.
- The student must pass a final comprehensive examination (written, oral, or both). This examination covers the field of concentration and the minor.

**Master of Arts in Urban and Regional Planning**

The degree of Master of Arts in Urban and Regional Planning (M.A.U.R.P.) is a graduate degree that offers professional urban and regional planners and meets the educational requirements for the American Institute of Certified Planners. The program is accredited by the Planning Accreditation Board. General requirements are the same as for other Master of Arts degrees with thesis, except that the minimum registration required is 52 credits including no more than 6 credits in URP 6971 or 6979. All areas allow a project (requiring 6 credits) in lieu of thesis (with permission from the academic unit's Graduate Faculty).
MAURP/J.D. joint program: A 4-year program leading to the Juris Doctor and Master of Arts in Urban and Regional Planning degrees is offered under the joint auspices of the College of Law and the College of Design, Construction, and Planning, Department of Urban and Regional Planning. For students interested in the legal problems of urban and regional planning, this program blends law studies with relevant course work in the planning curriculum. Students receive both degrees at the end of a 4-year course of study whereas separate programs would require 5 years. Students must take the GRE and the LSAT before admission, must be admitted to both programs, and must complete the first year of law school course work before commencing law and planning courses. A thesis is required on completing the course work.

Interested students should apply to both the Holland Law Center and the Graduate School, noting on the application the joint nature of their admission requests. For more information on the program, contact the Holland Law Center and the Department of Urban and Regional Planning.

Master of Business Administration

The Master of Business Administration (M.B.A.) degree gives students (1) conceptual knowledge for understanding the functions and behaviors common to business organizations and (2) analytical, problem-solving, and decision-making skills essential for effective management. Emphasis is on developing the student’s capacities and skills for business decision making.

The traditional MBA curriculum is structured so that students may extend their knowledge in a specialized field. The program offers certificate programs in: financial services, hospitality management, supply chain management, information systems and operations management, entrepreneurship and technology management, and global management; and concentrations in finance, security analysis, real estate, competitive strategy, marketing, entrepreneurship, information systems and operations management, management, global management, human resource management, Latin American business, international studies, and sports administration.

Admission: Applicants for admission must submit recent official scores from the Graduate Management Admission Test (GMAT) and official transcripts for all previous academic work. All program options require at least two years of full-time professional work experience performed after receiving an acceptable bachelor's degree, along with written essays and personal recommendations from employers. All qualified applicants to the full-time (traditional) program are asked to interview as part of the admissions process. Applicants whose native, first language is not English must submit acceptable scores from one of the following TOEFL (Test of English as a Foreign Language), IELTS (International English Language Testing System), MELAB (Michigan English Language Assessment Battery) or successful completion of the University of Florida English Language Institute program. Admission is competitive and class size is limited.

A diverse student body is seen as an important asset of the program. Accordingly, the backgrounds of students include a wide range of disciplines and cultures. With the exception of the Option B program, the curriculum assumes no previous academic work in business administration; however, enrolling students find introductory course work in statistics, calculus, and financial accounting beneficial.

For more specific information on other aspects of the program, contact the Office of Admissions, UF MBA Program, 310 Hough Hall, P.O. Box 117152, Gainesville FL 32611-7152, or visit the website, http://www.floridamb.com.

Course work: A minimum of 48 qualified credits of course work are required for the two-year option, and one-year Option A. The one-year Option B requires a minimum of 32 credits. Credits cannot be transferred from another institution or program.

Options

Traditional MBA Two-Year Option: This 48 credit program requires 4 terms of full-time study over two academic years. Students are admitted for the fall term only; many students spend the summer between academic years working at internships. This option requires at least two years of full-time, post-undergraduate work experience as well as a bachelor's degree from an accredited four year institution.

Traditional MBA One-Year, Option A: This 48 credit program starts in late spring/early summer and students are expected to complete all coursework within 12 months. Successful candidates are expected to have a bachelor's degree from an accredited four year institution and two years of post-undergraduate work experience.

Traditional MBA One-Year, Option B: This 32 credit program starts in mid-summer and students expected to complete all course work within 10 months. Applicants to this program are required to have a bachelor's degree in business from a four-year accredited institution (conferred within the last seven years) and at least two years of post-undergraduate work experience. Students take primarily graduate business electives during summer B, fall, and spring terms and graduate in May.

Executive MBA Program: A 20-month program for working professionals, students attend classes one extended weekend per month (Friday-Sunday). The program is divided into five terms each lasting about four months. The program starts in August, and includes a one-week two credit international experience. The international study tour is a program requirement; students travel abroad in May for a week of experiential learning through lectures or discussions with local business and government leaders. The tour will include a combination of lectures, group projects and/or site visits. This option requires eight years of post-undergraduate work experience, and students are expected to have people or project management responsibilities in their current positions.

Professional Two-Year MBA: This 27-month program starts in August and January and is designed for professionals who work full time while pursuing their degree part time. Students attend classes one weekend per month (Saturday-Sunday) and must attend a one-week in-residence elective class. This option requires two years of post-undergraduate work experience.

Professional One-Year MBA: For students with acceptable undergraduate degrees in business (completed within seven years before starting the program), this 16-month option starts in January. Students attend classes one weekend per month (Saturday-Sunday) and must attend a one-week in-residence elective class. The first meeting includes a one-week, on-campus foundations review of basic course work. This option requires two years of post-undergraduate work experience.

Internet Two-Year MBA: This 27-month program starts in September and February and allows students to earn their MBA primarily through class lectures downloaded to their laptops or iPads. Students interact with faculty and classmates via e-mail, synchronous group discussion software, asynchronous class presentation software, and multimedia coursework. Students visit campus one weekend (Saturday-Sunday) every four months. This option requires two years of post-undergraduate work experience.

Internet One-Year MBA: For students with acceptable undergraduate degrees in business (completed within seven years before starting this program), this 16-month option starts in January and August and gives students the flexibility to work while earning the MBA through the Internet Two-Year MBA. Students visit campus one weekend (Saturday-Sunday) every four months. The first meeting includes a one week, on-campus foundations review of basic course work. This option requires two years of post-undergraduate work experience.

Professional MBA in South Florida: This 24 month program starts during the late summer, and is designed for professionals who wish to continue working full time while pursuing their degree part time. This program includes a one-week two-credit international experience. The international study tour is a program requirement; students travel abroad in November for a week of experiential learning through lectures or discussions with local business and government leaders. The tour will include a combination of lectures, group projects and/or site visits. Students attend classes once every three weeks during the late summer (Saturday-Sunday) at the UF MBA Sunrise Center in Sunrise, Florida. This option requires two years of post-undergraduate work experience.

MBA/MS. in medical sciences (biotechnology) program: Concurrent studies leading to the Master of Business Administration and Master of Science degrees, offered in cooperation with the College of Medicine, are in response to the needs of businesses engaged in biotechnological sciences. Both degrees can be obtained in 3 years. The program requires 1 year of science courses, 1 year of business courses, and a year devoted to research and electives in business and science. Research is done in one of the Interdisciplinary Center for Biotechnology Research core laboratories. Students must pass the admission and curriculum requirements of both degrees. Requirements of the M.B.A. program are those in effect when an applicant is admitted to the program. A student must meet all times remain in good standing in both degree programs to remain in the M.B.A. program. Applicants are expected to have previous professional work experience prior to starting the MBA program.

MBA/Ph.D. in medical sciences program: Concurrent studies leading to the Master of Business Administration and Doctor of Philosophy degrees are offered in cooperation with the College of Medicine. This 120-credit program trains research scientists to assume responsibilities as managers of biotechnical industries. Estimated time to complete both degrees is 5 to 7 years. Students must meet the admission and curriculum requirements of both programs. Requirements of the M.B.A. program are those in effect when an applicant is admitted to the program.
Master of Construction Management

The Master of Construction Management (M.C.C.) degree is for students pursuing advanced work in construction management, construction techniques, and research problems in the construction field.

General requirements are the same as for the Master of Science in Construction Management degree except that the M.C.M. requires at least 36 graduate credits. A thesis is not required. All candidates are required to pass a comprehensive examination at the completion of course work.

Joint Program: The M.C.M./J.D. program is offered in conjunction with the Levin College of Law.

Master of Education

The Master of Education (M.Ed.) degree program meets the need for professional personnel to serve a variety of functions required in established and emerging educational activities of modern society. A thesis is not required.

All M.Ed. programs require at least 36 credits, with at least half of these credits earned in courses in the College of Education. Up to 6 credit earned from 3000- and 4000-level courses taken outside the academic unit may be counted toward the minimum requires for the degree provided they are part of an approved plan of study. (See also General Requirements for Master's Degrees.)

At least 16 credits must be earned while the student is enrolled as a graduate student in courses offered on the Gainesville campus of the University of Florida including registration for at least 6 credits in a single term. This requirement may deviate where distance education programs are considered.

Master of Engineering

Students may choose a thesis or non-thesis option for the Master of Engineering (M.E.) degree. To be eligible for admission to the M.E. program, students must have earned a bachelor's degree from an ABET-accredited college or they must complete articulation work for equivalence. Admission requirements of the Graduate School must be met. The College of Engineering may use the Fundamentals of Engineering examination in lieu of the GRE for admitting students into the non-thesis master's degree programs. Students who do not meet the ABET requirement may be admitted to the Master of Science program (see section on Master of Arts and Master of Science).

The non-thesis M.E. degree is a 30-credit course-work-only degree (practice-oriented project or capstone course may be included in the 30 credits). At least 15 credits must be in the student's major at the 5000 level or higher. For work outside the major, courses numbered 3000 or above (not to exceed 6 credits) may be taken if they are part of an approved plan of study. If a minor is chosen, at least 6 credits are required. Two 6-credit minors may be taken. At the discretion of individual engineering academic units, an oral or written examination may be required.

The thesis option requires 30 credits of course work, including up to 6 credits of 6971 (Research for Master's Thesis). At least 12 credits (not counting 6971) must be in the student's major. Courses in the major must be at the 5000 level or higher. For work outside the major, up to 6 credits of courses numbered 3000 or above may be taken if part of approved plan of study. If a minor is chosen, at least 6 credits are required. Two 6-credit minors may be taken at the discretion of the academic unit. A comprehensive oral and/or written final examination is required.

An off-campus (distance learning) student who is a candidate for the non-thesis M.E. degree must take half the course work from full-time U.F. faculty members and must pass a comprehensive written examination administered by a committee from the academic unit. If the student has a minor, the committee must include a member representing that minor.

Master of Fine Arts

The Master of Fine Arts (M.F.A.) degree is offered with majors in art, creative writing, and theatre. Requirements are the same as for the Master of Arts with thesis, except the M.F.A. requires at least 60 credits (54 for creative writing), including 6 to 9 credits in 6971 (Research for Master's Thesis). Students in art and theatre substitute 6973 (Individual Project) creative work in lieu of the written thesis.

Admission: Applicants requesting admission to any of the programs should have an earned baccalaureate degree in the same or a closely related field from an accredited institution. Students must fulfill the admission requirements of their disciplines and the Graduate School's admission criteria. In cases where the undergraduate degree is not in the area chosen for graduate study, the student must demonstrate a level of achievement fully equivalent to the bachelor's degree in the chosen graduate field. A candidate deficient in certain areas must remove the deficiencies by successfully completing appropriate courses.

Art or theatre candidates also must submit a portfolio of the creative work, or must audition, before being accepted into the program. Creative writing candidates must submit 2 short stories, 2 chapters of a novel, or 6 to 10 poems. Three years of work in residence are usually needed to complete degree requirements. If deficiencies must be removed, the residency could be longer. See the Programs. Section of this catalog for Art, English, and Theatre.

Art: The M.F.A. degree with a major in art involves advanced visual research for those who wish to attain a professional level of proficiency in studio work. Specialization is offered in the studio areas of art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. For studio work, the M.F.A. is generally the terminal degree and is often the required credential for teachers in arts and universities.

In addition to the general requirements above, students must take at least 60 credits. Requirements include 42 credits in studio courses (24 in specialization, 12 in electives, and 6 in ART 6973C); 6 credits in art history; 3 credits in teaching art in higher education (required if the student is to accept a teaching assistantship); 3 credits in aesthetics, criticism, or theory; and 6 credits in electives. The College requires the student to complete a semester of the thesis project work for purposes of record, exhibition, or instruction.
Creative writing: The M.F.A. in creative writing develops writers of poetry and fiction by a series of workshops and literature seminars. Candidates are expected to produce a thesis (a manuscript of publishable poetry or fiction) at the end of the 3-year program. The degree requires 9 courses (4 workshops, 3 literature courses, and 2 electives), 3 reading tutorials, and a thesis: 46 credits in all. Students take at least 1 workshop each term. All of the literature courses cannot be in the same century. The electives may be literature seminars or workshops: 1 elective may be an approved graduate course outside the Department of English.

Theatre: The M.F.A. degree with a major in theatre is for those interested in production-oriented theatrical careers and teaching. Two specializations are offered: acting and design. The craft skills encompassed in the program are later applied in public and studio productions. The program requires 60 credits, including 18 credits of core classes, 17 credits of specialty training, an internship, and a project in lieu of a thesis.

Master of Fire and Emergency Services

The Master of Fire and Emergency Services (M.F.E.S) is a non-thesis, distance education, advanced degree program with a research report/project requirement offered by the Rinker School of Construction Management. The degree focuses on Emergency Services/Disaster Management (ESDM) and is designed for individuals who are seeking knowledge in emergency planning, hazard mitigation and preparedness, disaster response and recovery, and homeland security. The goal is to create broad experience that includes the many elements of current cases in ESDM and emphasizes both the critical thinking and leadership skills necessary to advance in the field. Major research topics include interdisciplinary studies in material sciences, suppression systems, advanced planning and geographic systems, pre- and post-disaster mitigation planning, computer applications, and technological innovations.

Admission: All admission requirements of the Graduate School must be met. Applicants must have a U.S. Bachelor's degree (or equivalent) from an accredited institution. In addition, applicants must have at least five years of meaningful supervisory and management related experience; a cumulative verbal and quantitative GRE score of 300 or higher; a grade point average of 3.0 on a 4.0 scale (preferred); and for international applicants a TOEFL score of 80 or higher on the Internet-Based exam (550 on the Paper-Based) or a 6 or higher on the IELTS.

Work required: At least 33 credits overall (at least 17 credits in the major) with a GPA of 3.0 or higher, a final comprehensive exam, and a research report.

Master of Fisheries and Aquatic Sciences

The non-thesis Master of Fisheries and Aquatic Sciences (M.F.A.S) program trains students in the technical aspects of fisheries and aquatic sciences emphasizing written and oral communication of scientific information. Requirements are the same as for the Master of Science degree with the non-thesis option, except that the minimum credit requirement is 32 credits, of which at least 26 graduate credits of graded course work (at least 16 in the major), and a technical paper. The final draft of the technical paper must be submitted to all supervisory committee members for approval at least 3 weeks before the scheduled date of the oral and written final examination.

Master of Forest Resources and Conservation

The Master of Forest Resources and Conservation (M.F.R.C) degree is for additional professional preparation rather than primary research. Requirements are the same as those listed under General Regulations for master's degrees, except that the M.F.R.C requires GRE scores of at least 300 verbal and 500 quantitative.

Work required: At least 32 credits of letter-graded course work with at least 12 credits of graduate course work in the major are required. A thesis is not required, but the student must complete a technical project in an appropriate field. This project may take various forms, such as a literature review, extension publication, video, training manual, or curriculum. The M.F.R.C requires a final examination covering the candidate's entire field of study. The student must present the work to the supervisory committee in an on-campus public forum before the final examination.

Master of Health Administration

The Master of Health Administration (M.H.A.), offered by the College of Public Health and Health Professions, trains qualified individuals to become managers and leaders of health care organizations. The degree provides a core of business and analytical skills, concepts and knowledge specific to health administration, opportunities for application and synthesis, and exposure to the field of practice. The M.H.A. program admits students only in the fall term and requires full-time study for 2 years, plus a summer internship between the first and second years. The program requires a total of 63 credits.

Master of Health Science

The Master of Health Science (M.H.S.) degree, offered by the College of Public Health and Health Professions, provides exposure to health research and meets the need for leadership personnel in established and emerging health care programs. The College currently offers a program in occupational therapy.

There are three paths to enter occupational therapy and attain the Master of Health Science degree. The 4-year thesis option emphasizes research and is the appropriate route for (but not limited to) students interested in rehabilitation science. The 3-term non-thesis option emphasizes research and advanced theories related to the practice of occupational therapy. Both options prepare leaders in the profession and require 36 credits. The third option, the distance learning program, is for working professionals to increase knowledge in emerging practice areas and leadership. See the General Regulations for requirements for all master's degrees for further requirements.

Master of Interior Design

The Master of Interior Design (M.I.D.) allows students to direct their attention to a variety of topics including design pedagogy and processes; sustainable, safe, and secure environments; creative performance and innovation; and built heritage conservation.

Work required: includes at least 36 credits (no more than 6 thesis credits). Required preparatory courses are in addition to the minimum credits for graduate work.

Master of International Business

The Master of International Business (M.I.B) is a non-thesis interdisciplinary graduate business program designed to enhance a student's knowledge and understanding of global business trends and problems.

Admission: All admission requirements of the Graduate School must be met. Applicants must have a U.S. Bachelor's degree (or equivalent) from an accredited institution, with a major or minor in Business. In addition, applicants must complete a statement of purpose and submit two letters of recommendation as well as a resume and all official transcripts and admissions scores.

Work required: Students must complete the 30-credit curriculum, which consists of 14 core credits and 16 elective credits, with a grade point average (major and overall) of 3.0 or higher. The curriculum includes a mandatory global immersion experience and a non-thesis capstone project.

Master of International Construction Management
The Master of International Construction Management (M.I.C.M.) is a non-thesis, distance education, advanced degree program with a research report/project requirement offered by the Rinker School of Construction Management. The M.I.C.M. allows students with computer and Internet access to attend classes at any time, any place and to interact with faculty and classmates via the Internet.

Admissions: Applicants for admission must have:
- An undergraduate degree,
- At least 5 years of meaningful, supervisory-level construction management experience,
- Acceptable GRE scores,
- A grade point average of 3.00 on a 4.0 scale,
- If an international student, an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language; paper=550, internet=80), IELTS (International English Language Testing System 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program,
- Sponsorship by the employer.

Work required: The M.I.C.M. prepares students to assume upper-level construction management responsibilities in a multinational construction company. Specializations include sustainable construction, information systems, construction safety, and human resource management. In addition to 6 research-oriented graduate credits, the student selects 1 or 2 specializations and then takes the rest of the required 33 credits from the remaining courses and special electives. Students must pass a comprehensive oral and/or written examination on completing course work and the master's research report/project.

Master of Landscape Architecture

The degree of Master of Landscape Architecture (M.L.A.) is the advanced professional degree for graduates with baccalaureate credentials in landscape architecture and is a first professional degree for the graduate from a non-landscape architectural background. Candidates are admitted from related and unrelated fields and backgrounds. An advanced professional life experience track is available for eligible candidates.

Work required: Candidates must complete at least 52 credits, including no more than 6 credits of thesis or project. For students without baccalaureate credentials in landscape architecture, required preparatory courses are in addition to the minimum credits for graduate work. For advanced professional life experience candidates, the minimum requirement is 30 credits, including thesis. At least 50% of all course work must be graduate courses in landscape architecture. Some areas allow a project (requiring 6 credits) in lieu of thesis, with permission of the academic unit's Graduate Faculty.

Master of Latin

The Classics Department offers the non-thesis Master of Latin (M.L.) degree, a 30-credit program mainly for currently employed and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of Classics, and enhance their professional qualifications. This degree can be attained by students in residence for fall/spring terms or by a program of summer course work at UF and by directed independent study and/or distance learning courses during the regular academic year.

Students registering during summer terms can complete the degree in 4 years by earning 6 graduate credits each summer (total = 24), plus two 3-credit independent study or distance learning courses during the intervening academic years. Those who already have some graduate credit in Latin, or who can take more credits during the year, can complete the degree more quickly.

Unlike the M.A. degree in Latin, the Master of Latin degree has no thesis requirement, does not prepare students for Ph.D. level studies, and is aimed specifically at currently employed and certified Latin teachers.

Admission: Contact the Department's Graduate Coordinator or Distance Learning Coordinator before applying. Requirements for the admissions process are:
- Apply to UF's Graduate School,
- Acceptable GRE scores,
- Three letters of recommendation, and
- Transcripts recording undergraduate courses (and graduate courses, if any; students must demonstrate the ability to take Latin courses at the graduate level).

Degree requirements include:
- At least 30 credits as a UF graduate student. Of these, no more than 8 credits (grade of A, A-, B+, or B) may be transferred from institutions approved for this purpose by the Dean of the Graduate School. At least half of the 30 credits required should be from Latin language and literature courses (LAT or LNW courses at the 5000 level or above).
- UF graduate-level courses taken before admission to Graduate School (e.g., in the Latin Summer Institutes) may be applied to the 30 credits if approved by the Graduate School.
- The Department will work closely with individual students to determine how many previous graduate credits at UF or other institutions may be applied to this program.

The student may elect minor work in other academic units (e.g., history, philosophy, art history, religion) although there is no requirement to do so. If a minor is chosen, at least 6 credits are required in the minor field. Two 6-credit minors may be taken with departmental permission. A GPA of 3.0 is required for minor credit and for all work counted toward the degree. All work in a minor must be approved by the supervisory committee.

Examination: The supervisory committee administers a final oral and written comprehensive examination at completion of the course work. This examination includes (1) an oral component on Roman literary tradition and (2) a written component covering (a) Latin sight translation and grammar, (b) Roman history and civilization, and if applicable (c) the minor, or minors. As preparation for this examination, the student should read the required reading list of secondary works in English.

Language requirement: The Department for this degree plan does not require, but strongly recommends, at least a reading knowledge of one (or more) of the following: German, French, Italian, or Spanish. Such study will facilitate reading important secondary works not translated into English, enhance travel, and perhaps lead to teaching opportunities in the chosen language at the secondary school level.

Master of Laws in Comparative Law

The Master of Laws in Comparative Law (LL.M. Comp. Law) degree is for graduates of foreign law schools who want to enhance their understanding of the American legal system and the English common law system. The program starts with Introduction to American Law, a 4-credit summer course that gives students a foundation in the American legal process. It also helps students acclimate to the College of Law and the University community before starting the academic year. During fall and spring terms, and with the director's approval, students choose their work track is available for eligible candidates.

Degree requirements include:
- At least 52 credits as a UF graduate student. Of these, no more than 8 credits (grade of A, A-, B+, or B) may be transferred from institutions approved for this purpose by the Dean of the Graduate School. At least half of the 52 credits required should be from Latin language and literature courses (LAT or LNW courses at the 5000 level or above).
- UF graduate-level courses taken before admission to Graduate School (e.g., in the Latin Summer Institutes) may be applied to the 30 credits if approved by the Graduate School.
- The Department will work closely with individual students to determine how many previous graduate credits at UF or other institutions may be applied to this program.

Students registering during summer terms can complete the degree in 4 years by earning 6 graduate credits each summer (total = 24), plus two 3-credit independent study or distance learning courses during the intervening academic years. Those who already have some graduate credit in Latin, or who can take more credits during the year, can complete the degree more quickly.

Unlike the M.A. degree in Latin, the Master of Latin degree has no thesis requirement, does not prepare students for Ph.D. level studies, and is aimed specifically at currently employed and certified Latin teachers.

Admission: Contact the Department's Graduate Coordinator or Distance Learning Coordinator before applying. Requirements for the admissions process are:
- Apply to UF's Graduate School,
- Acceptable GRE scores,
- Three letters of recommendation, and
- Transcripts recording undergraduate courses (and graduate courses, if any; students must demonstrate the ability to take Latin courses at the graduate level).

Degree requirements include:
- At least 30 credits as a UF graduate student. Of these, no more than 8 credits (grade of A, A-, B+, or B) may be transferred from institutions approved for this purpose by the Dean of the Graduate School. At least half of the 30 credits required should be from Latin language and literature courses (LAT or LNW courses at the 5000 level or above).
- UF graduate-level courses taken before admission to Graduate School (e.g., in the Latin Summer Institutes) may be applied to the 30 credits if approved by the Graduate School.
- The Department will work closely with individual students to determine how many previous graduate credits at UF or other institutions may be applied to this program.

The student may elect minor work in other academic units (e.g., history, philosophy, art history, religion) although there is no requirement to do so. If a minor is chosen, at least 6 credits are required in the minor field. Two 6-credit minors may be taken with departmental permission. A GPA of 3.0 is required for minor credit and for all work counted toward the degree. All work in a minor must be approved by the supervisory committee.

Examination: The supervisory committee administers a final oral and written comprehensive examination at completion of the course work. This examination includes (1) an oral component on Roman literary tradition and (2) a written component covering (a) Latin sight translation and grammar, (b) Roman history and civilization, and if applicable (c) the minor, or minors. As preparation for this examination, the student should read the required reading list of secondary works in English.

Language requirement: The Department for this degree plan does not require, but strongly recommends, at least a reading knowledge of one (or more) of the following: German, French, Italian, or Spanish. Such study will facilitate reading important secondary works not translated into English, enhance travel, and perhaps lead to teaching opportunities in the chosen language at the secondary school level.

Master of Laws in Environmental and Land Use Law

The Master of Laws in Environmental and Land Use Law degree is for eligible candidates.

Master of Laws in Environmental and Land Use Law

The Master of Laws in Environmental and Land Use Law degree is for eligible candidates.

For more information about the Environmental and Land Use Law Program, contact University of Florida Levin College of Law, Environmental and Land Use Law Office.

P.O. Box 117625
Master of Laws in International Taxation

The Master of Laws in International Taxation (LL.M.I.T.) degree program offers advanced instruction for law graduates who plan to specialize in international taxation, in the practice of law. Degree candidates must complete 26 credits. Of these 26 credits, 22 must be graduate-level tax courses, and 13 must be graduate-level international tax courses, including a research and writing course.

Master of Laws in Taxation

The Master of Laws in Taxation (LL.M.T.) degree program offers advanced instruction for law graduates who plan to specialize in federal taxation and particularly federal income taxation, in the practice of law. Degree candidates must complete 26 credits. Of these 26 credits, 22 must be graduate-level tax courses, including a research and writing course.

Master of Music

The Master of Music (M.M.) degree is offered in music or music education. The music program offers the following concentrations: choral conducting, composition, electronic music, ethnomusicology, instrumental conducting, music education, music history and literature, music theory, performance, and sacred music. The M.M. degree prepares students for careers as teachers in schools, schools, and universities; performers; music historians; music critics; church musicians; composers; conductors; and accompanists.

Admission: Applicants should have a baccalaureate degree in music or a closely related area from an accredited institution. Students whose undergraduate degree is in another discipline must demonstrate a level of achievement fully acceptable for master's level work in this discipline. Applicants normally complete at least 4 semesters of music theory, two semesters of music history, and a 3-semester signature of the program's philosophy and curriculum.

Work required includes at least 32 credits of course work (not counting prerequisite or deficiency courses) incorporating a core of 9 credits. The core in all emphases includes MUS 6716 (MUE 6785 in the music education program), MUT 6629, and one MUM or MUL graduate course. A thesis or creative project in lieu of thesis is required.

The College of the Arts reserves the right to retain student work for purposes of record, exhibition, or instruction. For more information, see the Programs Section of this catalog.

Master of Occupational Therapy

The non-thesis Master of Occupational Therapy (M.O.T.) degree program is for students who do not have a degree in occupational therapy, and who want to enter the field of occupational therapy. The program gives students a holistic perspective including an understanding of the philosophical and theoretical bases for practice in the current health care environment. The M.O.T. program provides a strong foundation in therapy, assessment, and therapeutic intervention.

This 5-term program of graduate study consists of 3 terms of classroom course work and 2 terms (24 weeks) of internship. Students enter the program after completing a bachelor's degree. The M.O.T. degree is awarded after completing 58 credits. Students must receive at least a B (3.00 truncated) on all course work and satisfactory evaluations on all clinical fieldwork.

Master of Public Health

The Master of Public Health (M.P.H.) is a non-thesis degree program that prepares students to become effective public health practitioners, scientists, and educators. Graduates can contribute to the health of the local, national, and international communities through advancing public health knowledge and by designing, implementing, and evaluating programs and policies that prevent disease and promote health. Students have the opportunity to develop skills in 1 of 6 public health concentration areas:

- Biostatistics: Applying quantitative and analytical methods in public health research and evaluation
- Environmental health: Assessing risk levels and protecting the public from environmental threats to health
- Epidemiology: Studying the distribution and determinants of health in populations and communities
- Public health management and policy: Providing leadership in public health administration and developing policies to promote the public's health
- Public health practice: Developing breadth in the field of public health by studying 2 or more of the other concentration areas
- Social and behavioral sciences: Exploring the unique issues faced by diverse groups and populations and acquiring skills to achieve social and behavioral change.

The M.P.H. degree program is a 48-credit program for individuals with bachelor's degrees. Those with prior terminal degrees in health-related fields may take the M.P.H. in an accelerated 42-credit format. Several collaborative programs with professional and graduate degrees are available, including D.V.M., M.P.H., J.D., M.P.H., and Pharm.D./M.P.H. A combined degree program for seniors and a 15-credit certificate program also are offered. For additional information, visit http://www.mph.ufl.edu.

Admission: Applicants with any undergraduate major are considered for the program as long as they meet the Graduate School admission requirements and their interests match the program's philosophy and curriculum.

Work required: In the 48-credit program, students take 16 credits of core public health course work and 5-8 credits of internship. Internships are designed to promote competency in the concentration area and contribute to the student's career goals. The remaining 24-27 credits include required and elective course work in the concentration area chosen by the student. Specific course requirements vary by concentration area.

Students who have a relevant terminal degree in a health-related field may be eligible for the 42-credit accelerated program, pending M.P.H. admissions committee approval. This program requires completion of 16 credits of core public health course work, 21 credits of concentration course work, and a 5-credit internship.

Master of Science in Architectural Studies

Admission: The Master of Science in Architectural Studies (M.S.A.S.) is a nonprofessional, research degree for students with undergraduate degrees in any field of study who wish to undertake advanced studies and research in architectural specialties. Specialization is offered in environmental technology, architectural preservation, urban design, history, and theory.

Work required includes at least 32 credits of course work incorporating 6 credits of ARC 6971 (Research for Master's Thesis). Most course work should be in the School of Architecture, but multidisciplinary electives in planning, history, law, engineering, art history, and real estate are encouraged. Students may also enroll in one of the School's off-campus programs in Nantucket, in the Caribbean, in Hong Kong, or in Vicenza. A thesis is required.

Requirements for level and distribution of credits, supervisory committee, and final examination are the same as for the Master of Arts and Master of Science with thesis.
Master of Science in Entrepreneurship

The Master of Science in Entrepreneurship (M.S.E.) program is a one-year, 36-credit, campus-based program designed for young and aspiring entrepreneurs and change-makers. Offered to both business and non-business majors alike, the program is a combination of classroom delivery and experiential learning activities with a focus on opportunity assessment, feasibility analysis, lean entrepreneurial concept testing, business plan development, entrepreneurial leadership, and the sourcing of capital. Students are exposed to cutting edge entrepreneurial theory, which they apply immediately by consulting for small business, commercializing UF technology, and creating their own businesses. The M.S.E. program is a non-thesis degree requiring a final exam in lieu of a thesis.

Admission: All admission requirements of the Graduate School must be met. In addition, applicants must complete a statement of purpose, submit two letters of recommendation as well as a resume and all official transcripts and admissions scores, and conduct a program interview. Either a GMAT or GRE score will be accepted.

Work required: In order to graduate from the program students must:

- Complete 36 credits with a grade of "C" or better;
- Maintain an overall Graduate GPA of 3.0 or higher;
- Maintain a Major GPA of 3.0 or higher;
- Complete the program final exam a portfolio of entrepreneurial experiences completed throughout the program demonstrating mastery of entrepreneurial competencies;
- Fulfill all program requirements.

Master of Science in Information Systems and Operations Management

The Master of Science in Information Systems and Operations Management (M.S.ISOM) program provides computing, analytical, and application skills to be used in a business setting. The primary areas of emphasis in the program are business intelligence and analytics, information technology, and supply chain management. Requirements span traditional academic disciplines to produce a multi-discipline focus. The M.S.ISOM program is a non-thesis degree program.

All admission requirements of the Graduate School must be met. There are no prerequisites for the program. However, students without a business background will need additional core business coursework.

Preparedness for graduation is based on:

- Completing a minimum of 36 credits (including 18 in the major) and all course requirements for the designated track. Letter grades of C-, D+, D, D- or E are not considered passing at the graduate level and therefore any required course for which such grades have been assigned must be repeated.
- Being registered for at least two credits in the semester in which the student intends to graduate.
- Completing all degree requirements, including a minimum grade point average of B (3.00 truncated) in the major (i.e. only courses offered under the Department section of the graduate catalog) and all work attempted in the graduate program, including a minor where applicable.
- Clearing all incompletes or other unresolved grades by the midpoint deadline published on the Graduate School's Critical Dates web page.
- Filing a degree application with the Office of the University Registrar by the deadline published on the Graduate School's Critical Dates web page. The degree application can be accessed on ISIS under "My Record." Check the box "Master of Science" on the application.

Master of Science in Nursing

The master's degree prepares nurses for advanced practice, clinical nurse specialist, or to be a clinical nurse leader. The graduate nursing core includes nursing theory, research, statistics, health policy, ethics, finance, and health promotion. The advanced practice core includes specific theory and clinical courses with relevant clinical experiences.

The College offers the master's degree and post-master's certification for nurse midwifery and the following nurse practitioner roles: adult acute care, adult, family, pediatric, and neonatal.

Additional offerings include:

- Psychiatric/mental clinical nurse specialists/nurse practitioners
- Clinical Nurse Leader

Graduates are eligible for Florida licensure and national certification. To be considered for the M.S.N. program, students must meet the following minimum requirements:

- Bachelor of Science in Nursing degree with an upper-division grade point average of 3.0 or higher from a CCNE or NLN AC accredited program
- A score of 500 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination (GRE) General Test. In the new version of the GRE a minimum score of 153 in the verbal section and 144 in the quantitative section. Analytical writing section is optional.
- Eligibility for licensure to practice as a registered nurse in the state of Florida

For application materials: [http://www.nursing.ufl.edu/prospective/prospective_msn_application_process.shtml](http://www.nursing.ufl.edu/prospective/prospective_msn_application_process.shtml)

Master of Statistics

The Master of Science (M.Stat.) degree requires at least 36 credits including at least 30 graduate credits in the major. Courses are selected in consultation with the supervisory committee chair and approved by the supervisory committee. Students must pass two examinations: (1) a first-year examination, given by a committee designated for the purpose, on material covered in statistics courses for first-year graduate students and (2) a final oral examination consisting of a presentation by the student on a statistical topic not covered in depth in the regular course work. The student should consult with his/her advisor to choose a topic, and present a written report on that topic to the supervisory committee at least 1 week before the examination date. A typical report is 8 to 10 pages. During and after the presentation, the student's committee may ask questions related to the topic of the presentation and related to other material covered in the student's program of study.

Master of Sustainable Development Practice

The Master of Sustainable Development Practice (MDP) at the University of Florida is focused on training development practitioners capable of addressing development challenges in creative and dynamic ways. The UF MDP bridges the academic and development pillars of natural sciences, social sciences, health sciences and integrated management skills into a vigorous and innovative program curriculum.

The MDP Degree requires 45 credits of course work, including 33 core credits and 12 electives, the latter through which a student focuses on a specialization. The MDP Program is a non-thesis degree, wherein each student must successfully complete a set of requirements. These include, among others, a summer field practicum, the development of a poster presented in a public poster session, a final practicum report approved by their committee, and a public presentation and private defense with committee members of the final report. All students will be expected to meet defined learning outcome objectives, integrating knowledge, skills and desired professional behaviors.

All admission and graduation requirements of the Graduate School must be met. Students are required to develop a study plan approved by the MDP program Graduate Coordinator.
Requirements for Doctoral Degrees

Doctor of Philosophy

The Doctor of Philosophy (Ph.D.) is a research degree and is granted on evidence of general proficiency, distinctive attainment in a special field, and particularly on ability for independent investigation as demonstrated in a dissertation presenting original research with a high degree of literary skill. Consequently, doctoral programs are more flexible and varied than those leading to other graduate degrees. The Graduate Council does not specify what courses are required for the Doctor of Philosophy degree. General requirements: the program should be unified in relation to a clear objective, the program should have the considered approval of the student's entire supervisory committee, and the program should include an appropriate number of credits of doctoral research.

Course Requirements

Course requirements for doctoral degrees vary from field to field and from student to student. In all fields, the Ph.D. degree requires at least 90 credits beyond the bachelor's degree. All master's degrees counted in the minimum must be earned in the last 7 years.

Transfer of credit: No more than 30 credits of a master's degree from another institution will be transferred to a doctoral program. If a student holds a master's degree in a discipline different from the doctoral program, the master's work will not be counted in the program unless the academic unit petitions the Dean of the Graduate School. All courses beyond the master's degree taken at another university to be applied to the Ph.D. degree must be taken at an institution offering the doctoral degree and must be approved for graduate credit by the Graduate School of the University of Florida. All courses to be transferred must be graduate-level, letter-graded with a grade of B or better and must be demonstrated to relate directly to the degree being sought. All such transfer requests must be made by petition of the supervisory committee no later than the third term of Ph.D. study. The total number of credits (including 30 for a prior master's degree) that may be transferred cannot exceed 45, and in all cases the student must complete the qualifying examination at the University of Florida. In addition, any prior graduate credits earned at UF (e.g., a master's degree in the same or a different discipline) may be transferred into the doctoral program at the discretion of the supervisory committee and by petition to the Graduate School. The petition must show how the prior course work is relevant to the current degree.

Major: A Ph.D. student does the major work in an academic unit specifically approved for offering doctoral courses and supervising dissertations. See Graduate Programs. At least a B (3.00 truncated) is needed for courses included in the major.

Minor: Minor work must be in an academic unit other than the major. If an academic unit contributes more than one course (as specified in the curriculum inventory and/or the Graduate Catalog) to the major, the student is not eligible to earn a minor from the contributing academic unit. A 3.00 (truncated) GPA is required for minor credit.

With the supervisory committee's approval, the student may choose one or more minor fields. If one minor is chosen, the supervisory committee member representing the minor suggests 12 to 24 credits of courses numbered 5000 or higher as preparation for a qualifying examination. If two minors are chosen, each must include at least 8 credits. Competency in the minor is demonstrated by written examination by the minor academic unit, or by the oral qualifying examination.

Leave of Absence

A doctoral student who ceases to be registered at UF for more than 1 term needs prior written approval from the supervisory committee chair for a leave of absence for a stated period of time. This approved leave is kept on file in the student's departmental record. It does not need Graduate School approval. The student must reapply for admission on returning. See Readmission and Catalog Year.

Supervisory Committee

Supervisory committees are nominated by the academic unit chair, approved by the dean of the college concerned, and appointed by the Dean of the Graduate School. The committee should be appointed as soon as possible after the student starts doctoral work and no later than the end of the second term of equivalent full-time study. The Dean of the Graduate School is an ex-officio member of all supervisory committees.

Duties and responsibilities of the supervisory committee:

- Inform the student of all regulations governing the degree sought. This does not absolve the student from responsibility for being informed about these regulations. See General Regulations.
- Meet immediately after appointment to review the student's qualifications and discuss and approve a program of study.
- Meet to discuss and approve the proposed dissertation project and the plans for carrying it out.
- Give the student a yearly evaluation letter in addition to S/U grades earned for research courses 7979 and 7980. The chair writes this letter after consulting with the supervisory committee.
- Conduct the qualifying examination (or participate in it, if administered by the academic unit).
- Meet when at least half the work on the dissertation is complete, to review procedure, progress, and expected results; and to make suggestions for completion.
- Meet with the student when the dissertation is completed and conduct the final oral examination to assure that the dissertation is a piece of original research and a contribution to knowledge. The supervisory committee chair or co-chair must be present with the candidate for the examination. All other committee members may attend remotely. Only the actual supervisory committee may sign the ETD Signature Page, and they must approve the dissertation unanimously. See Examinations in General Regulations.

Membership: The supervisory committee for a doctoral candidate comprises at least four members selected from the Graduate Faculty. At least two members, including the chair, must be from the academic unit recommending the degree. At least one member serves as external member and should be from a different educational discipline, with no ties to the home academic unit. One regular member may be from the home academic unit or another unit.

If a minor is chosen, the supervisory committee includes at least one Graduate Faculty member representing the student's minor. If the student elects more than one minor, each minor area must be represented on the supervisory committee. Therefore, committees for students with two minors must have a minimum of five members.

Special appointments: People without Graduate Faculty status may be made official members of a student's supervisory committee through the special appointment process. Appropriate candidates for special appointments include

- Individuals from outside UF with specific expertise who contribute to a graduate student's program of study
- Tenure-track faculty not yet qualified for Graduate Faculty status
- Non-tenure-track faculty or staff at UF who do not qualify for Graduate Faculty status

Limitations for special appointments:

- They do not hold Graduate Faculty appointments
- They have a special appointment that is specific only to an individual student's committee
• They may not serve as a supervisory committee chair, co-chair, external member, or minor representative.

The student's supervisory committee chair requests the special appointment, briefly explaining what the special appointment contributes to the supervisory committee. A special appointment is made for a specific supervisory committee. If a student changes to a new degree or major and the committee chair wishes to include the special member on the new supervisory committee, another request must be submitted to the Graduate School for the new committee.

External member:

• Represents the interests of the Graduate School and UF
• Knows Graduate Council policies
• Serves as an advocate for the student at doctoral committee activities.

If the academic unit's committee activity conflicts with broader University policies or practices, the external member is responsible for bringing such conflicts to the attention of the appropriate governing body. Therefore, the external member is prohibited from holding any official interest in the doctoral candidate's major academic unit. Faculty holding joint, affiliate, courtesy, or adjunct appointments in the degree-granting academic unit cannot be external members on a student's committee.

Minor member: The Graduate Faculty member who represents a minor on a student's committee may be appointed as the external member if he/she does not have a courtesy graduate appointment in the student's major academic unit.

Co chair: To substitute for the chair of the committee at any examinations, the co chair must be in the same academic unit as the candidate.

Retired faculty: Graduate Faculty members who retire may continue their service on supervisory committees for 1 year. With approval of the academic unit, retired faculty may continue serving on existing or new committees beyond this period.

Substituting members at qualifying and final examination: If a supervisory committee member cannot be present at the student's final defense, a Graduate Faculty member in the same academic area may substitute for the absent committee member. The substitute should sign the Final Examination form on the left side, in the space provided for committee members, noting the name of the absent member.

The chair of the student's major academic unit also must indicate the reason for the absence and state that the absent member agreed to this substitution at the final examination.

The substitute should not sign the ETD signature page. The original committee member must sign.

The student and chair or co-chair should be present for the oral defense; however, other committee members may elect to attend remotely, with approval by the other committee members, using modern communication technology to be present rather than being physically present at the defense.

No substitutes are allowed for the chair or external member of the committee. Changes to the supervisory committee may be entered online in GIMS before the qualifying examination.

The Graduate Council wants each supervisory committee to function as a University committee (not a departmental committee), applying University-wide standards to the various doctoral degrees. For complete information on the appointment process, consult the Graduate Council Policy Manual, http://gradschool.ufl.edu/archived-files/policy-manual-archived-copy.html (Chapter VIII).

Language Requirement

Any foreign language requirement for the Ph.D. is established by the major academic unit with approval of the college. The student should check with the graduate coordinator of the appropriate academic unit for specific information. The foreign language departments offer classes for graduate students starting to study a language. See the current Schedule of Courses for available languages. All candidates must be able to use the English language correctly and effectively, as judged by the supervisory committee.

Campus Residence Requirement

Beyond the first 30 credits counted toward the doctoral degree, students must complete 30 credits enrolled at the University of Florida campus or at an approved branch station of the University of Florida Agricultural Experiment Stations or the Graduate Engineering and Research Center. An academic unit or college may establish and monitor its own more-stringent requirement as desired.

Qualifying Examination

All Ph.D. candidates must take the qualifying examination. It may be taken during the third term of graduate study beyond the bachelor's degree.

The student must be registered in the term the qualifying examination is given.

The examination, prepared and evaluated by the full supervisory committee or the major and minor academic units, is both written and oral and covers the major and minor subjects. Except for allowed substitutions, all members of the supervisory committee must attend the oral part. The student and chair or co-chair must be in the same physical location. With approval of the entire committee, other committee members may attend remotely using modern technology. At this time the supervisory committee is responsible for deciding whether the student is qualified to continue work toward a Ph.D. degree.

If a student fails the qualifying examination, the Graduate School should be notified. A re-examination may be requested, but it must be recommended by the supervisory committee. At least one term of additional preparation is needed before re-examination.

Time lapse: Between the oral part of the qualifying examination and the date of the degree there must be at least 2 terms. The term the qualifying examination is passed is counted, if the examination occurs before the midpoint of the term.

Registration in Research Courses

Advanced Research (7979) is open to doctoral students not yet admitted to candidacy (classified as 7 and 8). Students enrolled in 7979 during the term they qualify for candidacy will stay in this registration unless the academic unit elects to change their enrollment to Research for Doctoral Dissertation (7980), which is reserved for doctoral students admitted to candidacy (classified as 9).

Admission to Candidacy

A graduate student becomes a candidate for the Ph.D. degree when the student is granted formal admission to candidacy. Such admission requires the approval of the student's supervisory committee, the academic unit chair, the college dean, and the Dean of the Graduate School. The approval must be based on:

• The academic record of the student
Dissertation

Each doctoral candidate must prepare and present a dissertation that shows independent investigation and that is acceptable in form and content to the supervisory committee and to the Graduate School. The work must be of publishable quality and must be in a form suitable for publication, using the Graduate School’s format requirements. The student and supervisory committee are responsible for level of detail and scholarship. Graduate Council requires the Graduate School Editorial Office, as agents of the Dean of the Graduate School, to review theses and dissertations for acceptable format, and to make recommendations as needed.

Doctoral dissertation requirements: Before presentation to the Editorial Office, the dissertation should be virtually complete and completely formatted (not in a draft format). Students must be completely familiar with the format requirements of the Graduate School and should work with one of the consultants in the Application Support Center, to troubleshoot the dissertation, before attempting to make submission to the editors in the Graduate School Editorial Office. Students who fail to first meet with one of the Lab Consultants often find their document rejected upon First Submission to the Editorial Office, for not meeting the minimum submission standards, required for an editorial review.

Format requirements:
- [URL]

Checklist:
- [URL]

Graduate School Editorial Office:
- [URL]

Application Support Center:
- [URL]

Gatorlink e-mail requirement: UF requires all students to maintain access to their Gatorlink e-mail.

Dissertation First Submission: Before presentation to the Editorial Office, the thesis should be virtually complete and completely formatted (not in a draft format). Students must be completely familiar with the format requirements of the Graduate School and should work with one of the consultants in the Application Support Center, to troubleshoot the dissertation, before attempting to make submission to the editors in the Graduate School Editorial Office. Students who fail to first meet with one of the Lab Consultants often find their document rejected upon First Submission to the Editorial Office, for not meeting the minimum submission standards required for an editorial review.

Should the document pass the submission requirements and appear acceptable for review, the Editorial Office will e-mail the student, using their Gatorlink email address, confirming the submission, and responding with an acceptance e-mail. Should the document not pass first submission requirements, a denial e-mail will instead be sent, advising the student of their options at that time. This notice must be addressed immediately. Once a successful first submission has been achieved and the document has been reviewed by one of the Graduate School’s editors, another e-mail is sent, providing editorial feedback to the student and committee chair. The student is responsible for retrieving the dissertation, review comments, and resolving any deficits related to the format requirements. Students should promptly make all required changes.

Uploading and submitting the final pdf for Editorial Final Submission: After changes have been made to the satisfaction of the supervisory committee, the Electronic Thesis or Dissertation (ETD) Signature page is submitted electronically to the Graduate School Editorial Office, via the Graduate Information Management System (GIMS). This must be completed by the Editorial Office’s Final Submission Deadline. Once submitted, the student should upload and submit the final pdf of the electronic thesis, using the Editorial Document Management (EDM) system. The document will undergo a final review by one of the Graduate School Representatives. The Editorial Office ensures that the format is acceptable, that all indicated changes were made, and that all of the hyperlinks work within the document. The Graduate School Representative then e-mails the student regarding the status of the ETD. If accepted, no further changes are allowed. If changes are still required, the student should resubmit the corrected document as soon as possible. All documents must be confirmed with final approval emails from the Graduate School Editorial Office by the Final Clearance deadline. This deadline is firm, and no exceptions can be granted. When all changes have been made and approved, the Editorial Office will email the Committee Chair and the student with a message, indicating the student has achieved Electronic Final Clearance with the Graduate School’s Editorial Office.

Editorial Final Clearance: Among other requirements (see Checklist above), the final thesis must be confirmed as accepted, by email, by 5:00 p.m. on this deadline. This deadline only applies, if all other posted deadlines for the term have been appropriately met. Because there are hundreds of students in this process, most students complete all requirements well in advance. It is the responsibility of the student to ensure they have achieved Final Clearance status by the Final Clearance Deadline for the term in which they intend to graduate. This can be confirmed via GIMS.

Publication of dissertation: All dissertation students must pay a $25 microfilm fee for traditional publication and microfilming fees through UMI/Proquest, even if they elect not to send the dissertation to UMI for publication. This charge will appear as a hold on the student record in ISIS after making first submission to the Graduate School Editorial Office. All dissertation students also must sign a microfilm agreement form. This form is provided to the student at the defense. This form is signed by the student; it is delivered to the Graduate School Editorial Office by the Final Submission Deadline for the intended term of degree award. Students who begin their graduate program in Fall 2001 or later must submit their final dissertations electronically (not on paper).

Copyright: The student is automatically the copyright holder, by virtue of having written the dissertation. A copyright page should be included immediately after the title page to indicate this. The Editorial Office does not accept copyright registration requests. Registering copyright is not required and does not benefit most students. Any students who wish to register a copyright can do so themselves (http://www.copyright.gov).

Dissertation language: Dissertations must be written in English, except for students pursuing degrees in Romance or Germanic languages and literatures. Students in these disciplines, with the approval of their supervisory committees, may write in the topic language. A foreign language dissertation should have the Acknowledgments, Abstract, and Biographical Sketch written in English. All page titles before Chapter 1 should also be in English.

Journal articles: Dissertations may include journal articles as chapters, if all copyright considerations are addressed appropriately. In such cases, Chapter 1 should be a general introduction, tying everything together as a unified whole. The last chapter should be general conclusions, again tying everything together into a unified whole. Any chapter representing a journal article needs a footnote at the bottom of the first page of the chapter: "Reprinted with permission from . . . " giving the source, just as it appears in the list of references. The dissertation should have only 1 abstract and 1 reference list.

Guidelines for Restriction on Release of Dissertations

Research performed at the University can effectively contribute to the education of our students and to the body of knowledge that is our heritage only if the results of the research are published freely and openly. Conflicts can develop when it is in the interests of sponsors of university research to restrict such publication. When such conflicts arise, the University must decide what compromises it is willing to accept, taking into account the relevant circumstances.

Final Examination
While submitting the dissertation and completing all other work prescribed for the degree, the student is given a final examination, oral or written, with or without the dissertation. The student and the supervisory committee chair or co-chair must be physically present together at the same location. With approval of the entire committee, other members may attend the defense remotely, using modern communication technology. The defense should be no more than 6 months before degree award. All forms should be signed at the defense: the student and the supervisory committee chair sign the UF Publishing Agreement Form, the entire supervisory committee signs the ETD Signature Page and the Final Examination Report. If dissertation changes are requested, the supervisory committee chair or his or her designee may hold the ETD Signature Page until all are satisfied with the dissertation. However, this form must be submitted electronically, via GIMS, by the Final Submission Deadline for the Graduate School Editorial Office, during the term of intended degree award.

Satisfactory performance on this examination and adherence to all Graduate School regulations outlined above complete the requirements for the degree.

**Time limitation:** All work for the doctorate must be completed within 5 calendar years after the qualifying examination, or this examination must be repeated.

### Doctor of Audiology

The College of Public Health and Health Professions offers a program leading to the degree of Doctor of Audiology. The Au.D. degree is awarded after a 4-year program of graduate study. Foreign languages are not required. The program leading to the Au.D. degree is administered by the Department of Speech, Language and Hearing Sciences, the college, and the Graduate School.

**Admission:** To be considered for the Au.D. program, students must meet the following minimum requirements:

- A 3.00 junior-senior undergraduate grade point average and a program-specific acceptable score on the GRE General Test,
- Evidence of potential for academic success in at least three letters of recommendation, and
- Evidence of acceptable skills in written expression through a personal statement describing the motivation and skills applicable to graduate study and the profession of audiology.

Course requirements include 110 credits for students entering the program with a bachelor's degree awarded by an accredited institution consisting of at least 70 credits of didactic instruction, 30 credits of applied practicum, and 3 credits of audiology research.

A 70-credit program leading to the Au.D. is offered for applicants holding an earned master's degree in audiology from an accredited institution.

A 45-credit program leading to the Au.D. is offered for applicants holding an earned master's from an accredited institution, certification, and/or licensure in audiology, and at least 3 years of full-time experience in audiology.

Comprehensive examination, required for all Au.D. candidates, may be taken during the eighth term of study beyond the bachelor's degree. Both written and oral, this examination is prepared and evaluated by the supervisory committee, which is responsible for determining whether the student is qualified to continue work toward the degree by completing the clinical residency.

### Doctor of Education

The Doctor of Education (Ed.D.) degree offers advanced professional training and academic preparation for the highest levels of educational practice. Programs are available in the School of Teaching and Learning, the School of Special Education, School Psychology, and Early Childhood Studies, and the School of Human Development and Organizational Studies in Education.

A minimum of 90 credits beyond the bachelor's degree (master's degrees included must be in the last 7 years) is required. Course requirements vary with the academic unit and with the student's plan for research and/or professional pursuit. With the approval of the supervisory committee, the student may choose one or more minor fields of study. The Ed.D. requires a qualifying examination and a dissertation.

See Requirements for the Au.D. for information on transfer of credit, minors, leave of absence, supervisory committee, language requirement, campus residence requirement, qualifying and final examinations, admission to candidacy, dissertation, and certification. These statements apply to both the Ph.D. and Ed.D. degrees.

### Doctor of Nursing Practice

The College of Nursing offers a program leading to the degree of Doctor of Nursing Practice (D.N.P.). The program prepares advanced practice nurses with the knowledge, skills, and abilities needed in today's complex health care environment and produces advanced practice nurses with educational background comparable to health care practitioners in other fields.

**Admission:**

To be considered for the D.N.P. program, students must meet the following minimum requirements:

- A bachelor of science in nursing degree for the BSN/DNP program or a master's degree in nursing for the post master's DNP program from a CCNE or NLN AC accredited program.
- A GPA of at least 3.0 on a 4.0 scale.
- A score of 500 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination (GRE) General Test. In the new version of the GRE a minimum score of 153 in the verbal section and 144 in the quantitative section. Analytical writing section is optional.
- Current licensure (or eligibility) in the state of Florida

**Program of study**

The D.N.P. program consists of 93 credits that can be completed in 8 semesters of full-time study or 14 semesters of part-time study. Students who already have an M.S.N. degree are able to satisfy the requirements of the D.N.P. curriculum upon completion of 48 credits.

### Doctor of Plant Medicine

The College of Agricultural and Life Sciences offers an interdisciplinary program leading to the degree of Doctor of Plant Medicine (D.P.M.). The D.P.M. degree is awarded after a 3- to 4-year program of graduate study. Foreign languages are not required. The program leading to the D.P.M. degree is administered by the Entomology and Nematology Department, College of Agricultural and Life Sciences, and the Graduate School.

**Admission:** Students must meet the following minimum requirements:

- B.S. or B.A. degree, preferably in biological, agricultural, or health science.
- A 3.00 grade point average in upper-division courses.
- A minimum score of 153 in the verbal section and 144 in the quantitative section of the Graduate Record Examination (GRE).
- A program-specific acceptable score on the GRE General Test.

Applicants from countries where English is not the native language must also achieve a satisfactory score on one of the following: TOEFL (Test of English as a Foreign Language: paper=550, web=80), IELTS (International English Language Testing System: 6, 7), MELAB (Michigan English Language Assessment Battery: 77) or successful completion of the University of Florida English Language Institute program.
Course requirements: Students entering the program with a bachelor's degree must earn 100 credits. This includes at least 85-86 credits of course work and 15-16 credits of internship. Students entering the program with a master's degree in a related area may be allowed to transfer up to 30 credits in graduate courses corresponding to those required by the D.P.M. degree program. All D.P.M. students must complete two substantial 3-credit internships. Signed approval by a student's Committee and the D.P.M. Director is required prior to registering for substantial internship credits.

Comprehensive examination: Both written and oral comprehensive examinations are required of all D.P.M. students. The written examination has three sections: entomology/nematology, plant pathology, and plant/soil science. Faculty from the appropriate disciplines are appointed by the D.P.M. Program Director and D.P.M. Competency Exam Coordinators to develop and grade the final written examination. The three sections of the written exam may be taken independently throughout the program at the discretion of the supervisory committee and the D.P.M. Director. Students are encouraged to complete the exam prior to the last full year of the D.P.M. program and his/her anticipated semester of graduation. Students should also complete the D.P.M. Competency Area Exams before the completion of a substantial internship. After a student passes all three sections of the final written examination (90% or higher is considered a passing grade), the supervisory committee administers an oral examination that tests the student's ability to diagnose and manage plant health problems. A student who fails to pass a comprehensive examination may retake an exam once with the recommendation of his/her supervisory committee.

Specialized Degrees

Engineer

For those engineers who need additional technical depth and diversification in their education beyond the master's degree, the College of Engineering offers the degree of Engineer (Eng.). This degree requires at least 30 credits of graduate work beyond the master's degree. It is not to be considered as a partial requirement toward the Ph.D. degree. The student's objective after the master's degree should be the Ph.D. or the Engineer degree.

Admission to the program: Students must have completed a master's degree in engineering and apply for admission to the Graduate School of the University of Florida. The master's degree is regarded as the foundation for the degree of Engineer. The master's degree must be based on the candidate having a bachelor's degree in engineering from an ABET-accredited curriculum or having taken sufficient articulation course work to meet the minimum requirements specified by ABET.

Course and residence requirements: Total registration in an approved program must include at least 30 graduate credits beyond the master's degree. This minimum requirement must be earned through the University of Florida. The last 30 credits must be completed within 5 calendar years.

Supervisory committee: Each student admitted to the program needs a supervisory committee with at least 3 members of the Graduate Faculty (2 from the major academic unit, and at least 1 from a supporting academic unit). In addition, every effort should be made to have a representative from industry as an external adviser for the student's program.

This committee should be appointed as soon as possible after the student is admitted to Graduate School and no later than the end of the second term of study. This committee informs the student of all regulations pertaining to the degree program. The committee is nominated by the academic unit chair, approved by the Dean of the College of Engineering, and appointed by the Dean of the Graduate School.

The Dean of the Graduate School is an ex-officio member of all supervisory committees. If a thesis or report is required, the committee will approve the proposed thesis or report and the plans for carrying it out. The thesis must be submitted to the Graduate School. The committee will also conduct the final examination on campus when the plan of study is completed.

Plan of study: Each plan of study is developed on an individual basis for each student. Thus, there are no specific requirements for the major or minor; each student is considered individually. If the plan of study includes a thesis, the student may register for 6 to 12 credits of 6972 (Research for Engineer's Thesis).

Thesis: The thesis should represent performance at a level above that ordinarily associated with the master's degree. It should clearly be an original contribution; this may take the form of scientific research, a design project, or an industrial project approved by the supervisory committee. Work on the thesis may be conducted in an industrial or governmental laboratory under conditions stipulated by the supervisory committee.

Final examination: After the student completes all work on the plan of study, the supervisory committee conducts a final comprehensive oral and/or written examination (for thesis students, this also involves defending the thesis).

Specialist in Education

An Ed.S. program develops competencies needed for a professional specialization. Specializations are offered in the School of Teaching and Learning, the School of Special Education, School Psychology, and Early Childhood Studies, and the School of Human Development and Organizational Studies in Education. Ed.S. applicants must apply and be admitted to UF's Graduate School. All work for the degree, including transferred credit, must be completed within 7 years before the degree is awarded.

The Ed.S. degree is awarded on completing a planned program with at least 72 credits beyond the bachelor's degree or at least 36 credits beyond the master's degree. All credits accepted for the program must contribute to the unity and the stated objective of the total program.

Students are tested (no more than 6 months before graduation) by written and oral examination. A thesis is not required; however, each program includes a research component relevant to the intended profession. With the academic unit's approval, course work taken as part of the specialist program may count toward a doctoral degree.
Nontraditional Programs

Concurrent Graduate Programs

Any student interested in pursuing two master's degrees in two different programs or two master's degrees in the same program concurrently should discuss the proposed study with Graduate Student Records (392-4643, 106 Grinter) before applying. Written approval is needed from each academic unit and the Graduate School Dean. The student must be officially admitted to both programs through regular procedures. No more than 9 credits from the first program may be applied toward the second. Contact the academic unit(s) for details.

Joint Degree Programs

A joint degree program leads to a graduate degree and a professional degree. Normally 12 credits of professional courses count toward the graduate degree and 12 credits of graduate courses count toward the professional degree. Individual academic units determine whether a joint degree program is appropriate. Joint programs established before January 1, 2003, may have other requirements.

To participate in a joint program, a student must be admitted to both programs. Enrollment in one program may precede enrollment in the other according to timelines set by the program. During the term the student is graduating, registration is required (at least 3 credits fall or spring, or 2 credits summer). This course work must be credit that applies toward the graduate degree requirements. See graduate coordinator for details.

Combined Bachelor's/Master's Degree Programs

UF offers a number of bachelor's/master's programs for superior students. In these programs, 12 credits of graduate-level courses are counted for both degrees. See Transfer of Credit for requirements. For admission requirements and available programs, contact the academic unit.

State University System Programs

Traveling Scholar Program: By mutual agreement of the appropriate academic authorities in both the home and host institutions, traveling scholars' admission requirements are waived and their earned credits are guaranteed acceptance. Traveling scholars are normally limited to 1 term on the host campus, and it cannot be their final term. The program offers special resources on another campus that are not available on the student's home campus. To participate, graduate students need prior approval from the graduate coordinator, their supervisory committee chair, and the Dean of the Graduate School. Interested students should contact Graduate Student Records, 106 Grinter Hall.

Cooperative Degree Programs: In certain degree programs, faculty from other universities in the State University System hold Graduate Faculty status at UF. In those approved areas, the intellectual resources of these Graduate Faculty members are available to students at UF.

Click here to find information about individual homepages.

University of Florida

College of Agricultural and Life Sciences

Go to information for College of Agricultural and Life Sciences.

Agricultural and Biological Engineering Department

Go to information for Agricultural and Biological Engineering Department.

Agricultural Education and Communication Department

Go to information for Agricultural Education and Communication Department.

Agronomy Department

Go to information for Agronomy Department.

Animal Molecular and Cellular Biology Department

Go to information for Animal Molecular and Cellular Biology Department.

Animal Sciences Department

Go to information for Animal Sciences Department.

Entomology and Nematology Department

Go to information for Entomology and Nematology Department.

Family, Youth, and Community Sciences Department
Food and Resource Economics Department

Food Science and Human Nutrition Department

Horticultural Sciences Department

Microbiology and Cell Science Department

Plant Molecular and Cellular Biology Department

Plant Pathology Department

School of Forest Resources and Conservation

School of Natural Resources and Environment

Soil and Water Science Department

Wildlife Ecology and Conservation Department

College of the Arts

School of Art and Art History

Digital Worlds Institute

Music Department

School of Theatre and Dance
Warrington College of Business Administration

Fisher School of Accounting

Economics Department

Finance, Insurance, and Real Estate Department

Information Systems and Operations Management Department

Management Department

Marketing Department

College of Dentistry

Dental Sciences Department

College of Design, Construction, and Planning

School of Architecture

M.E. Rinker, Sr., School of Construction Management

Interior Design Department

Landscape Architecture Department

Urban and Regional Planning Department

College of Education
Human Development and Organizational Studies in Education Department

Go to information for Human Development and Organizational Studies in Education Department.

Special Education, School Psychology and Early Childhood Studies Department

Go to information for Special Education, School Psychology and Early Childhood Studies Department.

School of Teaching and Learning

Go to information for School of Teaching and Learning.

College of Engineering

Go to information for College of Engineering.

Agricultural and Biological Engineering Department

Go to information for Agricultural and Biological Engineering Department.

Biomedical Engineering Department

Go to information for Biomedical Engineering Department.

Chemical Engineering Department

Go to information for Chemical Engineering Department.

Civil and Coastal Engineering Department

Go to information for Civil and Coastal Engineering Department.

Computer and Information Science and Engineering Department

Go to information for Computer and Information Science and Engineering Department.

Electrical and Computer Engineering Department

Go to information for Electrical and Computer Engineering Department.

Environmental Engineering Sciences Department

Go to information for Environmental Engineering Sciences Department.

Industrial and Systems Engineering Department

Go to information for Industrial and Systems Engineering Department.

Materials Science and Engineering Department

Go to information for Materials Science and Engineering Department.

Mechanical and Aerospace Engineering Department

Go to information for Mechanical and Aerospace Engineering Department.

Nuclear and Radiological Engineering Department

Go to information for Nuclear and Radiological Engineering Department.

College of Health and Human Performance
Go to information for College of Health and Human Performance.

Applied Physiology and Kinesiology Department

Go to information for Applied Physiology and Kinesiology Department.

Department of Health Education & Behavior

Go to information for Department of Health Education & Behavior.

Tourism, Recreation, and Sport Management Department

Go to information for Tourism, Recreation, and Sport Management Department.

College of Journalism and Communications

Go to information for College of Journalism and Communications.

Fredric G. Levin College of Law

Go to information for Fredric G. Levin College of Law.

Comparative Law Department

Go to information for Comparative Law Department.

Environmental and Land Use Law Department

Go to information for Environmental and Land Use Law Department.

Taxation Department

Go to information for Taxation Department.

College of Liberal Arts and Sciences

Go to information for College of Liberal Arts and Sciences.

Animal Molecular and Cellular Biology Department

Go to information for Animal Molecular and Cellular Biology Department.

Anthropology Department

Go to information for Anthropology Department.

Astronomy Department

Go to information for Astronomy Department.

Biology Department

Go to information for Biology Department.

Chemistry Department

Go to information for Chemistry Department.

Classics Department

Go to information for Classics Department.

Computer and Information Science and Engineering Department
Spanish and Portuguese Studies Department

Go to information for Spanish and Portuguese Studies Department.

Statistics Department

Go to information for Statistics Department.

Women's Studies Department

Go to information for Women's Studies Department.

College of Medicine

Go to information for College of Medicine.

Biochemistry and Molecular Biology Department

Go to information for Biochemistry and Molecular Biology Department.

Biostatistics Department

Go to information for Biostatistics Department.

Epidemiology Department

Go to information for Epidemiology Department.

Health Outcomes and Policy Department

Go to information for Health Outcomes and Policy Department.

Molecular Genetics and Microbiology Department

Go to information for Molecular Genetics and Microbiology Department.

College of Nursing

Go to information for College of Nursing.

College of Pharmacy

Go to information for College of Pharmacy.

Medicinal Chemistry Department

Go to information for Medicinal Chemistry Department.

Pharmaceutics Department

Go to information for Pharmaceutics Department.

Pharmacodynamics Department

Go to information for Pharmacodynamics Department.

Pharmaceutical Outcomes and Policy Department

Go to information for Pharmaceutical Outcomes and Policy Department.

Pharmacotherapy and Translational Research Department

Go to information for Pharmacotherapy and Translational Research Department.
College of Public Health and Health Professions

Behavioral Science and Community Health Department

Biostatistics Department

Clinical and Health Psychology Department

Environmental and Global Health Department

Epidemiology Department

Health Services Research, Management, and Policy Department

Occupational Therapy Department

Speech, Language and Hearing Sciences Department

College of Veterinary Medicine

Animal Molecular and Cellular Biology Department

Interdisciplinary Research

Click here for information about UF's interdisciplinary research centers.

Many interdisciplinary and traditional programs, colleges, and departments, across UF, come together to serve the university and our entire community. The information in this catalog is current as of July 2014. Please contact individual programs for any additional information or changes.

Graduate Majors and Concentrations

The following majors are offered by the University of Florida Graduate School. Graduate concentrations appear in parentheses following the major; additional interdisciplinary and/or multi-college concentrations follow the individual college's listings. For further definitions, see below.

College of Agricultural and Life Sciences

Go to information for College of Agricultural and Life Sciences.

- Agricultural and Biological Engineering (CALS)
- Agricultural Education and Communication
- Agronomy
- Animal Molecular and Cellular Biology
- Animal Sciences
- Entomology and Nematology
College of the Arts

Go to information for College of the Arts.

- Art
- Art Education
- Art History
- Arts in Medicine
- Dental Arts and Sciences (Arts)
- Museology
- Music
- Music Education
- Theatre

Warrington College of Business Administration

Go to information for Warrington College of Business Administration.

- Accounting
- Business Administration (Accounting)
- Business Administration (Finance, Insurance, and Real Estate)
- Business Administration (Information Systems and Operations Management)
- Business Administration (M.A.)
- Business Administration (M.B.A.)
- Business Administration (M.S.)
- Business Administration (Management)
- Business Administration (Marketing - Master's)
- Business Administration (Marketing - Ph.D.)
- Business Administration (Ph.D.)
- Economics
- Entrepreneurship
- Finance
- Information Systems and Operations Management
- International Business
- Management
- Real Estate

College of Dentistry

Go to information for College of Dentistry.

- Dental Sciences

College of Design, Construction, and Planning

Go to information for College of Design, Construction, and Planning.

- Architecture
- Construction Management
- Design, Construction, and Planning (Ph.D.)
- Fire and Emergency Services
- Historic Preservation
- Interior Design
- International Construction Management
- Landscape Architecture
- Sustainable Construction
- Urban and Regional Planning

College of Education

Go to information for College of Education.

- Counseling and Counselor Education
- Curriculum and Instruction (CCD)
• Curriculum and Instruction (ISC)
• Early Childhood Education
• Educational Leadership
• Elementary Education
• English Education
• Higher Education Administration
• Marriage and Family Counseling
• Mathematics Education
• Mental Health Counseling
• Reading Education
• Research and Evaluation Methodology
• School Counseling and Guidance
• School Psychology
• Science Education
• Social Studies Education
• Special Education
• Student Personnel in Higher Education

College of Engineering

Go to information for College of Engineering.

• Aerospace Engineering
• Agricultural and Biological Engineering (Engineering)
• Biomedical Engineering
• Chemical Engineering
• Civil Engineering
• Coastal and Oceanographic Engineering
• Computer Engineering
• Digital Arts and Sciences (Engineering)
• Electrical and Computer Engineering
• Environmental Engineering Sciences
• Industrial and Systems Engineering
• Materials Science and Engineering
• Mechanical Engineering
• Nuclear Engineering Sciences

College of Health and Human Performance

Go to information for College of Health and Human Performance.

• Applied Physiology and Kinesiology
• Health and Human Performance
• Health Education and Behavior
• Recreation, Parks, and Tourism
• Sport Management

College of Journalism and Communications

Go to information for College of Journalism and Communications.

• Advertising
• Mass Communication

Fredric G. Levin College of Law

Go to information for Fredric G. Levin College of Law.

• Comparative Law
• Environmental and Land Use Law
• International Taxation
• Taxation

College of Liberal Arts and Sciences

Go to information for College of Liberal Arts and Sciences.

• Animal Molecular and Cellular Biology
• Anthropology
• Astronomy
• Botany
• Chemistry
• Classical Studies
• Computer Science
• Counseling Psychology
• Creative Writing
• Criminology, Law and Society
• English
• French and Francophone Studies
• Genetics and Genomics
• Geography
College of Medicine

Go to information for College of Medicine.

- Biochemistry and Molecular Biology
- Biostatistics (Medicine)
- Epidemiology (Medicine)
- Genetics and Genomics
- Medical Sciences
- Molecular Genetics and Microbiology

College of Nursing

Go to information for College of Nursing.

- Nursing
- Nursing Sciences

College of Pharmacy

Go to information for College of Pharmacy.

- Pharmaceutical Sciences (Medicinal Chemistry)
- Pharmaceutical Sciences (Pharmaceutical Outcomes and Policy)
- Pharmaceutical Sciences (Pharmaceutics)
- Pharmaceutical Sciences (Pharmacodynamics)
- Pharmaceutical Sciences (Pharmacotherapy and Translational Research)

College of Public Health and Health Professions

Go to information for College of Public Health and Health Professions.

- Audiology
- Biostatistics (PHHP)
- Communication Sciences and Disorders
- Environmental and Global Health (M.H.S. - One Health)
- Epidemiology (PHHP)
- Health Administration
- Health Services Research
- Occupational Therapy
- Psychology (Clinical and Health Psychology - PHHP)
- Public Health (M.P.H.)
- Public Health (Ph.D. - Environmental and Global Health)
- Public Health (Ph.D. - One Health)
- Public Health (Ph.D. - Social and Behavioral Sciences)
- Public Health (Ph.D.)
- Rehabilitation Science

College of Veterinary Medicine

Go to information for College of Veterinary Medicine.

- Animal Molecular and Cellular Biology
- Veterinary Medical Sciences
Interdisciplinary Concentrations

- Agroforestry
- Animal Molecular and Cell Biology
- Clinical and Translational Science
- Geographic Information Systems
- Historic Preservation
- Hydrologic Sciences
- Quantitative Finance
- Sustainable Architecture
- Sustainable Design
- Tropical Conservation and Development
- Wetland Sciences
- Women's and Gender Studies

Interdisciplinary Graduate Concentrations

A number of graduate programs offer interdisciplinary enhancements in the form of concentrations, field research, or certificates. The following programs offer interdisciplinary study leading to a concentration or minor, whether offered by a single college or by multiple colleges. Please follow individual links within the Majors Section of this catalog or contact the programs directly for further information.

The agroforestry interdisciplinary concentration is administered through the School of Forest Resources and Conservation. It offers facilities for interdisciplinary graduate education (M.S., Ph.D.) by combining course work and research around a thematic field focusing on agroforestry, especially in the context of tropical land use. Students seeking admission to the concentration need a degree in a relevant field such as agronomy, forestry, horticulture, soil science, or social sciences. They should apply to the School of Forest Resources and Conservation or another academic unit that closely represents their background and interest. Course work may be chosen from several related disciplines. Thesis research can be undertaken in Florida or overseas.

Degrees are awarded through the academic units the candidates are enrolled in.

In conjunction with the graduate degree, a student can earn a concentration or minor in agroforestry by fulfilling certain requirements. Students who have a primary interest in agroforestry and undertake graduate research on an agroforestry topic can seek the concentration. Those who have an active interest and some training in agroforestry, but do not conduct graduate research on an agroforestry topic, can earn a minor. Candidates meeting the requirements can have Concentration in Agroforestry or Minor in Agroforestry appear on their transcripts.

Each option requires completing FNR 5335 (Agroforestry) and an appropriate number of approved supporting courses. These courses should be distributed over at least two academic units outside the major to prepare the student to function in multidisciplinary teams and to associate with professionals from other disciplines. Students whose background is in biology are encouraged to take social science courses, and vice versa.

For a student with a concentration or minor in agroforestry, at least one member of the supervisory committee should represent agroforestry. The Agroforestry Program Advisory Committee requires this member to counsel the student on selecting courses and the research topic.

For more information, contact the Agroforestry Program Leader, 330 Newins-Ziegler Hall, Phone (352) 846-0880, Fax (352) 846-1277, E-mail pknaei@ufl.edu.

The interdisciplinary concentration in animal molecular and cell biology (AMCB) gives graduate students in the animal and veterinary sciences an understanding of principles of molecular and cell biology as applied to animal health and production. It emphasizes participation in molecular and cell biology research and provides an intellectual environment for cross-fertilization among disciplines. The AMCB gives graduate students access to the diverse research facilities needed to study cellular and molecular biology, reproductive biology, virology, immunology, and endocrinology. Facilities exist for recombinant DNA research, experimental surgery, in vitro culture of cells, tissue and organ explants, embryo manipulation, vaccine production, and recombinant protein engineering.

Ph.D. degrees are awarded by participating academic units, with an interdisciplinary concentration in animal molecular and cell biology. Applicants need a strong background in animal or veterinary sciences. Graduate degree programs are designed by each student's supervisory committee, headed by the member who represents AMCB. All students must complete a core curriculum, may obtain cross-disciplinary training through rotations in laboratories of participating faculty, and may participate in the AMCB seminar series.

Requirements for admission to AMCB are the same as for the faculty adviser's academic unit and college.

Note that typically students interested in education through the AMCB enroll in the AMCB graduate program rather than the AMCB interdisciplinary concentration. For more information, contact Dr. Peter J. Hansen, Department of Animal Sciences, phansen@ufl.edu.

Clinical and Translational Science

This unique concentration in the Master of Science program in medical sciences was developed by an interdisciplinary faculty to provide sound didactic background in the foundations of clinical research. Core course requirements cover study design, data analysis, ethical conduct of research, epidemiology, manuscript and abstract writing, and grant writing. Additional electives in specific fields may be taken from other concentrations or programs. A research thesis designed and conducted with a clinical research mentor is required.

For clinically trained M.D.s and other doctoral-level health professionals, the M.S. concentration in clinical and translational science (MS-CTS) may be part of a more-complete training experience in clinical research offered through the College of Medicine as the Advanced Postgraduate Program in Clinical Investigation (APPCI).

For more information:
- Dr. Marian Limacher
- Program Director
- P.O. Box 100277
- Health Science Center
- Gainesville, FL 32610

http://www.ctsi.ufl.edu/education/programs/ph-d-students/cts-interdisciplinary-concentration/

Geographic Information Systems (GIS) revolutionized the way land features are located, measured, inventoried, managed, planned, and studied. GIS provides theories and methods for measuring location and topography, physical and biological attributes, and distribution of cultural components through data storage, analysis, modeling, mapping, and data display.

GIS applications are diverse. They include determining the suitability of land for different uses, planning future land uses, setting cadastral boundaries for the purpose of property recognition and taxation and regulation, analyzing land and land-cover for both resource inventories and scientific studies, and siting commercial enterprises.
Interdisciplinary graduate studies in hydrologic sciences are for science and engineering students seeking advanced training in diverse aspects of water quantity and quality, and water-use issues. This concentration emphasizes (1) understanding the physical, chemical, and biological processes occurring over broad spatial and temporal scales; and (2) skills in hydrologic policy and management based on a strong background in natural and social sciences and engineering.

Graduate Faculty from eight departments in three colleges contribute to this interdisciplinary concentration. Depending on academic background and research interests, students may earn a degree in any one of the following departments: Agricultural and Biological Engineering, Civil and Coastal Engineering, Environmental Engineering Sciences, Food and Resource Economics, Forest Resources and Conservation, Geology, Geophysical Sciences, , and Soil and Water Science. M.S. (thesis and non-thesis option) and Ph.D. studies are available. Interdisciplinary graduate requirements recognize diversity in the academic backgrounds and professional goals of the students. A core curriculum (12 credits for M.S.; 18 credits for Ph.D.) provides broad training in six topics: subsurface hydrology, surface hydrology, hydrologic chemistry, hydrologic ecology, hydrologic analysis and techniques, and hydrologic policy and management. Research projects involving faculty from several academic units can provide the basis for thesis and dissertation research topics.

Students with B.S. or M.S. degrees in any of the following disciplines are encouraged to consider this specialization in their graduate program: engineering (agricultural, chemical, civil, environmental); natural sciences (physics, biology, chemistry); social sciences (agricultural and resource economics); forestry; and earth sciences (geography, geology, soil and water science). For more information, contact Dr. Wendy Graham, UF Water Institute, P.O. Box 116601, Gainesville FL 32611, Phone (352) 392-5893, E-mail water-institutes@ufl.edu, or visit the Hydrologic Sciences Academic Cluster website (http://www.hydrology.ufl.edu).
Four academic units participate in this interdisciplinary concentration: Industrial and Systems Engineering (College of Engineering), Mathematics (College of Liberal Arts and Sciences), Statistics (College of Liberal Arts and Sciences), and Finance, Insurance, and Real Estate (College of Business Administration). To be eligible, a student must be admitted to a Ph.D. program in one of these participating academic units. Students seeking admission to the concentration need strong quantitative skills and a degree in one of the relevant fields such as finance, engineering, statistics, or mathematics. Students with a background in several disciplines are welcome. Application should be submitted to one of the participating academic units.

Each student takes basic courses and meets the home academic unit's Ph.D. requirements. The student also takes approved courses in the other participating academic units to meet the requirements of the concentration.

Dissertation research is conducted in quantitative finance, risk management, and relevant areas involving quantitative finance approaches. The student receives a Ph.D. degree and a Certificate in Quantitative Finance.

Activities of the Ph.D. concentration in quantitative finance are supported by the Risk Management and Financial Engineering Laboratory (RMFE Lab). http://www.ufl.edu/rmfe. The RMFE Lab facilitates research and applications in the area of risk management and financial mathematics/engineering, including organizing research meetings, seminars, and conferences. It provides a basis for the collaborative efforts of multidisciplinary teams of UF researchers, governmental institutions, and industrial partners.

The Concentration and Certificate in Sustainable Architecture is for architecture graduate students (in the M.Arch. or M.S.A.S. program) seeking advanced courses on a wide range of topics related to sustainable architecture. The concentration in sustainable architecture supports detailed rigorous study in specific areas of expertise. Furthermore, the program requirements recognize the inherent diversity of academic backgrounds and professional goals of the students. Thus, there is flexibility in the selection of a suite of courses, while maintaining exposure to the multidisciplinary subject matter of sustainable architecture. This essential feature of the program allows students to develop individualized yet focused plans of study. Students select from a variety of approved courses offered in the College of Design, Construction, and Planning (the School of Architecture, the School of Building Construction, the Department of Interior Design, the Department of Landscape Architecture, and the Department of Urban and Regional Planning); and in other colleges in the University. Course work may include the following sustainability issues.

- Architectural design and preventing environmental degradation: protecting ecosystems, fauna and flora, energy consumption, energy conservation, architectural commissioning, maintenance, water consumption, land use, and materials selection (resource depletion, environmental degradation, and healthy environments)
- Providing healthy architectural environments: indoor air environmental quality, non-toxic environments, and sustainable ecosystems and landscapes
- Responsive and responsible building design and construction: environmentally responsive architecture, and environmentally responsible architecture
- Sustainable architectural and environmental theory: the philosophy of sustainable design, ecological theory, sustainability and ethics, deep ecology, and systems theory
- Enhancing the community environment: historic preservation, sustainable developments, community and neighborhood design, regional design, and systems theory
- Mitigating the environmental effects of construction operations: life cycle operations, design longevity, reusing materials, recycling materials, deconstruction, and reconstruction.

Students enrolled in the Concentration and Certificate Program in Sustainable Architecture must complete at least 12 credits of approved sustainable architecture electives. Students must complete at least 6 credits within the School of Architecture; and at least one approved 3 credit course from outside the School of Architecture. Students also must complete a research project or thesis on a subject pre-approved by the concentration's Governing Board, related to sustainable architecture. For more information, contact Dr. Barry G. Kofinas, Chair, School of Architecture, University of Florida, Box 115702, Gainesville FL 32611-5702, Phone (352) 392-0205 ext. 202, E-mail bhuds@ufl.edu.

The Interdisciplinary Concentration and Certificate in Sustainable Design (ICCSD) is for master's-level students in the College of Design, Construction, and Planning. This concentration allows students to become proficient in one or more of the following areas: sustainable architecture, sustainable construction, sustainable interior design, sustainable landscape architecture, or sustainable urban planning. Course work deals with the following issues.

- Preventing environmental degradation: protecting ecosystems, fauna and flora, energy conservation, energy consumption, architectural commissioning, maintenance, water consumption, land use, site selection, and materials selection (resource depletion, environmental degradation, and healthy environments)
- Providing healthy environments: indoor air environmental quality, outdoor environmental quality, non-toxic environments, and sustainable ecosystems and landscapes
- Responsive and responsible building construction: construction impacts on sites, environmentally responsive architecture, environmentally responsible architecture (preventing environmental degradation), and designing sustainable building components
- Mitigating the environmental effects of construction operations: life cycle operations, design longevity, reusing materials, recycling materials, deconstruction, reconstruction, and historic preservation
- Enhancing the community environment: sustainable developments, community and neighborhood design, regional design, and city planning design
- Environmental theory: the philosophy of sustainable design, ecological theory, sustainability and ethics, deep ecology, and systems theory.

Students wishing to participate in the ICCSD should notify their department or school as early in the graduate program as possible. To participate in the ICCSD, a student must be admitted and enrolled in one of the departments participating in the ICCSD. Students will complete the concentration for either the master's degree or Master of Science degree, but not for both degrees if awarded from the University of Florida. Students cannot enroll in two concentration programs at the same time.

To successfully complete the ICCSD, the student must earn 12 credit hours in sustainable design research and course work from a list of recommended courses. To satisfy the interdisciplinary intent of the ICCSD, the student must take one of the approved 3 credit courses outside their home department or school, but within the College of Design, Construction, and Planning and at least one approved 3 credit course from another college of the University. For more information, contact the Dean's Office in the College of Design, Construction, and Planning, University of Florida, Box 115701, Gainesville FL 32611-5702, Phone (352) 392-0205 ext. 202, E-mail bhuds@ufl.edu.

The Tropical Conservation and Development Program (TCD), in the Center for Latin American Studies, offers an interdisciplinary graduate certificate and graduate concentration focused on integrative approaches to conservation and development in the tropics, including sub-tropical and temperate areas in developing countries. Both the certificate and concentration are open to students who are interested in acquiring interdisciplinary knowledge and technical skills to pursue a career in conservation and development research and practice. These students must be enrolled in master's or Ph.D. programs in TCD's affiliate academic units at the University of Florida.

Course work for the certificate and concentration includes social science theory, principles of tropical ecology, and patterns and trends of tropical resource use and conservation. TCD core courses also allow students to gain essential practical skills. Emphasis is on communication and presentation techniques, grant writing, proposal writing, and fundraising; facilitation and conflict management; participatory methods for research and project implementation; and project design, analysis, and evaluation. Summer research, practitioner experiences, and field-based training programs provide learning opportunities outside the classroom.

On completing the certificate or concentration, students should have an in-depth understanding of the relationships among biological conservation, resource management, and the livelihood needs of rural communities; and the appropriate professional skills for a career in research, field practice, or both.


Master's students can earn a certificate in TCD by completing 12 credits of approved course work; 2 interdisciplinary core courses and 1 course each in tropical ecology and social science. Ph.D. students can earn a certificate by completing 15 credits of approved course work (3 interdisciplinary core courses and 1 course each in tropical ecology and social science). Students from natural science academic units must take the social science credits outside their major. Otherwise, courses from the student's major can count toward program requirements. Substitutions need prior approval from the TCD faculty advisor.

To earn a concentration in TCD, students must complete the course requirements for the certificate (as explained above) and they must focus on conservation and development in their thesis, dissertation, or final project. One member of the student's supervisory committee must be a TCD affiliate faculty member. This person is responsible for judging whether the student's thesis...
focuses on tropical conservation and/or development. For the faculty member to make this judgment, the student must articulate in writing how the research fits in the broader context of biodiversity conservation and/or rural development in the tropics, subtropics, or temperate areas in developing countries. This person cannot count as the external member of the committee.

For more information on the TCD certificate and concentration program, and for a list of approved courses, visit the TCD website (http://www.ufl.edu), or contact Bette Loiselle, TCD Director, 347 Griner Hall, (352) 273-4706. E-mail Loiselle@latam.ufl.edu. To view the TCD Program Coordinator, 343 Griner Hall, (352) 273-4754; E-mail Sampaio@latam.ufl.edu.

The Interdisciplinary Concentration in Wetland Sciences (ICWS) is a unified interdisciplinary program in wetland science and policy for master's and doctoral students.

Graduate faculty from the following academic units contribute to the wetlands sciences concentration: Agricultural and Biological Engineering, Botany, Civil Engineering, Environmental Engineering Sciences, Fisheries and Aquatic Sciences, Forest Resources and Conservation, Geography, Geological Sciences, Landscape Architecture, Law, Soil and Water Sciences, Urban and Regional Planning, Wildlife Ecology and Conservation, and Zoology. Students in any of these programs may elect to participate in the ICWS. A major strength of the ICWS is the breadth of wetlands-related courses and research opportunities in many academic programs across campus. The ICWS exposes students to perspectives outside their disciplines and provides a rigorous, substantive education in wetlands sciences in addition to their disciplinary focus.

Students may complete the ICWS for either the M.S. or Ph.D. degree. A core curriculum (15 credits for M.S. and 18 credits for Ph.D.) provides the opportunity for interdisciplinary training in four broad subject areas:

- wetlands science (1 course each in wetlands ecology, wetland hydrology, and wetlands biogeochemistry),
- wetlands systems,
- wetlands organisms, and
- wetlands policy/law.

Additional course work in a student's disciplinary focus may strengthen the student's knowledge base or allow for specialization in one or more of the areas.

For more information, contact Dr. Mark T. Brown, Director, Howard T. Odum Center for Wetlands, Phelps Lab, P.O. Box 116350, Gainesville FL 32611, Phone (352) 392-2424; or visit the website (http://www.cfw.ufl.edu).

Two certificates, one master's degree (thesis or non-thesis option), and a doctoral concentration are offered in women's and gender studies. Participating graduate faculty are from several academic units, campus-wide, including Agricultural and Life Sciences, Anthropology, Counselor Education, English, German and Slavic Studies, History, Journalism and Communications, Latin American Studies, Linguistics, Medicine, Nursing, Philosophy, Psychology, Religion, Romance Languages and Literatures, Sociology, and Teaching and Learning.

The two graduate certificates in women's studies for master's and doctoral students are offered in conjunction with degree programs in other academic units. The Graduate Certificate in Women's Studies and the Graduate Certificate in Gender and Development require specific sets of course work to thoroughly ground students in the discipline. The Graduate Certificate in Women's Studies is a general introduction to the field, and the Graduate Certificate in Gender and Development allows students to focus on issues related to gender, economic development, and globalization.

The doctoral interdisciplinary concentrations in women's and gender studies give graduate students a thorough grounding in the new scholarship produced by the intersection of women's studies and other academic fields. The concentration facilitates analysis and assessment of theories about the role of gender in cultural systems and its intersections with other categories of differences, such as race, ethnicity, religion, class, sexuality, physical and mental ability, age, and economic and civil status. Emphasis is on participating in women's and gender studies research and on providing an intellectual environment for cross-fertilization among disciplines. Women's and gender studies critically explores the role and status of women and men, past and present.

Participating academic units award Ph.D. degrees with an interdisciplinary concentration in women's and gender studies. Study plans are designed by each student's supervisory committee, whose chair is affiliated with women's and gender studies.

Admission requirements are those of the student's home academic unit and college. After admission to the degree-granting academic unit, the application is sent to the Graduate Coordinator of Women's and Gender Studies who chairs an admissions committee.

For more information on the master's degree, contact the Director, Center for Women's Studies and Gender Research, 3324 Turlington Hall.

*Programs are the students' primary fields of study; a program is the student's major. The degree and program name appear on the student's transcript. Concentrations are subprograms within a major. The concentration, degree, and program may appear on the student transcript. Specializations are informal designations, used by academic units, to indicate areas of research or scholarly strength, and have no formal significance. Tracks and emphases are similar unofficial terms. No tracks, emphases, or specializations appear in official lists in this catalog or on the student transcript.

Graduate Certificates

For the list of available Graduate Certificates, please visit the Graduate School's website:
http://graduateschool.ufl.edu/academic/graduate-certificates-list

For the Graduate Certificate Policies, please visit the Graduate School's website:
http://graduateschool.ufl.edu/academic/certificates-policies.pdf

For information about the policies governing certificates, please visit the Office of the Provost's website:
http://www.ufl.edu/graduateschool/academics/graduate-certificates

Academic Assessment Plans

Visit http://assessment.aa.ufl.edu/graduate-academic-assessment-plans for the Academic Assessment Plans for each graduate degree program.

University of Florida Graduate School Academic Calendar 2014-2015
Entire Academic Year Calendar

Graduate School Academic Calendar 2014-2015

Individual Term Calendars

- Fall 2014 Graduate School Critical Dates
- Spring 2015 Graduate School Critical Dates
- Summer 2015 Graduate School Critical Dates

UF Graduate Courses

Courses by Discipline

- Agricultural and Life Sciences
- Arts
- Business
- Dentistry
- Design, Construction, and Planning
- Education
- Engineering
- Health and Human Performance
- Journalism and Mass Communication
- Law
- Liberal Arts and Sciences
- Medicine
- Nursing
- Pharmacy
- Public Health and Health Professions
- Veterinary Medicine

Search All Courses

Publication Policy

Publication Policy

The Graduate Catalog is published annually by the University of Florida and has been adopted as a rule of the University pursuant to the provision of Chapter 120 of the Florida Statutes. Published editions of this official record correspond to an academic year and will remain in effect as published from the Fall Term through the following Summer C Term. The Graduate Catalog provides official university rules, policies and regulations; it establishes minimum eligibility requirements for admission and reflects degree requirements; it provides approved calendar and curricular information; and it contains general information about the University community, the University, and its services and facilities.
Updates to the Graduate Catalog

Changes will be made to this academic record to correct errors or omissions. The University is not responsible for information obtained through Internet links from this catalog to other websites. Every effort has been made to ensure the accuracy of information. However, all courses, course descriptions, degree requirements, and fees are subject to change. Updates to the material listed within the Graduate Catalog should be sent to the editors, via an e-mail to gradcatalog@aa.ufl.edu; every effort will be made to ensure the accuracy of the material listed herein.

Graduate School Academic Calendar 2014-2015


August 25, Monday

Classes start.
Drop/add starts.
Late registration starts (late fee assessed after 5:00 p.m. on 8/22/14).

August 29, Friday, 11:59 p.m.

Drop/add ends.
Late Registration ends (late fee assessed).
Deadline to withdraw with no fee liability

September 2014

September 1, Monday, Labor Day

No classes

September 5, Friday, 3:30 p.m.

Fee payment deadline
Residency reclassification deadline for receiving the request and all documents

September 12, Friday, 5:00 p.m.

Deadline for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

September 19, Friday, 5:00 p.m.

Deadline to withdraw with 25% refund (W symbol assigned)
Degree application deadline for degree award this term
www.graduateschool.ufl.edu/files/graduation-checklist.pdf
http://www.isis.ufl.edu/

October 2014

October 3, Friday, 5:00 p.m.

Last day to submit Transmittal Letter and dissertation for initial review by Graduate School Editorial Office

October 10, Friday

Midpoint of term
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants
Late degree application deadline for degree award this term
October 17-18, Friday-Saturday, Homecoming

No classes

November 2014

November 3, Monday, 5:00 p.m.

Last day to submit successfully defended thesis for review by Graduate School Editorial Office
graduateschool.ufl.edu/files/checklist-thesis.pdf
Deadline for final exam forms to be posted to GIMS for thesis students

November 11, Tuesday, Veterans Day

No classes

November 24, Monday, 5:00 p.m.

Last day to withdraw (all courses) without failing grades via ISIS
http://www.registrar.ufl.edu/currents/withdraw.html

November 26-29, Wednesday-Saturday, Thanksgiving

No classes

December 2014

December 1, Monday, 5:00 p.m.

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students
Deadline for ETD Signature Pages to be posted to GIMS for thesis and dissertation students
Deadline for thesis and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term
No exceptions can be granted.
www.graduateschool.ufl.edu/graduation/checklists

December 10, Wednesday

Classes end.
Deadline for requesting transfer of credit (for spring degree candidates)

December 10, Wednesday, 5:00 p.m.

Deadline for thesis and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term
No exceptions can be granted.

December 11-12, Thursday-Friday

Examination reading days (no classes)

December 13, Saturday, 15-19, Monday-Friday

Final examinations

December 19, Friday, 5:00 p.m.

Last day to drop a course and receive W on transcript via College petition to the Registrar, Room 222 Criser
Last day to withdraw (all courses) without failing grades via College petition to the Registrar, Room 222 Criser
December 19-20, Friday-Saturday

Commencement Ceremonies+

December 22, Monday, 12:00 noon

Final term grades are due.

December 23, Tuesday

Degree certification

December 24, Wednesday

Unofficial transcripts with grades and remarks available via ISIS

NOTES: All dates and deadlines are subject to change and will be updated accordingly. Prospective students should contact the appropriate academic unit for admission application deadlines. + Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

Spring 2015 Calendar

December 2014

December 10, Wednesday, 5:00 p.m.
Deadline for requesting transfer of credit (for spring degree candidates)

January 2015

January 5, Monday, 5:00 p.m.
Registration deadline

Last day for thesis and dissertation students to clear prior to the spring semester with the Graduate School Editorial Office


January 6, Tuesday

Classes start.
Drop/add starts.
Late registration starts (late fee assessed, after 5:00 p.m. on 1/5/14).

January 12, Monday, 11:59 p.m.

Drop/add ends
Late Registration ends (late fee assessed).
Deadline to withdraw with no fee liability

January 16, Friday, 3:30 p.m.

Fee payment deadline
Residency reclassification deadline for receiving requests and all documents

January 19, Monday, Martin Luther King Jr. Day

No classes
January 23, Friday, 5:00 p.m.

Deadline for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

January 30, Friday, 5:00 p.m.

Degree application deadline for degree award this term

Deadline to withdraw with 25% refund (W symbol assigned)

February 2015

February 11, Wednesday, 5:00 p.m.

Last day to submit Transmittal Letter and dissertation for review by Graduate School Editorial Office

February 13, Friday

Midpoint of term

Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants

February 28-March 7, Saturday-Saturday, Spring Break

No classes

March 2015

March 11, Wednesday, 5:00 p.m.

Last day to submit successfully defended thesis for review by Graduate School Editorial Office

April 2015

April 8, Wednesday, 5:00 p.m.

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students

April 10, Friday, 5:00 p.m.

Last day to withdraw (all courses) via ISIS without failing grades

April 22, Wednesday

Classes end.

April 22, Wednesday, 5:00 p.m.

Deadline for thesis and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term
Deadline for requesting transfer of credit (for summer degree candidates)

April 23-24, Thursday-Friday

Examination reading days (no classes)

April 24, Friday

Doctoral Degree Commencement Ceremony+

April 25, Saturday; April 27-May 1, Monday-Friday

Final examinations

May 2015

May 1, Friday

Last day to drop a course and receive W on transcript via College petition to the Registrar, Room 222 Criser
Last day to withdraw (all courses) without failing grades via College petition to the Registrar, Room 222 Criser

May 1-3, Friday-Sunday

Commencement Ceremonies (Non-doctoral)+

May 4, Monday, 12:00 noon

Final term grades are due.

May 5, Tuesday

Degree certification

May 6, Wednesday

Unofficial transcripts with grades and remarks available via ISIS

NOTES: All dates and deadlines are subject to change and will be updated accordingly.
Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

Summer 2015 Calendar

All Summer 2015 graduate-level degrees will be awarded at the end of Summer B/C (August 2015).
Applicants will select Summer B/C 2015 on the degree application menu in ISIS.
The Summer 2015 degree application will be available via ISIS in mid-March 2015.

Students enrolled only in Summer A courses, still apply for the Summer B/C term, since graduate-level degrees are only awarded at the end of the B/C term. No graduate-level degrees are awarded at the end of Summer A (June). No late degree applications will be approved after the B/C deadline (July 1).

graduateschool.ufl.edu/files/graduation-checklist.pdf
http://www.isis.ufl.edu/

April 2015

April 22, Wednesday, 5:00 p.m.

Deadline for requesting transfer of credit (for summer degree candidates)
May 8, Friday, 5:00 p.m.

Summer A & C registration

Last day for thesis and dissertation students to clear prior to the summer semester with the Graduate School Editorial Office


May 11, Monday

Summer A & C classes start.

Summer A & C drop/add starts.

Summer A & C late registration starts (late fee assessed).

May 12, Tuesday, 11:59 p.m.

Summer A & C late registration ends (late fee assessed).

Summer A & C drop/add ends.

Summer A & C deadline to withdraw with no fee liability

May 20, Wednesday, 5:00 p.m.

Summer A deadline to withdraw with 25% refund (W symbol assigned)


Deadline for Summer A courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

May 22, Friday, 3:30 p.m.

Summer A & C fee payment deadline

Summer A & C residency reclassification deadline for receiving the request and all documents

May 25, Monday, Memorial Day observed

No classes

May 29, Friday, 5:00 pm

Summer C deadline to withdraw with 25% refund (W symbol assigned)


Deadline for Summer C courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

June 12, Friday, 5:00 p.m.

Last day to withdraw (all courses) via ISIS for Summer A without failing grades

http://www.registrar.ufl.edu/currents/withdraw.html

June 15, Monday, 5:00 p.m.

Last day to submit Transmittal Letters and dissertation for initial review by Graduate School Editorial Office

graduateschool.ufl.edu/files/checklist-dissertation.pdf

June 19, Friday

Summer A classes end.

Summer A final examinations during regular class periods

June 19, Friday, 5:00 p.m.

Last day to drop a course and receive W on transcript for Summer A term via College petition to the Registrar, Room 222 Criser

Last day to withdraw (all courses) without failing grades for Summer A term via College petition to the Registrar, Room 222 Criser
June 22, Monday, 12:00 p.m.

Summer A final term grades are due.

June 22-26, Monday-Friday, Summer Break

No classes

June 26, Friday, 5:00 p.m.

Summer B Registration

June 29, Monday

Summer B classes start.
Summer B drop/add starts.
Summer B late registration starts (late fee assessed, after 5:00 p.m. on 6/26/14).

June 30, Tuesday, 11:59 p.m.

Summer B drop/add ends.
Summer B late registration ends (late fee assessed).
Summer B deadline to withdraw with no fee liability

July 2015

July 1, Wednesday

Summer B/C Degree application deadline—no exceptions will be granted after this date.
http://www.isis.ufl.edu/
Midpoint of Summer term
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants

July 3, Friday, Independence Day, observed

No classes

July 7, Tuesday, 5:00 p.m.

Last day to submit successfully defended thesis for review by Graduate School Editorial Office
Deadline for final exam forms to be posted to GIMS for thesis students.

July 8, Wednesday, 5:00 p.m.

Summer B deadline to withdraw with 25% refund (W symbol assigned):
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall
Deadline for Summer B courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

July 10, Friday, 3:30 p.m.

Summer B fee payment deadline
Summer B residency reclassification deadline for receiving the request and all documents

July 27, Monday, 5:00 p.m.

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students
Deadline for ETD Signature Pages to be posted to GIMS for thesis and dissertation students
Deadline for thesis and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term. No exceptions can be granted.

July 31, Friday, 5:00 p.m.

Last day to withdraw (all courses) for Summer B or Summer C via ISIS without failing grades

www.registrar.ufl.edu/currents/withdraw.html

August 2015

August 4, Tuesday, 5:00 p.m.

Deadline for thesis and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term. No exceptions can be granted.

August 7, Friday

Summer B and C classes end.
Final examinations are during regular class periods.

August 7, Friday, 5:00 p.m.

Last day to drop a course and receive W on transcript for Summer B or Summer C via College petition to the Registrar, Room 222 Criser
Last day to withdraw (all courses) without failing grades for Summer B or Summer C via College petition to the Registrar, Room 222 Criser
Deadline for requesting transfer of credit (for full degree candidates)

August 8, Saturday

Commencement +

August 10, Monday, 12:00 noon

Summer B and C final term grades are due.

August 11, Tuesday

Degree certification

August 12, Wednesday

Unofficial transcripts with grades and remarks are available via ISIS.

NOTES: All dates and deadlines are subject to change and will be updated accordingly. Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

Biology Courses

Biology Department

College of Liberal Arts and Sciences
Chair: Craig W. Osenberg
The Department of Biology offers two graduate programs: Botany and Zoology. Both programs offer graduate work leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

More information regarding these programs is available by following the links below and by visiting our departmental website: http://www.biology.ufl.edu.

BOT 5225C: Plant Anatomy
BOT 5305: Paleobotany
BOT 5505C: Intermediate Plant Physiology
BOT 5625: Plant Geography
BOT 5655C: Physiological Plant Ecology
BOT 5685C: Tropical Botany
BOT 5695C: Ecosystems of Florida
BOT 5725C: Taxonomy of Vascular Plants
BOT 6508C: Proteomics Theory and Practice
BOT 6516: Plant Metabolism
BOT 6566: Plant Growth and Development
BOT 6716C: Advanced Taxonomy
BOT 6726C: Principles of Systematic Biology
BOT 6905: Individual Studies in Botany
BOT 6910: Supervised Research
BOT 6927: Advances in Botany
BOT 6935: Special Topics
BOT 6936: Graduate Student Seminar
BOT 6940: Supervised Teaching
BOT 6943: Internship in College Teaching
BOT 6971: Research for Master’s Thesis
BOT 7979: Advanced Research
BOT 7980: Research for Doctoral Dissertation
PCB 5046C: Advanced Ecology
PCB 5307C: Limnology
PCB 5338: Principles of Ecosystem Ecology
PCB 5356: Tropical Ecology
PCB 5415C: Behavioral Ecology
PCB 6049: Seminar in Ecology
PCB 6377C: Physiological Ecology of Vertebrates
PCB 6447C: Community Ecology
PCB 6675C: Evolutionary Biogeography
PCB 6695: Seminar in Evolutionary Biology
ZOO 5115C: Vertebrate Paleontology
ZOO 5486C: Mammalogy
ZOO 6005: Integrative Principles of Zoology I
ZOO 6308: Dynamic Optimization Modeling in Behavioral and Evolutionary Ecology
ZOO 6406: Biology of Sea Turtles
ZOO 6456C: Ichthyology
ZOO 6542: Nutritional Ecology
ZOO 6905: Individual Studies
ZOO 6910: Supervised Research
ZOO 6920: Zoology Colloquium
ZOO 6931: Seminar in Marine Turtle Biology
ZOO 6939: Seminar in Animal Behavior
ZOO 6971: Research for Master's Thesis
ZOO 7979: Advanced Research
ZOO 7980: Research for Doctoral Dissertation

Business Courses - filtered

Warrington College of Business Administration

Dear: Jamie Kraft

Complete faculty listings: Follow this link.

Graduate degrees offered by the Warrington College of Business Administration are the Doctor of Philosophy with major programs in business administration and in economics; the Master of Arts with major programs in economics, in international business, and in business administration with concentrations in insurance and marketing; the Master of Science with major programs in Information Systems and Operations Management (with a concentration in supply chain management), in finance, in management, in real estate, and in business administration, including concentrations in entrepreneurship, insurance, marketing and retail; the Master of Business Administration; and the Master of Accounting. Fields of concentration and requirements for the M.B.A. are given under Graduate Degrees of this catalog, as well as admission and degree requirements for the Ph.D., M.A., and M.S. degrees.

Master of Arts: The M.A. degree with a major in international business is designed to provide students with quantitative and application skills to be used in an international business setting. The program provides practical training with a brief study trip to a major international city, where students are required to participate actively in business tours and lectures. The students also have the opportunity to gain credits for the degree by studying at one or more foreign universities for a period of 2 weeks to 6 months.

Master of Science: The M.S. degree with a major in management targets students from nonbusiness backgrounds who would like to gain "core" business knowledge and application skills. Requirements span the traditional business disciplines to produce a sound knowledge base for students seeking a solid business foundation. Students are required to take such courses as accounting, finance, economics, entrepreneurship, management, marketing, organizational behavior, and statistics. Typical positions for graduates include managers, consultants, and analysts.

Doctor of Philosophy: For the Ph.D. in business administration, students must have a concentration in one of the following:

- Accounting
- Information Systems and Operations Management
- Finance
- Insurance
- Management
- Marketing
- Real estate and urban analysis.

Specific requirements for the various departments and specialties are given in the Graduate Degrees section in this catalog. (Requirements for the Ph.D. degree in economics are described under...
All candidates for the Ph.D. in business administration must satisfy the following general requirements:

**Breadth requirement:** All applicants for Ph.D. in the business administration program are expected to have completed prior business-related course work at either the advanced undergraduate or graduate level. Students entering without prior work are required to take a minimum of three graduate courses in at least two fields other than their chosen area of concentration. Most often, the appropriate courses will be found in the M.B.A. first-year core; the particular courses to be taken by a student will be decided in consultation with the student's academic adviser. After a student enters the Ph.D. program, the courses taken to satisfy the breadth requirement must be taken in the College of Business Administration.

**Research foundations requirement:** All students must complete a six-course research skills sequence that prepares them for scholarly research in their chosen area of concentration. Research foundations are defined as essential methodological tools (e.g., statistics, quantitative analysis) and/or substantive content domains (e.g., psychology, economics) outside the student’s major field that are considered essential to conducting high quality research in the chosen field. The specific research skills required by each area of concentration can be found in the field descriptions in this Catalog.

Other requirements include satisfactory completion of graduate course work in the major field of concentration, as well as one or two minor fields designed to add depth to the student's research training. Minors are selected by the student in consultation with his or her advisory committee, and may be within or outside the College of Business Administration. Other requirements for the Ph.D. are given in the Graduate Degrees section of this catalog.

**Departments and Programs within Warrington College of Business Administration**

**Warrington College of Business Courses**

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

**Fisher School of Accounting**

Warrington College of Business Administration

Director: Gary A. McGill
Graduate Coordinators: Dominique DeSantiago, Stephen Asare

Complete faculty listing by department: Follow this link.

As a professional school in a major public research university, the Fisher School of Accounting (FSOA) is committed to scholarly research, teaching, and service to advance knowledge and prepare future leaders for business, professional, and academic careers.

The Fisher School of Accounting offers graduate work leading to the Master of Accounting (M.Acc.) degree with a major in accounting, and the Ph.D. degree with a major in business administration and an accounting concentration. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below, or visit our website: [http://warrington.ufl.edu/accounting](http://warrington.ufl.edu/accounting).

**ACG 5005: Financial Accounting**

**ACG 5065: Financial and Managerial Accounting**

**ACG 5075: Managerial Accounting**

**ACG 5226: Advanced Accounting**

**ACG 5505: Governmental Accounting**

**ACG 5637: Auditing I**

**ACG 5647: Auditing II**
ACG 5815: Accounting Regulation
ACG 6136: Accounting Theory
ACG 6175: Financial Reporting and Analysis
ACG 6207: Accounting for Risk
ACG 6265: International Accounting and Taxation
ACG 6635: Issues in Audit Practice
ACG 6685: Forensic Accounting
ACG 6691: International Auditing
ACG 6697: Information Systems Assurance
ACG 6905: Individual Work in Accounting
ACG 6935: Special Topics in Accounting
ACG 6940: Supervised Teaching
ACG 7885: Accounting Research I
ACG 7886: Accounting Research II
ACG 7887: Research Analysis in Accounting
ACG 7939: Theoretical Constructs in Accounting
ACG 7979: Advanced Research
ACG 7980: Research for Doctoral Dissertation
TAX 5005: Introduction to Federal Income Taxation
TAX 5025: Federal Income Tax 1
TAX 5027: Federal Income Tax 2
TAX 5065: Tax Professional Research
TAX 6105: Corporate Taxation
TAX 6115: Advanced Corporate Taxation
TAX 6205: Partnership Taxation
TAX 6526: International Taxation
TAX 6726: Executive Tax Planning
TAX 6877: State and Local Taxation

Economics Department

Chair: R. D. Blair
Graduate Coordinator: S. M. Slutsky.
Complete faculty listing: Follow this link.

The department offers the Master of Arts (thesis and nonthesis option) and Doctor of Philosophy degrees in economics with specializations in econometrics, economic theory, industrial organization, international economics, monetary economics, and public finance.
M.A. requirements: A minimum of 36 credits of course work is required for the M.A. with and without thesis. A minimum of six credits of the research course ECO 6971 may be included for a master’s degree with thesis. The following core courses are required: ECO 7408 and ECO 7404, or equivalent, ECO 7415, or equivalent, ECO 7115, and ECO 7206.

Ph.D. requirements: Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) an acceptable score on the GRE, and (c) for non-native speakers of English, an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

All core courses must be completed in the first year. In addition, students must complete courses in three fields of specializations and pass qualifying examinations in two of those fields.

Complete descriptions of the minimum requirements for the M.A. and Ph.D. degrees are provided elsewhere in this catalog.

ECO 5715: Open Economy Macroeconomics
ECO 6075: Economics/Consumer Education
ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
ECO 6409: Game Theory Applied to Business Decisions
ECO 6716: International Macroeconomics
ECO 6906: Individual Work in Economics
ECO 6910: Supervised Research
ECO 6936: Special Topics
ECO 6940: Supervised Teaching
ECO 6957: International Studies in Economics
ECO 6971: Research for Master’s Thesis
ECO 7113: Information Economics
ECO 7115: Microeconomic Theory
ECO 7118: Markets and Institutions
ECO 7119: Information, Incentives, and Agency Theory
ECO 7120: General Equilibrium and Welfare Economics
ECO 7206: Macroeconomic Theory I
ECO 7272: Economic Growth I
ECO 7404: Game Theory for Economists
ECO 7405: Mathematical Economics: Game Theory
ECO 7406: Dynamic Economics: Theory and Applications
ECO 7408: Mathematical Methods and Applications to Economics
ECO 7415: Statistical Methods in Economics
ECO 7424: Econometric Models and Methods
ECO 7426: Econometric Methods I
ECO 7427: Econometric Methods II
ECO 7452: Best Empirical Practices in Economics
ECO 7516: Tax Theory and Public Policy
ECO 7525: Welfare Economics and The Second Best
ECO 7534: Empirical Public Economics I
ECO 7535: Empirical Public Economics II
ECO 7536: Theoretical Public Economics
ECO 7706: Theory of International Trade
ECO 7707: International Economic Relations
ECO 7925: Research Skills Workshop
ECO 7938: Advanced Economics Seminar
ECO 7979: Advanced Research
ECO 7980: Research for Doctoral Dissertation
ECP 5415: Antitrust Policy and Managerial Decisions
ECP 5702: Managerial Economics
ECP 5705: Economics of Business Decisions
ECP 6407: Economics for Managing Information for Electronic Commerce
ECP 6417: Public Policy and Social Control
ECP 6701: Competitive Strategies in Expanding Markets
ECP 6708: Cases in Competitive Strategy
ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
ECP 7408: Empirical Industrial Organization
ECP 7418: Economics of Regulation
ECP 7419: Current Research in Regulation
HSA6436: Health Economics

Finance, Insurance, and Real Estate Department

Chair: Michael D. Ryngaert
Graduate Coordinator: Mahen Nimalendran

Complete faculty listing: Follow this link.

The Department of Finance, Insurance, and Real Estate offers graduate work leading to the Master of Science degree with major programs in finance and real estate, the Master of Science in Entrepreneurship (M.S.E.); and the Doctor of Philosophy degree in business administration with a concentration in finance, insurance, quantitative analysis, or real estate. Complete descriptions of the minimum requirements for the M.S., M.S.E, and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

Finance, Real Estate, and Entrepreneurship are also available as concentrations within the M.B.A program. For information about the M.B.A. program, please consult that listing in the Graduate Degrees section.

For more information see the program pages below, and visit our website: http://warrington.ufl.edu/departments/fire

ENT 5275: Family Business Management
ENT 6006: Entrepreneurship
ENT 6008: Entrepreneurial Opportunity
ENT 6016: Venture Analysis
ENT 6116: Business Plan Formation

ENT 6416: Venture Finance

ENT 6506: Social Entrepreneurship

ENT 6616: Creativity in Entrepreneurship

ENT 6905: Individual Work in Entrepreneurship

ENT 6930: Special Topics

ENT 6933: Entrepreneurship Lecture Series

ENT 6946: Entrepreneurial Consulting Project

ENT 6950: Integrated Technology Ventures

ENT 6957: International Studies in Entrepreneurship

FIN 5405: Business Financial Management

FIN 5437: Finance I: Asset Valuation, Risk, and Return

FIN 5439: Finance II: Capital Structure and Risk Management Issues

FIN 6108: Personal Financial Management

FIN 6246: Money and Capital Markets

FIN 6296: Capitalism

FIN 6306: Investment Banking

FIN 6418: International Cash Flow Management

FIN 6425: Corporation Finance

FIN 6427: Measuring and Managing Value

FIN 6429: Financial Decision Making

FIN 6432: Asset Valuation and Corporate Finance

FIN 6434: Private Equity

FIN 6438: Study in Valuation

FIN 6465: Financial Statement Analysis

FIN 6477: Entrepreneurial Finance

FIN 6489: Financial Risk Management

FIN 6496: Mergers & Acquisitions

FIN 6518: Investment Concepts

FIN 6525: Asset Management Project

FIN 6526: Portfolio Theory

FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation

GEB 5114: Entrepreneurship and Venture Finance

GEB 5118: New Venture Creation

GEB 6157: Entrepreneurship Experiential Learning Project

GEB 6366: Fundamentals of International Business

GEB 6924: Entrepreneurship Professional Speaker Series

REE 6045: Introduction to Real Estate

REE 6058: Construction Considerations in Real Estate

REE 6105: Real Estate Appraisal

REE 6206: Primary Mortgage Markets and Institutions

REE 6208: Secondary Mortgage Markets and Securitization

REE 6315: Real Estate Market and Transaction Analysis

REE 6395: Investment Property Analysis

REE 6397: Real Estate Securities and Portfolios

REE 6705: Geographic Information Systems and Location Analysis

REE 6737: Real Estate Development

REE 6905: Individual Work in Real Estate

REE 6910: Supervised Research

REE 6930: Special Topics in Real Estate

REE 6935: Real Estate Case Studies

REE 6940: Supervised Teaching

REE 6948: Capstone Seminar and Applied Project

REE 6957: International Studies in Real Estate

REE 7979: Advanced Research

REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Department

Warrington College of Business Administration

Chair: Haldun Aytug
Graduate Coordinator: Praveen Pathak

Complete faculty listing: Follow this link.

The primary mission of the Department of Information Systems & Operations Management is a commitment to scholarly research, teaching and service to advance the state of knowledge in information systems and supply chain management and to train future leaders for professional and academic careers.

The Department offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Combined Bachelor/Master of Science: The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.
For more information, please see the program pages below and our website: http://warrington.ufl.edu/departments/isom

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
ISM 6223: Business Telecom Strategy and Applications II
ISM 6224: Business Telecom Strategy and Applications III
ISM 6226: Business Telecom Strategy and Applications
ISM 6236: Business Objects I
ISM 6239: Business Objects II
ISM 6257: Intermediate Business Programming
ISM 6258: Advanced Business Programming
ISM 6259: Business Programming
ISM 6405: Business Intelligence
ISM 6423: Data Analysis for Decision Support
ISM 6485: Electronic Commerce and Logistics
ISM 6486: eCommerce Technologies
ISM 6487: Risks and Controls in eCommerce
ISM 6942: Electronic Commerce Practicum
ISM 7166: Advanced Business Systems Design and Development III
MAN 5501: Management
MAN 5502: Production and Operations Management
MAN 6508: Management of Service Operations
MAN 6511: Production Management Problems
MAN 6528: Principles of Logistics/Transportation Systems
MAN 6573: Purchasing and Materials Management
MAN 6575: Purchasing and Supplier Relationship Management
MAN 6581: Project Management
MAN 6586: Project Management
MAN 6598: Logistics and Distribution Management
MAN 6599: Tactical Logistics Planning
MAN 6617: International Operations/Logistics
MAN 6619: International Logistics
QMB 5303: Managerial Statistics
QMB 5304: Introduction to Managerial Statistics
QMB 5305: Advanced Managerial Statistics
QMB 6358: Statistical Analysis for Managerial Decisions I
QMB 6359: Statistical Analysis for Managerial Decisions II
QMB 6607: Decision Processes Under Uncertainty I
QMB 6616: Business Process Analysis
QMB 6693: Quality Management and Control Systems
QMB 6697: Optimization in Simulation Modeling I
QMB 6755: Managerial Quantitative Analysis I
QMB 6756: Managerial Quantitative Analysis II
QMB 6905: Individual Work in Information Systems and Operations Management
QMB 6910: Supervised Research
QMB 6930: Special Topics in Information Systems and Operations Management
QMB 6940: Supervised Teaching
QMB 6941: Internship
QMB 6957: International Studies in Quantitative Methods
QMB 6971: Research for Master's Thesis
QMB 7931: Special Topics in Information Systems and Operations Management
QMB 7933: Seminar in Information Systems and Operations Management
QMB 7979: Advanced Research
QMB 7980: Research for Doctoral Dissertation

Management Department

Warrington College of Business Administration
Chair: Robert E. Thomas
Graduate Coordinator: Amir Erez
Complete faculty listing: Follow this link

The Management Department offers graduate work leading to a Ph.D. degree with a major in Business Administration and a concentration in Management; a Master of Business Administration degree with a concentration in Management; a Master of Science degree with a major in Management; and a Master of International Business (M.I.B.). Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees Section of this catalog.
The Department participates in combined bachelor's/master's degree programs for the Master of International Business (M.I.B.) and Master of Science (M.S.) with a major in management. The Master of International Business is open to students pursuing a bachelor's degree in a business discipline or minor in business administration. The M.S. with a major in management program is only open to non-business majors. Contact the graduate coordinator for information.

For more information, please see the program pages below and our website: http://warrington.ufl.edu/departments/mgt.

BUL 5445: Ethical Role of the Manager
BUL 5810: Legal Environment of Business
BUL 5811: Managers and Legal Environment of Business
BUL 5831: Commercial Law
BUL 5832: Commercial Law for Accountants
BUL 6440: Business Ethics and Corporation Social Responsibility
BUL 6441: Business Ethics and Corporate Social Responsibility
BUL 6516: Law of Real Estate Transactions
BUL 6652: Law and Ethics of Corporate Governance
BUL 6656: Law for Entrepreneurs
BUL 6821: Cyberlaw and Ethics
BUL 6841: Employment Law
BUL 6851: International Business Law
BUL 6852: International Business Law
BUL 6891: Legal Aspects of Technology Management
BUL 6905: Individual Work
BUL 6930: Special Topics
ENT 6706: Global Entrepreneurship
MAN 5141: Leadership Skills
MAN 5245: Organizational Behavior
MAN 5246: Organizational Behavior
MAN 5265: Managing Groups and Teams
MAN 6107: Motivation in Organizational Setting
MAN 6128: Management Skills and Personal Development
MAN 6149: Developing Leadership Skills
MAN 6257: Power and Politics in Organizations
MAN 6266: Managing Groups and Teams in Organizations
MAN 6286: Managing Strategic Processes and Change in Organizations
MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management
MAN 6331: Compensation in Organizations
MAN 6351: Training and Development in Organizations
MAN 6365: Organizational Staffing
MAN 6366: Organizational Staffing
MAN 6385: Strategic Human Resource Management
MAN 6446: Negotiations
MAN 6447: Art and Science of Negotiation
MAN 6537: Managing Technology in Organizations
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
Marketing Department

Chair: Joseph W. Alba
Graduate Coordinator: Lyle A. Brenner

Complete faculty listing: Follow this link

The Marketing Department at the University of Florida is a recognized leader in the discipline of marketing. For over a decade, our faculty has ranked as one of the most productive and influential in the field. Our faculty is known for conducting provocative, cutting-edge research that contributes both to the scientific understanding and practice of marketing. Our Ph.D. program has produced many leading researchers in the discipline. And the David F. Miller Center for Retailing Education and Research is known as one of the foremost centers for developing the science of retailing.

The Marketing Department offers graduate work leading to the Ph.D. degree in business administration, the M.S. degree in business administration, and a concentration in the Master of Business Administration (M.B.A.) program. Requirements for the M.B.A., M.S., and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

For more information, please see our website: http://warrington.ufl.edu/departments/mkt.

MAR 5805: Problems and Methods in Marketing Management
MAR 5806: Problems and Methods in Marketing Management
MAR 6157: International Marketing
MAR 6158: International Marketing
MAR 6237: The Art and Science of Pricing
MAR 6256: Strategy and Tactics of Pricing
MAR 6335: Building and Managing Brand Equity
MAR 6456: Business-to-Business Marketing
MAR 6508: Customer Analysis
MAR 6646: Marketing Research for Managerial Decision Making
MAR 6648: Marketing Research for Managerial Decision Making
MAR 6722: Web-Based Marketing
MAR 6725: Introduction to Electronic Commerce
MAR 6816: Advanced Marketing Management (MBA)
MAR 6818: Advanced Marketing Management
MAR 6833: Product Development and Management
MAR 6834: Marketing of Science and Technology
MAR 6835: Marketing of Science and Technology
MAR 6837: Consumer-Centered Product Design
MAR 6861: Customer Relationship Management
MAR 6862: Customer Relationship Management
MAR 6905: Individual Work
MAR 6910: Supervised Research
MAR 6930: Special Topics in Marketing
MAR 6940: Supervised Teaching
MAR 6957: International Studies in Marketing
MAR 6971: Research for Master’s Thesis
MAR 6973: Project in Lieu of Thesis
MAR 7507: Perspectives on Consumer Behavior
MAR 7588: Consumer Information Processing and Decision Making
MAR 7589: Judgment and Decision Making
MAR 7626: Multivariate Statistical Methods in Marketing
MAR 7636: Research Methods in Marketing
MAR 7666: Marketing Decision Models
MAR 7786: Marketing Literature
MAR 7925: Workshop in Marketing Research
MAR 7979: Advanced Research
MAR 7980: Research for Doctoral Dissertation

CALS Courses by Department - filtered

College of Agricultural and Life Sciences

Dear: Elaine Turner

Complete faculty listings: Follow this link.

The College of Agricultural and Life Sciences offers academic programs and grants advanced degrees in 17 departments and the Schools of Forest Resources and Conservation, and Natural Resources and Environment. These academic units are all a part of the Institute of Food and Agricultural Sciences (IFAS). Additional components of IFAS include 16 research centers located throughout the state and cooperative extension offices in each of the 67 counties of the state.

The following courses are offered under the supervision of the office of the dean by an interdisciplinary faculty and deal with material of concern to two or more IFAS academic units. The courses are also open to students of other colleges, with the permission of the course instructor.

For more information, please see our website: http://cals.ufl.edu

Departments and Programs within the College of Agricultural and Life Sciences
College of Agricultural and Life Sciences Courses

ALS 5106: Food and the Environment
ALS 5364C: Molecular Techniques Laboratory
ALS 5905: Individual Study
ALS 5932: Special Topics
ALS 6046: Grant Writing
ALS 6921: Colloquium on Plant Pests of Regulatory Significance
ALS 6925: Integrated Plant Medicine
ALS 6930: Graduate Seminar
ALS 6931: Plant Medicine Program Seminar
ALS 6942: Principles of Plant Pest Risk Assessment and Management
Agricultural and Biological Engineering Department

College of Agricultural and Life Sciences
Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker
Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

AOM 5334C: Agricultural Chemical Application Technology

AOM 5431: GIS and Remote Sensing in Agriculture and Natural Resources

AOM 5435: Advanced Precision Agriculture

AOM 6905: Individual Work in Agricultural Operations Management

AOM 6932: Special Topics in Agricultural Operations Management

Agricultural Education and Communication Department

Chair: E. W. Osborne
Graduate Coordinator: B. E. Myers
Complete faculty listing by department: Follow this link.

The Department of Agricultural Education and Communication offers the degrees of Master of Science and Doctor of Philosophy. Graduate students who obtain a degree in Agricultural Education and Communication will focus their study in one of four areas of specialization. The areas of specialization are agricultural communication, agricultural education, extension education, and leadership development. These degree programs are individually tailored to meet the student's unique needs for professional development. The requirements for each degree are described in the Graduate Degrees section of the University of Florida Graduate Catalog. More information about our program can be found by following the link below.

AEC 5032: Agricultural Media Writing

AEC 5037: Agricultural Media Production

AEC 5060: Public Opinion and Agricultural and Natural Resource Issues

AEC 5074: Agriculture, Resources, People, and the Environment: A Global Perspective

AEC 5201: Teaching in Colleges of Agricultural and Life Sciences

AEC 5203: Advanced Teaching in Colleges of Agricultural and Life Sciences

AEC 5206: Teaching Methods in Agricultural Education

AEC 5227: Teaching in Agricultural Education Laboratory Facilities

AEC 5302: Professional Skill Development in Agriscience Education I

AEC 5324: Philosophy and Development of Agricultural Education

AEC 5454: Leadership Development for Extension and Community Nonprofit Organizations

AEC 5501: Professional Skill Development in Agriscience Education II

AEC 5541: Communication and Instructional Technologies in Agricultural and Life Sciences

AEC 5544: Curriculum Development and Assessment Techniques in Emerging Agricultural Technologies
AEC 5545: Special Methods in Teaching Agriculture
AEC 5546: Program Planning in Agricultural Education
AEC 6205: Advanced Curriculum and Teaching Methods
AEC 6210: Designing Educational Programs in Agricultural Settings
AEC 6211: Delivering Educational Programs in Agricultural Settings
AEC 6212: Teacher Education in Agriculture
AEC 6229: Laboratory Instruction: Theory and Practice
AEC 6300: Methodology of Planned Change
AEC 6316: From America to Zimbabwe: An Overview of International Extension Systems
AEC 6321: The Land Grant University and University Governance
AEC 6325: History and Philosophy of Agricultural Education
AEC 6419: Communication and Competencies for Global Leadership
AEC 6426: Development of a Volunteer Leadership Program
AEC 6512: Program Development in Extension Education
AEC 6540: Agricultural and Natural Resources Communications Theory and Strategies
AEC 6543: Teaching and Learning Theory: Applications in Agricultural Education
AEC 6552: Evaluating Programs in Extension Education
AEC 6611: Agricultural and Extension Adult Education
AEC 6704: Extension Administration and Supervision
AEC 6767: Research Strategies in Agricultural Education and Communication
AEC 6905: Problems in Agricultural and Extension Education
AEC 6910: Supervised Research
AEC 6912: Nonthesis Research in Agricultural and Extension Education
AEC 6933: Seminar in Agricultural Education and Communication
AEC 6940: Supervised Teaching
AEC 6945: Practicum in Agricultural Education and Communication
AEC 6947: Experiential Learning in Agricultural Education
AEC 6971: Research for Master’s Thesis
AEC 7979: Advanced Research
AEC 7980: Research for Doctoral Dissertation
AGG 5504: Critical and Creative Thinking in Problem Solving and Decision Making

Agronomy Department
The Agronomy Department offers the degrees of Doctor of Philosophy and Master of Science (thesis and non-thesis options) in agronomy with specializations in plant physiology, ecology, management and nutrition, weed science (terrestrial and aquatic), and plant breeding and genetics. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate programs emphasize the development and subsequent application of basic principles in each specialization to the management of agricultural and natural ecosystems in Florida and throughout the world. The continuing need for increased plant production for food, fiber and energy to meet the demands of a rapidly escalating population is reflected in departmental research programs. When compatible with a student's program and permitted by prevailing circumstances, some thesis and dissertation research may be conducted wholly or in part in one or more of several countries.

Students seeking a graduate program in the Agronomy Department should hold a Bachelor of Science degree from an accredited college or university with a major in an area of plant science, or closely related discipline. A science background with basic courses in biology, botany, mathematics, chemistry, and physics is required of new graduate students.

AGR 5215C: Integrated Field Crop Science
AGR 5230C: Florida Grassland Agroecosystems
AGR 5266C: Field Plot Techniques
AGR 5277C: Tropical Crop Production
AGR 5307: Molecular Genetics for Crop Improvement
AGR 5321C: Genetic Improvement of Plants
AGR 5444: Ecophysiology of Crop Production
AGR 5511: Crop Ecology
AGR 6233: Tropical Grassland Agroecosystems
AGR 6237C: Research Techniques in Forage Evaluation
AGR 6311: Population Genetics
AGR 6322: Advanced Plant Breeding
AGR 6325L: Plant Breeding Techniques
AGR 6353: Cytogenetics
AGR 6422C: Environmental Crop Nutrition
AGR 6442C: Physiology of Agronomic Plants
AGR 6905: Agronomic Problems
AGR 6910: Supervised Research
AGR 6932: Topics in Agronomy
AGR 6933: Graduate Agronomy Seminar
AGR 6940: Supervised Teaching
AGR 6971: Research for Master's Thesis
AGR 7979: Advanced Research
AGR 7980: Research for Doctoral Dissertation
IPM 5305: Principles of Pesticides
PLS 5632C: Integrated Weed Management
PLS 5652: Advanced Weed Science
PLS 6623: Weed Ecology
PLS 6626: Invasive Plant Ecology
PLS 6655: Plant/Herbicide Interaction

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link.

For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/.

ANS 5446: Animal Nutrition
ANS 6313: Current Concepts in Reproductive Biology
ANS 6718: Nutritional Physiology of Domestic Animals
ANS 6751: Physiology of Reproduction
PCB 5235: Immunology
PCB 5615: Molecular Evolution and Systematics
STA 6934: Special Topics in Statistics
ZOO 6927: Special Topics in Zoology

Animal Sciences Department

Chair: G. E. Dahl
Graduate Coordinator: G. Adesogan

Complete faculty listing by department: Follow this link.

Animal Sciences is an academic department of the College of Agriculture and Life Sciences (CALS), a unit of the Institute of Food and Agricultural Sciences (IFAS). Creating new solutions to tomorrow's problems underlies everything we do in the Animal Sciences Program. In the areas of teaching, research, and extension, our faculty integrates the most modern technologies available with personal expertise and attention to the needs of students and our industry. For more information about the Animal Sciences program, please follow the link below.

ANS 5312C: Applied Ruminant Reproductive Management
ANS 5935: Reproductive Biology Seminar and Research Studies
ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
ANS 6314: Experimental Embryology
ANS 6447: Ruminant Nutrition
ANS 6449: Vitamins
ANS 6452: Principles of Forage Quality Evaluation
ANS 6458: Advanced Methods in Nutrition Technology
ANS 6636: Meat Technology
ANS 6666L: Molecular and Cellular Research Methods
ANS 6702: Lactation Physiology of Farm Animals
ANS 6704: Mammalian Endocrinology
ANS 6705: Muscle Physiology
ANS 6707: Growth Physiology in Farm Animals
ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
ANS 6715: Gastrointestinal and Feed Microbiology
ANS 6716: Physiology in Farm Animals
ANS 6723: Mineral Nutrition and Metabolism
ANS 6745: Introduction to Statistical Genetics
ANS 6750: Reproductive Physiology in Farm Animals
ANS 6767: Molecular Endocrinology
ANS 6775: Essentials of Livestock Immunology
ANS 6905: Problems in Animal Science
ANS 6910: Supervised Research
ANS 6932: Special Topics in Animal Science
ANS 6933: Graduate Seminar in Animal Science
ANS 6936: Graduate Seminar in Animal Molecular and Cell Biology
ANS 6939: Animal Molecular and Cellular Biology Journal Colloquy
ANS 6940: Supervised Teaching
ANS 6971: Research for Master's Thesis
ANS 7979: Advanced Research
ANS 7980: Research for Doctoral Dissertation
PCB 6816: Thermal Physiology

Entomology and Nematology Department

College of Agricultural and Life Sciences
Chair: John L. Capinera.
Graduate Coordinator: Heather J. McAuslane.

Complete faculty listing by department: Follow this link.

The Entomology and Nematology Department offers the Master of Science (thesis and nonthesis options) and Doctor of Philosophy degrees in entomology and nematology with the following specializations: entomology, nematology, and pest management. Minimum requirements for the M.S. and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

The Department also offers a cooperative Doctor of Philosophy degree with Florida A&M University and distance education courses leading to the M.S. degree. Members of the Graduate Faculty include the department resident faculty, faculty located on University of Florida campuses away from Gainesville, scientists with other State of Florida agencies such as the Division of Plant Industry and Florida Department of Agriculture and Consumer Services, and scientists of the U.S. Department of Agriculture. The Graduate Faculty is qualified to direct graduate students in all specialties of entomology, nematology, and acarology.

New graduate students should have backgrounds in biology, chemistry, physics, and mathematics. Minor deficiencies may be made up after entering graduate school.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

For more information, please see the program page below, and visit our website: http://entnemdept.ufl.edu.
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<thead>
<tr>
<th>Course Code</th>
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<td>ALS 6166</td>
<td>Exotic Species and Biosecurity Issues</td>
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<tr>
<td>ALS 6935</td>
<td>Topics in Biological Invasions</td>
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<td>ENY 5006</td>
<td>Graduate Survey of Entomology</td>
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<td>ENY 5006L</td>
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<td>ENY 5031C</td>
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<td>ENY 5151C</td>
<td>Techniques in Insect Systematics</td>
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<td>ENY 5160C</td>
<td>Survey of Science with Insects</td>
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<td>ENY 5164</td>
<td>Graduate Survey of Invertebrate Field Biology</td>
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<td>ENY 5212</td>
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<td>ENY 5223C</td>
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<td>ENY 5226C</td>
<td>Principles of Urban Pest Management</td>
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<td>ENY 5332</td>
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<td>ENY 5405</td>
<td>Insects as Vectors of Plant Pathogens</td>
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<td>ENY 5516</td>
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<td>ENY 5566</td>
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<td>ENY 5572</td>
<td>Advanced Apiculture</td>
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<td>ENY 5611</td>
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<td>ENY 5820</td>
<td>Insect Molecular Genetics</td>
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<td>ENY 6166</td>
<td>Insect Classification</td>
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<td>ENY 6203</td>
<td>Insect Ecology</td>
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<tr>
<td>ENY 6203L</td>
<td>Insect Ecology Laboratory</td>
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<tr>
<td>ENY 6248</td>
<td>Termite Biology and Control</td>
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<td>ENY 6401</td>
<td>Insect Physiology</td>
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<tr>
<td>ENY 6401L</td>
<td>Insect Physiology Laboratory</td>
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<tr>
<td>ENY 6454</td>
<td>Behavioral Ecology and Systematics of Insects</td>
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<tr>
<td>ENY 6591C</td>
<td>Advanced Mosquito Identification</td>
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<td>ENY 6593</td>
<td>Advanced Mosquito Biology</td>
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<tr>
<td>ENY 6651C</td>
<td>Insect Toxicology</td>
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</tbody>
</table>
ENY 6665: Advanced Medical and Veterinary Entomology I
ENY 6665L: Advanced Medical and Veterinary Entomology Laboratory
ENY 6706: Forensic Entomology
ENY 6706L: Forensic Entomology Laboratory
ENY 6821: Insect Microbiology
ENY 6822C: Molecular Biology Techniques with Invertebrates and Their Pathogens
ENY 6905: Problems in Entomology
ENY 6910: Supervised Research
ENY 6931: Entomology Seminar
ENY 6932: Special Topics in Entomology
ENY 6934: Selected Studies in Entomology
ENY 6940: Supervised Teaching
ENY 6942: Insect Diagnostics
ENY 6943: Entomology Internship
ENY 6944: Entomology Extension Internship
ENY 6971: Research for Master's Thesis
ENY 7979: Advanced Research
ENY 7980: Research for Doctoral Dissertation
NEM 5004C: Graduate Survey of Nematology
NEM 5707C: Plant Nematology
NEM 6101C: Nematode Morphology and Anatomy
NEM 6102: Nematode Systematics and Molecular Phylogeny
NEM 6102L: Nematode Systematics and Molecular Phylogeny Laboratory
NEM 6103: Insect Parasitic Nematodes
NEM 6104L: Insect Parasitic Nematodes Laboratory
NEM 6201: Nematode Ecology
NEM 6708: Field Plant Nematology
NEM 6905: Problems in Nematology
NEM 6931: Nematology Seminar
NEM 6932: Special Topics in Nematology
NEM 6934: Selected Studies in Nematology
NEM 6940: Supervised Teaching
Family, Youth, and Community Sciences Department

Interim Chair: Tracy Irani  
Graduate Coordinator: Larry F. Forthun

Complete faculty listing by department: Follow this link

The FYCS graduate program is an interdisciplinary applied social science program that prepares students for advanced degrees (e.g., Ph.D.) and careers in such areas as family and youth services, Extension and community-based education, community development and nonprofit management, program planning and evaluation, and social policy. Graduates find careers in both the public and private sectors including:

- Child and Youth Development in areas such as juvenile justice, dropout prevention programs, recreational and camp programs, and youth ministry;
- Community Development Practice in local and regional government, private nonprofit organizations (such as chambers of commerce; local development corporations, and local, national and international foundations) and citizen's groups;
- Nonprofit Organizational Management, such as management of community based, nonprofit organizations;
- Family and Social Services, such as family preservation programs, assistance for abused and neglected children and other public assistance programs; and
- Cooperative Extension Service in such areas as youth development, family and consumer sciences and community development.

Contact the graduate coordinator for more information.

FYC 5008: Personal and Family Tax Planning

FYC 5009: Personal and Family Insurance Planning

FYC 5106: Personal and Family Retirement and Estate Planning

FYC 5935: Personal and Family Financial Planning Capstone

FYC 6020: Principles of Family, Youth, and Community Sciences

FYC 6111: Families and Violence

FYC 6117: Military Families in Community Context

FYC 6131: Ethics for FYCS Practitioners

FYC 6207: Adolescent Problematic Behavior

FYC 6221: Grant Proposals for Community-Based Organizations

FYC 6222: Parenting and Child Relationships

FYC 6223: Promoting Positive Youth Development

FYC 6224: Resilience and Positive Youth Development

FYC 6230: Theories of Youth and Family Development

FYC 6234: Theoretical Approaches to Youth Programming

FYC 6302: Sustainable Community Development
The Food and Resource Economics Department offers the Master of Agribusiness (M.AB) (non-thesis), Master of Science with Concentration in Agribusiness (M.S.AB.) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Department participates in programs with the Center for Latin American Studies, the Center for African Studies, the Center for Tropical Agriculture, the School of Natural Resources and Environment, the College of Law, and the Florida Sea Grant College Program.

The Department programs reflect the diversity of Florida's agriculture which has more than fifty major commodities. With over thirty faculty involved in a full range of research, extension, and teaching programs in areas including Agricultural Marketing, International Trade, Policy, Production/Farm Management, International Development, Marine Economics, Natural Resource and Environmental Economics, Community/Regional Development and Labor Economics. In addition to the main campus location, the department has faculty at research centers throughout the state.

Several members of the faculty have garnered international reputations in diverse fields such as trade policy, generic advertising, citrus economics, sugar policy, business retention and expansion, leadership development, consumer attitudes towards genetically modified food, and dairy marketing.

The Department offers a combined bachelor's/master's degree program for the Master of Science and Master of Science with Concentration in Agribusiness. Contact the Graduate Program Office in 1170 McCarty Hall for information.

For more information, please see the program pages below, and see our website: http://www.fred.ifas.ufl.edu.

AEB 5167: Economic Analysis in Small Farm Livelihood Systems

AEB 5188: Economics of Agribusiness Decisions

AEB 5326: Agribusiness Financial Management
AEB 5516: Quantitative Methods in Agribusiness Decisions
AEB 5757: Strategic Agribusiness Human Resource Management
AEB 6106: Microeconomic Principles and Analysis
AEB 6139: Strategic Agribusiness Management
AEB 6145: Agricultural Finance
AEB 6183: Agribusiness Risk Management
AEB 6225: Public Policy and the Agribusiness Firm
AEB 6301: Food Wholesale and Retail Marketing
AEB 6363: Agricultural Marketing
AEB 6385: Management Strategies for Agribusiness Firms
AEB 6533: Static and Dynamic Optimization Models in Agriculture
AEB 6553: Elements of Econometrics
AEB 6592: Mathematical Programming for Economic Analysis
AEB 6675: International Agribusiness Marketing
AEB 6815: Science and Research Methodology
AEB 6817: Survey Research Methods for Economists
AEB 6905: Problems in Food and Resource Economics
AEB 6910: Supervised Research
AEB 6921: Workshop in Food and Resource Economics I
AEB 6933: Special Topics
AEB 6934: Workshop in Food and Resource Economics II
AEB 6942: Advanced Applications in Agribusiness Experience
AEB 6971: Research for Master's Thesis
AEB 7108: Microeconomic Theory II
AEB 7174: Economic Coordination and Organizational Behavior in Agribusiness
AEB 7182: Agricultural Risk Analysis and Decision Making
AEB 7184: Production Economics
AEB 7240: Macroeconomic Theory in Open Economies II
AEB 7373: Consumer Demand and Applied Analysis
AEB 7453: Natural Resource and Environmental Economics
AEB 7483: Seminar in Natural Resource and Environmental Economics
AEB 7571: Econometric Methods I
Food Science and Human Nutrition Department

College of Agricultural and Life Sciences

Chair: Susan S. Percival
Graduate Coordinators: Harry S. Sitren (M.S. in Food Science and Human Nutrition / Ph.D. in Food Science), James F. Collins (Ph.D. in Nutritional Sciences)

Complete faculty listing by department: Follow this link.

The Food Science and Human Nutrition Department (FSHN) is one of the world's largest combined academic programs where food science, nutritional sciences, and dietetics are all studied within one department. FSHN has nearly 30 full-time faculty members, 80 graduate assistants, and close to 1,000 undergraduate students. Our programs are accredited by the Institute of Food Technologists (IFT) and the Academy of Nutrition and Dietetics. After completing undergraduate degrees, our students typically move on to professional employment, further education or training in food or nutrition graduate programs, or on to professional school programs. We have a strong record of excellent placement of our graduate students in industry and professional organization employment positions, as faculty members at colleges and universities, or in postdoctoral training experiences.

Our faculty has trained at institutions from around the world; they have been widely successful in their teaching, research, and extension efforts. Throughout our programs in food science, nutrition, and dietetics, our faculty is recognized nationally and internationally as experts in their respective fields.

The Food Science and Human Nutrition Department offers programs leading to the degrees of Master of Science in Food Science and Human Nutrition, Doctor of Philosophy in Food Science, and Doctor of Philosophy in Nutritional Sciences (offered under the auspices of the Center for Nutritional Sciences). Minimum requirements for these degrees are located in the Graduate Degrees section of this catalog.

For more information please click the links to the program pages below, or see our website: http://fshn.ifas.ufl.edu.

DIE 6241: Advanced Medical Nutrition Therapy
DIE 6242: Advanced Medical Nutrition Therapy II
DIE 6516: Professional Development in Dietetics
DIE 6905: Problems in Dietetics
DIE 6938: Advanced Dietetic Seminar
DIE 6942: Dietetic Internship I
DIE 6944: Dietetic Internship II
DIE 6949: Dietetic Internship in Sports Nutrition
FOS 5126C: Psychophysical Aspects of Foods
FOS 5205: Current Issues in Food Safety and Sanitation
FOS 5225C: Principles in Food Microbiology
FOS 5437C: Food Product Development
FOS 5561C: Citrus Processing Technology
FOS 5645: Functional Foods and Nutraceuticals
FOS 5732: Current Issues in Food Regulations
FOS 6125C: Sensory Evaluation of Food
FOS 6215: Principles of Food Safety
FOS 6216: Food Safety Systems
FOS 6217: Food Safety, Sanitation, and Microbiology
FOS 6226C: Advanced Food Microbiology
FOS 6315C: Advanced Food Chemistry
FOS 6317C: Flavor Chemistry and Technology
FOS 6355C: Instrumental Analysis and Separations
FOS 6428C: Advanced Food Processing
FOS 6455C: Industrial Food Fermentations
FOS 6736: Food Regulations
FOS 6905: Problems in Food Science
FOS 6910: Supervised Research
FOS 6915: Research Planning
FOS 6936: Topics in Food Science
FOS 6938: Food Science Seminar
FOS 6940: Supervised Teaching
FOS 6971: Research for Master's Thesis
FOS 7979: Advanced Research
FOS 7980: Research for Doctoral Dissertation
HUN 5246: Current Issues in Dietary Supplements
HUN 5441: Metabolic Response to Enteral and Parenteral Nutrition
HUN 5447: Nutrition and Immunity
HUN 6245: Advanced Human Nutrition
HUN 6255: Clinical Nutrition
HUN 6301: Nutritional Aspects of Lipid Metabolism
HUN 6305: Nutritional Aspects of Carbohydrates
HUN 6321: Proteins and Amino Acids in Nutrition
HUN 6331: Vitamins in Human Nutrition
HUN 6356: Minerals in Nutrition
HUN 6812C: Analytical Techniques in Nutritional Biochemistry
HUN 6905: Problems in Nutritional Sciences
HUN 6910: Supervised Research
HUN 6936: Topics in Nutritional Sciences
HUN 6938: Nutritional Sciences Seminar
HUN 6939: Advanced Clinical Nutrition
HUN 6940: Supervised Teaching

HUN 6971: Research for Master's Thesis

HUN 7979: Advanced Research

HUN 7980: Research for Doctoral Dissertation

Horticultural Sciences Department

College of Agricultural and Life Sciences

Chairs: K.M. Folta (Interim Chair, Horticultural Sciences) and W. Mackay (Environmental Horticulture)

Graduate Coordinator: G. A. Moore (Horticultural Sciences) and L. Trenholm (Environmental Horticulture)

Complete faculty listing: Follow this link.

The Horticultural Sciences Department Graduate Program at the University of Florida has a wide array of opportunities for graduate study.

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HSE) and Horticultural Sciences (HS) departments and offers graduate programs leading to the Master of Science (thesis or nonthesis options) and the Doctor of Philosophy degrees. Members of the program's Graduate Faculty include department resident faculty and faculty at University of Florida Research and Education Centers located throughout Florida.

The Horticultural Sciences Department offers a combined bachelor's/master's degree program. Please contact the graduate coordinator for information.

For admission to the HOS graduate program, apply to either the HS or HSE departments, depending on your career/research interest. Details about the program and how to apply are listed on their website: [http://hos.ufl.edu](http://hos.ufl.edu).

ALS 5934: Graduate Professional Development Seminar

HOS 5085C: Principles of Postharvest Horticulture

HOS 5115C: Horticultural Plant Morphology and Identification

HOS 5242: Genetics & Breeding of Vegetable Crops

HOS 5306: Molecular Biology of Plant Hormones

HOS 5330: Postharvest Technologies for Horticultural Crops

HOS 5432: Advanced Nutritional Management of Ornamental Crops

HOS 5515C: Greenhouse and Nursery Operations

HOS 5516C: Advanced Production of Greenhouse and Nursery Crops

HOS 5555: Tropical Fruit Production and Research in Florida

HOS 5711: Phytochemicals in Food & Health

HOS 6201: Breeding Perennial Cultivars

HOS 6236: Molecular Marker Assisted Plant Breeding

HOS 6331: Postharvest Biology

HOS 6345: Environmental Physiology

HOS 6412: Nutrition of Horticultural Crops

HOS 6523: Research and Development in Turfgrass Science

HOS 6545: Advanced Citriculture I

HOS 6546: Advanced Citriculture II

HOS 6905: Problems in Horticultural Science
HOS 6910: Supervised Research
HOS 6931: Horticultural Science Seminar
HOS 6932: Special Topics
HOS 6934: Professional Seminar Preparation
HOS 6940: Supervised Teaching
HOS 6941: Practicum in Horticultural Science
HOS 6971: Research for Master’s Thesis
HOS 7979: Advanced Research
HOS 7980: Research for Doctoral Dissertation
ORH 5026C: Advanced Annual and Perennial Gardening
ORH 5086: Advanced Golf and Sports Turf Management
ORH 5282: Orchid Biology and Culture
ORH 5322C: Palm Biology and Culture
ORH 5817C: Advanced Florida Native Landscaping
ORH 7941: Doctor of Plant Medicine: Internship in Environmental Horticulture
PCB 5065: Advanced Genetics
PLS 5222C: Propagation of Horticultural Crops
PLS 5241C: Advanced Plant Micropropagation
PLS 5405: Advanced Composting Technology

Microbiology and Cell Science Department

Chair: E. Triplett.
Graduate Coordinator: Tony Romeo.

Graduate study is offered leading to the Master of Science and Doctor of Philosophy degrees in microbiology and cell science, with emphasis in one or more of the disciplines of biochemistry, cell biology, and microbiology.

Requirements for these degrees are provided in the Graduate Degrees section of this catalog and also at the Department webpage: http://microcell.ufl.edu/.

Instruction and guidance are collaborative among faculty in the Colleges of Agricultural and Life Sciences, Liberal Arts and Sciences, and Medicine.

Research spans broad areas in the cellular and molecular aspects of bacterial, plant, and animal life functions: Areas of research include microbial biochemistry, biotechnology; biomass conversion; genetic and metabolic regulation; environmental microbiology; cell biology; molecular biology; molecular genetics; genomics and bioinformatics; immunology; virology; parasitology; host-pathogen interactions; cellular ultrastructure.

Prerequisites for admission to graduate study, in addition to those of the Graduate School, are a broad educational background including mathematics, physics, and chemistry through organic, analytical, and physical chemistry; basic courses in biology, botany, and/or zoology; and at least one course in microbiology and biochemistry. An undergraduate major in biochemistry, physical or chemical science, engineering, or general biology may be an acceptable alternative to a degree in microbiology or cell science. Receipt of an advanced degree requires detailed knowledge in microbiology, biochemistry, and chemistry; undergraduate deficiencies may necessitate additional course work prior to entry into the graduate program.

In addition, the Microbiology and Cell Science Department also offers a combined B.S.M.S. program that allows qualified students to earn both the Bachelor's and Master's degrees within 12 credit hours of jointly counted course work. This program is considered a "4/1" because students may be awarded both degrees within a five-year period. For further information on this program, follow this link: http://microcell.ufl.edu/graduate-program/combined-degree-program/

MCB 5205: Microbiology of Human Pathogens
MCB 5252: Microbiology, Immunology, and Immunotherapeutics
MCB 5305L: Microbial Genetics and Biotechnology Laboratory
MCB 5408: Anaerobic Microbiology and Biotechnology
MCB 5458: Energy Transformation in Microorganisms
MCB 5505: General Virology
MCB 6317: Molecular Biology of Gene Expression
MCB 6318: Comparative Microbial Genomics
MCB 6355: Microbial/Host Defense
MCB 6409: Microbial Cell Structure and Function
MCB 6417: Microbial Metabolism and Energetics
MCB 6457: Metabolic Regulation
MCB 6465: Microbial Metabolic Engineering
MCB 6485: Advanced Techniques in Microbiology and Cell Science
MCB 6772: Advanced Topics in Cell Biology
MCB 6905: Experimental Microbiology
MCB 6910: Supervised Research
MCB 6930: Seminar
MCB 6937: Special Topics in Microbiology
MCB 6940: Supervised Teaching
MCB 6971: Research for Master's Thesis
MCB 7922: Journal Colloquy
MCB 7979: Advanced Research
MCB 7980: Research for Doctoral Dissertation

Plant Molecular and Cellular Biology Department

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agriculture, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology within the colleges of Agriculture and Life Sciences, Medicine, and Liberal Arts and Sciences.

PCB 5136L: Techniques in Microbial and Cell Biology
PCB 5530: Plant Molecular Biology and Genomics
PCB 6528: Plant Cell and Developmental Biology
PCB 6910: Supervised Research
PCB 6937: Special Topics in Plant Molecular and Cellular Biology
PCB 7922: Journal Colloquy in Plant Molecular and Cellular Biology

PHC 6764: Global Public Health and Development I

Plant Pathology Department

Chair: R. Loria
Graduate Coordinators: J. Jones

The Department of Plant Pathology offers graduate studies leading to the Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees. The Department also participates in the Doctor of Plant Medicine interdisciplinary professional degree.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

PLP 5005C: General Plant Pathology

PLP 5102: Theory and Practice of Plant Disease Control

PLP 5115C: Citrus Pathology

PLP 5155: Microbiological Control of Plant Diseases and Weeds

PLP 6223C: Viral Pathogens of Plants

PLP 6241C: Bacterial Plant Pathogens

PLP 6262C: Fungal Plant Pathogens

PLP 6291: Plant Disease Diagnosis

PLP 6303: Host-Parasite Interactions II

PLP 6404: Epidemiology of Plant Disease

PLP 6502: Host-Parasite Interactions I

PLP 6621C: Pop Genetics Microbes

PLP 6656C: Fungal Biology

PLP 6905: Problems in Plant Pathology

PLP 6910: Supervised Research

PLP 6921: Colloquium in Principles of Plant Pathology

PLP 6932: Seminar in Plant Pathology

PLP 6940: Supervised Teaching

PLP 6942: Professional Internship in Plant Disease Clinic

PLP 6971: Research for Master's Thesis

PLP 7946: Plant Pathology Internship

PLP 7979: Advanced Research

PLP 7980: Research for Doctoral Dissertation

School of Forest Resources and Conservation

College of Agricultural and Life Sciences

Director: T. L. White.
Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Joint program: Students may simultaneously earn a juris doctorate from the College of Law and a graduate degree (M.F.R.C., M.S., or Ph.D.) in Forest Resources and Conservation.

Combined programs: The School offers a combined bachelor's/master's degree program, which allows qualified students to earn both a bachelor's degree and a master's degree with a savings of 1 semester. Ph.D. students may pursue a co-major with the Department of Statistics (see below).

Concentration in geomatics: Students completing 15 or more credits with an SUR designation, as part of an SFRC graduate degree, may earn the concentration in geomatics. Geomatics is the collection, analysis, and management of spatial information and includes such fields as surveying, mapping, land tenure, cadastral systems, geographic information systems, and remote sensing.

Concentration in ecological restoration: This concentration is available to M.S. non-thesis students. To earn this concentration a student must complete Ecosystem Restoration Principles and Practice and four of the following courses: Ecological Distribution and Management of Invasive Plants, Ecology and Restoration of Invaded Ecosystems, Ecology and Restoration of Longleaf Pine Ecosystems, Watershed Restoration and Management, Natural Resource Policy and Administration, or Agroforestry in the Southeastern US. Ecological restoration seeks to return ecosystems to a close approximation of condition before a disturbance.

Statistics co-major: Ph.D. students with the School may elect the co-major offered jointly with the Department of Statistics. Students focusing on forest genetics, tree improvement, and other statistics-intensive aspects of natural resource management are potential candidates for this option.

Certificates: The School administers the Graduate Certificate in Agroforestry, and SFRC students regularly earn certificates in Geographic Information Systems and in Environmental Education and Communication. Requirements are described under Interdisciplinary Graduate Certificates and Concentrations in this catalog.

For additional information, please visit the School's web page at http://sfrc.ufl.edu.

For details on what terms courses will be offered, please visit http://sfrc.ufl.edu/gradcourses.html.

FAS 5203C: Biology of Fishes
FAS 5255C: Diseases of Warmwater Fish
FAS 5276C: Field Ecology of Aquatic Organisms
FAS 5335C: Applied Fisheries Statistics
FAS 5901: Scientific Thinking in Ecology
FAS 6154: Aquatic Invertebrate Ecological Physiology
FAS 6171: Applied Phycology
FAS 6256: Fish and Aquatic Invertebrate Histology
FAS 6272: Marine Ecological Processes
FAS 6337C: Fish Population Dynamics
FAS 6339C: Advanced Quantitative Fisheries Assessment
FAS 6355C: Fisheries Management
FAS 6905: Individual Study
FAS 6910: Supervised Research
FAS 6932: Special Topics in Fisheries and Aquatic Sciences
FAS 6933: Graduate Symposium
FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
FAS 6940: Supervised Teaching
FAS 6971: Research for Master's Thesis
FAS 7979: Advanced Research
FAS 7980: Research for Doctoral Dissertation

FNR 5072C: Environmental Education Program Development

FNR 5335: Agroforestry

FNR 5462: Spatial Models and Decision Analysis

FNR 5608: Research Planning

FNR 6564: Ecohydrology

FOR 5157: Ecosystem Restoration Principles and Practice

FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems

FOR 5161: Forest Productivity and Health

FOR 5435: Forest Information Systems

FOR 5615: Forest Conservation and Management Policies and Issues

FOR 5625: Forest Water Resources Management

FOR 5756: Non-Timber Forest Products

FOR 6005: Conservation Behavior

FOR 6154: Analysis of Forest Ecosystems

FOR 6156: Simulation Analysis of Forest Ecosystems

FOR 6164: Silviculture: Concepts and Application

FOR 6170: Tropical Forestry

FOR 6172C: Tropical Forestry Field Course

FOR 6215: Fire Paradigms

FOR 6310: Forest Genetics and Tree Improvement

FOR 6340: Physiology of Forest Trees

FOR 6345C: Plant Water Relations Techniques

FOR 6543: Natural Resource Economics and Valuation

FOR 6628: Community Forest Management

FOR 6665: Landscape Planning for Ecotourism

FOR 6905: Research Problems in Forest Resources and Conservation

FOR 6910: Supervised Research

FOR 6933: Seminar

FOR 6934: Topics in Forest Resources and Conservation

FOR 6940: Supervised Teaching

FOR 6971: Research for Master's Thesis

FOR 7979: Advanced Research
FOR 7980: Research for Doctoral Dissertation
GIS 6103: GIS Programming and Customization
GIS 6116: Geographic Information Systems Analysis
PCB 6555: Introduction to Quantitative Genetics
SUR 5365: Digital Mapping
SUR 5385: Remote Sensing Applications
SUR 5386: Image Processing for Remote Sensing
SUR 5391C: Geomatics: Spatial Foundations of GIS
SUR 5425: Cadastral Information Systems
SUR 5525: Least Squares Adjustment Computations
SUR 6375: Terrain Analysis and Mapping
SUR 6395: Topics in Geographic Information Systems
SUR 6427: Land Tenure and Administration
SUR 6535: GPS-INS Integration
SUR 6905: Special Problems in Geomatics
SUR 6934: Topics in Geomatics

School of Natural Resources and Environment

Graduate coordinator: T. Frazer

Complete faculty listing by department: Follow this link.

The University of Florida School of Natural Resources and Environment offers interdisciplinary coursework in the basic and applied science of ecology, the related social sciences, and sustainability, leading to M.S. and Ph.D. degrees. Choose from about 450 courses, 280 faculty advisors, and 44 participating departments. Research areas of ecology graduate students range across natural resource ecology, environmental policy and management, and sustainable development.

Environmental problems are fundamentally human problems and should be understood in terms of human motivations and actions in a biophysical context. Their solution requires holistic thinking about dynamic ecological systems and the social, economic, and political forces driving human action. To this end, the goal of the Interdisciplinary Ecology graduate program is to provide advanced training in ecosystem thinking and the main theories and methodologies of the biophysical and social sciences to foster integrative approaches to complex real-world problems. Interdisciplinary Ecology students are intensely interested in the sustainability problem, and they welcome the challenge of addressing it through more than one traditional discipline.

EVR 5322: Scientific Processes in Conservation and Development
EVR 5705: Natural Resources and Innovation Systems
EVR 6320: Sustainable Natural Resource Management
EVR 6933: Seminar
EVR 6934: Internship
EVR 6979: Nonthesis Master's Project
PCB 6971: Research for Master's Thesis
PCB 7979: Advanced Research
PCB 7980: Research for Doctoral Dissertation
Soil and Water Science Department

Chair: K. Ramesh Reddy
Graduate Coordinator: Max Teplitski

Complete faculty listing by department: Follow this link.

The Soil and Water Science Department offers Master of Science (thesis or professional non-thesis option) and Doctor of Philosophy degrees in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The Department also offers Master of Science (thesis or professional option) specialization in environmental science via distance education for place bound students (http://soils.ifas.ufl.edu/distance). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Soil and Water are vital resources in urban, agricultural, and natural ecosystems. The Soil and Water Science Department (SWSD) provides highly visible leadership in teaching, research, and extension/outreach programs as related to improving the productivity of agriculture with environmentally sound management practices, improving water quality, and protection and conservation of natural resources. Our department is one of the few in the nation that offers a comprehensive research and educational programs (molecular to landscape level) involving terrestrial, wetlands and aquatic ecosystems of the landscape. In addition to traditional on-campus educational programs, we use innovative e-technologies to offer educational programs to place-bound students. Our graduates and postdoctoral fellows are well placed at universities, state and federal agencies, and private industry.

The SWSD programs are designed to meet the changing needs of our clientele at state, national and international levels. To meet new challenges and explore new opportunities, the SWSD's research, teaching, and extension programs are focused in five areas, with broader implication to water quality, carbon sequestration, greenhouse gases, and climate change:

- Nutrient, Pesticide, and Waste Management
- Soil, Water, and Aquifer Remediation
- Carbon Dynamics and Ecosystem Services
- Landscape Analysis and Modeling
- Wetlands and Aquatic Ecosystems

The Department offers graduate level certificates in Biodegradation and Remediation, Sustainable Land Resource and Nutrient Management, Soil Ecosystem Services, and Wetland and Water Resource Management for both on-campus students and via distance education for place bound students (http://soils.ifas.ufl.edu/academics/degree-certificates.shtml).

An additional option offered by the Department is a combined bachelor's/master's degree program that permits a B.S in Soil and Water Science or Interdisciplinary Studies – Environmental Management in Agriculture and Natural Resources and M.S. Degree to be completed in five years. Contact the graduate coordinator for more information.

For more information, please see the program page below and our website: http://soils.ifas.ufl.edu.

ALS 5027: Reusable Learning Objects
ALS 5155: Global Agroecosystems
SWS 5050: Soils for Environmental Professionals
SWS 5050L: Soils for Environmental Professionals Laboratory
SWS 5115: Environmental Nutrient Management
SWS 5132: Tropical Soil Management
SWS 5182: Earth System Analysis
SWS 5208: Sustainable Agricultural and Urban Land Management
SWS 5224: Environmental Biogeochemistry
SWS 5234: Environmental Soil, Water, and Land Use
SWS 5235: South Florida Ecosystems
SWS 5246: Water Resource Sustainability
SWS 5247: Hydric Soils
SWS 5248: Wetlands and Water Quality
SWS 5305C: Soil Microbial Ecology
SWS 5308: Ecology of Waterborne Pathogens
SWS 5406: Soil and Water Chemistry
SWS 5424C: Soil Chemical Analysis
SWS 5551: Soils, Water, and Public Health
Wildlife Ecology and Conservation Department

The Department of Wildlife Ecology and Conservation offers Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees in wildlife ecology and conservation. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Program emphases include wildlife biology, ecology, and management; landscape ecology and restoration; human dimensions; tropical and international conservation; and conservation education. Graduate students should have appropriate undergraduate training in the biological, social, and physical sciences including physics, chemistry, and mathematics. Students with inadequate backgrounds may be required to take (without credit at the graduate level) remedial undergraduate courses pertinent to their fields of interest.

For more information, please see our website: http://www.wec.ufl.edu.
WS 5496: Research Design in Wildlife Ecology
WS 5521: Plant-Animal Interactions
WS 5555C: Conservation Biology
WS 6444: Advanced Wetlands Ecology
WS 6455: Wildlife Population Ecology
WS 6466: Wildlife Population Modeling
WS 6468C: Pattern and Process in Landscape Ecology
WS 6525: Environmental Interpretation
WS 6543: Wildlife and Agriculture
WS 6544: Administration in Natural Resources
WS 6575: Mammalian Carnivores: Conservation and Management Issues
WS 6578: Human Dimensions of Biological Conservation
WS 6905: Research Problems in Wildlife and Range Sciences
WS 6910: Supervised Research
WS 6933: Seminar
WS 6934: Topics in Wildlife and Range Sciences
WS 6940: Supervised Teaching
WS 6971: Research for Master’s Thesis
WS 7979: Advanced Research
WS 7980: Research for Doctoral Dissertation

CLAS Courses - filtered

College of Liberal Arts and Sciences

Interim Dean: David Richardson
Complete faculty listings: Follow this link
The College of Liberal Arts and Sciences constitutes the intellectual core of the university. Its principal mission is to lead the academic quest to understand our place in the universe, and to help shape our society and environment.

For more information, please see our website: http://www.clas.ufl.edu

AFS 5061: Africana Bibliography
AFS 6060: Research Problems in African Studies
AFS 6305: Development Theory and Practice Intro
AFS 6307: Foundations of Economics for Sustainable Development
AFS 6357: Anthropology of Humanitarian Intervention
AFS 6905: Individual Work in African Studies
Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link.

For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/.

Anthropology Department

Chair: S. deFrance
Graduate Coordinator: P. Collings
Complete faculty listing by department: Follow this link.

The Anthropology Department takes pride in maintaining a holistic perspective, bridging the four traditional fields that have composed the discipline: sociocultural, archaeological, biological, and linguistic anthropology. Both graduate students and faculty conduct research that cut across the four-fields, and extend anthropological investigations into other disciplines.

The graduate program is a mentoring program emphasizing the PhD degree. Students are mentored by faculty advisors, together with supervisory committees chosen by students with the advice of advisors. Graduate students are expected to be in residence to attend classes and seminars, and receive individualized training. Distance-education graduate degrees are not offered. Students formally report on their progress each year, and the progress of each graduate student is evaluated by the faculty in their primary field.

Students receiving graduate degrees are well-prepared intellectually and professionally for success in a wide variety of careers, and become leaders in developing the next generation of anthropologists. The department offers teaching experience and resources for presenting conference papers, submitting grant proposals, conducting fieldwork, and other activities appropriate to their professionalization. Graduate students are welcome to contribute to discussions in departmental meetings, and serve on some departmental committees.

ANG 5012: Fantastic Anthropology and Fringe Science
ANG 5085: Collection and Analysis of Visual Data in Anthropology
ANG 5126: Zooarcheology
ANG 5158: Florida Archeology
ANG 5162: Maya Archeoastronomy and Ethnoastronomy
ANG 5164: The Inca and Their Ancestors
ANG 5172: Historical Archeology
ANG 5194: Principles of Archeology
ANG 5255: Rural Peoples in the Modern World
ANG 5265: Methods in Ethnoecology
ANG 5266: Economic Anthropology
ANG 5303: Women and Development
ANG 5310: The North American Indian
ANG 5323: Peoples of Mexico and Central America
ANG 5327: Maya and Aztec Civilizations
ANG 5330: The Tribal Peoples of Lowland South America
ANG 5331: Peoples of the Andes
ANG 5336: The Peoples of Brazil
ANG 5341: Anthropology of the Caribbean
ANG 5352: Peoples of Africa
ANG 5354: Anthropology of Modern Africa
ANG 5395: Visual Anthropology
ANG 5420: Social Network Analysis in Cultural Anthropology
ANG 5426: Kinship and Social Organization
ANG 5464: Culture and Aging
ANG 5485: Research Design in Anthropology
ANG 5486: Computing for Anthropologists
ANG 5488: Geospatial Analysis in Cultural Anthropology
ANG 5525: Human Osteology and Osteometry
ANG 5531: Culture and Nutrition
ANG 5546: Seminar: Human Biology and Behavior
ANG 5620: Language and Culture
ANG 5621: Proseminar in Cultural and Linguistic Anthropology
ANG 5700: Applied Anthropology
ANG 5702: Anthropology and Development
ANG 5711: Culture and International Business
ANG 5743: Human Rights Missions in Forensic Anthropology
ANG 5744: International Forensic Fieldwork in Human Rights
ANG 5824L: Field Sessions in Archeology
ANG 6034: Seminar in Anthropological History and Theory
ANG 6086: Historical Ecology
ANG 6091: Research Strategies in Anthropology
ANG 6110: Archaeological Theory
ANG 6112: Critical Archaeology of Time
ANG 6113: Ideology and Symbolic Approaches in Archaeology
ANG 6120C: Environmental Archaeology
ANG 6122C: Archaeological Ceramics
ANG 6128: Lithic Technology
ANG 6146: Archaeology of Maritime Adaptations
ANG 6155: Southeastern U.S. Prehistory
ANG 6161: Problems in Caribbean Prehistory
ANG 6165: Problems in South American Archaeology
ANG 6183: Laboratory Training in Archeology
ANG 6185: Ethnoarchaeology
ANG 6186: Seminar in Archeology
ANG 6187: Experimental Archaeology
ANG 6190: Seminar in Contemporary Methods
ANG 6191: Archaeology of Death
ANG 6224: Painted Books of Ancient Mexico: Codices of Aztecs, Mixtecs, and Mayas
ANG 6241: Special Topics in Ecology of Religion
ANG 6267: Anthropology, Geographic Information System, and Human Ecosystems
ANG 6273: Legal Anthropology
ANG 6274: Principles of Political Anthropology
ANG 6286: Seminar in Contemporary Theory
ANG 6304: Seminar in Gender and International Development
ANG 6314: Peoples of the Arctic
ANG 6351: Peoples and Culture in Southern Africa
ANG 6360: Ethnicity in China
ANG 6366: Family, Gender, and Population in China
ANG 6407: Sickness and Power
ANG 6421: Landscape, Place, Dwelling
ANG 6452: Race and Racism in Anthropological Theory
ANG 6453: Human Rights in Cross-Cultural Perspective
ANG 6478: Evolution of Culture
ANG 6481: Research Methods in Cognitive Anthropology
ANG 6483L: Anthropology of Science
ANG 6511: Seminar in Physical Anthropology
ANG 6514: Human Origins
ANG 6524: Skeletal Mechanics in Biological Anthropology
ANG 6532: Molecular Genetics of Disease
ANG 6547: Human Adaptation
ANG 6552: Primate Behavior
ANG 6553: Primate Cognition
ANG 6555: Issues in Evolutionary Anthropology
ANG 6583: Primate Functional Morphology
ANG 6591L: Advanced Molecular Anthropology Laboratory

ANG 6592: Seminar in Molecular Anthropology

ANG 6593L: Biological Anthropology Laboratory

ANG 6701: Seminar on Applied Anthropology

ANG 6737: Medical Anthropology

ANG 6740: Advanced Techniques in Forensic Anthropology

ANG 6801: Ethnographic Field Methods

ANG 6905: Individual Work

ANG 6910: Supervised Research

ANG 6915: Research Projects in Social, Cultural, and Applied Anthropology

ANG 6917: Professions of Anthropology

ANG 6930: Special Topics in Anthropology

ANG 6940: Supervised Teaching

ANG 6945: Internship in Anthropology

ANG 6971: Research for Master’s Thesis

ANG 6979: Advanced Research

ANG 7980: Research for Doctoral Dissertation

Astronomy Department

Chair: C. Telesco
Graduate Coordinator: V. Sarajedini.

Complete faculty listing by department: Follow this link.

The University of Florida’s Astronomy Department is one of the largest in the country. Research is an integral part of the graduate program. Students have opportunities to work with faculty and staff on a broad range of astronomical problems using in-house, national and international, and ground- and space-based facilities. Support for graduate studies is available through fellowships, research assistantships, and teaching assistantships. For more information on the program, please follow the link below or visit our website.

AST 5113: Solar System Astrophysics I

AST 5114: Solar System Astrophysics II

AST 6112: Solar System Astrophysics

AST 6215: Stellar Structure and Function

AST 6245: Stellar Atmospheres and Radiative Processes

AST 6309: Galactic and Extragalactic Astronomy

AST 6336: Interstellar Matter

AST 6415: Observational Cosmology

AST 6416: Physical Cosmology

AST 6506: Celestial Mechanics
Biology Department

The Department of Biology offers two graduate programs: Botany and Zoology. Both programs offer graduate work leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

More information regarding these programs is available by following the links below and by visiting our departmental website: http://www.biology.ufl.edu.

BOT 5225C: Plant Anatomy
BOT 5305: Paleobotany
BOT 5505C: Intermediate Plant Physiology
BOT 5625: Plant Geography
BOT 5655C: Physiological Plant Ecology
BOT 5685C: Tropical Botany
BOT 5695C: Ecosystems of Florida
BOT 5725C: Taxonomy of Vascular Plants
BOT 6508C: Proteomics Theory and Practice
BOT 6516: Plant Metabolism
BOT 6566: Plant Growth and Development
BOT 6716C: Advanced Taxonomy
BOT 6726C: Principles of Systematic Biology
BOT 6905: Individual Studies in Botany
BOT 6910: Supervised Research
BOT 6927: Advances in Botany
BOT 6935: Special Topics
BOT 6936: Graduate Student Seminar
BOT 6940: Supervised Teaching
BOT 6943: Internship in College Teaching
BOT 6971: Research for Master’s Thesis
BOT 7979: Advanced Research
BOT 7980: Research for Doctoral Dissertation
PCB 5046C: Advanced Ecology
PCB 5307C: Limnology
PCB 5338: Principles of Ecosystem Ecology
PCB 5356: Tropical Ecology
PCB 5415C: Behavioral Ecology
PCB 6049: Seminar in Ecology
PCB 6377C: Physiological Ecology of Vertebrates
PCB 6447C: Community Ecology
PCB 6675C: Evolutionary Biogeography
PCB 6695: Seminar in Evolutionary Biology
ZOO 5115C: Vertebrate Paleontology
ZOO 5486C: Mammalogy
ZOO 6005: Integrative Principles of Zoology I
ZOO 6308: Dynamic Optimization Modeling in Behavioral and Evolutionary Ecology
ZOO 6406: Biology of Sea Turtles
ZOO 6456C: Ichthyology
ZOO 6542: Nutritional Ecology
ZOO 6905: Individual Studies
ZOO 6910: Supervised Research
ZOO 6920: Zoology Colloquium
ZOO 6931: Seminar in Marine Turtle Biology
ZOO 6939: Seminar in Animal Behavior
ZOO 6971: Research for Master’s Thesis
ZOO 7979: Advanced Research
ZOO 7980: Research for Doctoral Dissertation

Chemistry Department
The Department of Chemistry granted its first master's degree in 1909 and the first Ph.D. in 1930. Specializations in biochemistry, organic, physical, inorganic and analytical are offered with extensive interdisciplinary research opportunities (e.g., bio/nano-science, particle science, green chemistry, polymer chemistry, chemical physics, health related biochemistry, chemistry-engineering, and genomics).

The Department presently offers the Master of Science and Doctor of Philosophy degrees with a major in chemistry. The non-thesis Master of Science in Teaching degree is also offered with a major in chemistry.

CHM 5224: Basic Principles for Organic Chemistry
CHM 5235: Organic Spectroscopy
CHM 5275: The Organic Chemistry of Polymers
CHM 5305: Chemistry of Biological Molecules
CHM 5413L: Advanced Physical Chemistry Laboratory
CHM 5511: Physical Chemistry of Polymers
CHM 6036: Chemical Biology
CHM 6037: Chemical Biology and Biochemistry Seminar
CHM 6153: Electrochemical Processes
CHM 6154: Chemical Separations
CHM 6155: Spectrochemical Methods
CHM 6158C: Electronics and Instrumentation
CHM 6159: Mass Spectrometric Methods
CHM 6165: Chemometrics
CHM 6180: Special Topics in Analytical Chemistry
CHM 6190: Analytical Chemistry Seminar
CHM 6225: Advanced Principles of Organic Chemistry
CHM 6226: Advanced Synthetic Organic Chemistry
CHM 6227: Topics in Synthetic Organic Chemistry
CHM 6251: Organometallic Compounds
CHM 6271: The Chemistry of High Polymers
CHM 6301: Enzyme Mechanisms
CHM 6302: Chemistry and Biology of Nucleic Acids
CHM 6303: Methods in Computational Biochemistry and Structural Biology
CHM 6306: Special Topics in Biological Chemistry Mechanisms
CHM 6381: Special Topics in Organic Chemistry
CHM 6390: Organic Chemistry Seminar Presentation
CHM 6391: Organic Chemistry Seminar Discussion
CHM 6430: Chemical Thermodynamics
CHM 6461: Statistical Thermodynamics
CHM 6470: Chemical Bonding and Spectra I
CHM 6471: Chemical Bonding and Spectra II
CHM 6480: Elements of Quantum Chemistry
CHM 6490: Theory of Molecular Spectroscopy
CHM 6520: Chemical Physics
CHM 6580: Special Topics in Physical Chemistry
CHM 6586: Computational Chemistry
CHM 6590: Physical Chemistry Seminar
CHM 6620: Advanced Inorganic Chemistry I
CHM 6621: Advanced Inorganic Chemistry II
CHM 6626: Applications of Physical Methods in Inorganic Chemistry
CHM 6628: Chemistry of Solid Materials
CHM 6670: Inorganic Biochemistry
CHM 6680: Special Topics in Inorganic Chemistry
CHM 6690: Inorganic Chemistry Seminar
CHM 6720: Chemical Dynamics
CHM 6905: Individual Problems, Advanced
CHM 6910: Supervised Research
CHM 6934: Advanced Topics in Chemistry
CHM 6935: Chemistry Colloquium
CHM 6943: Internship in College Teaching
CHM 6971: Research for Master's Thesis
CHM 7485: Special Topics in Theory of Atomic and Molecular Structure
CHM 7979: Advanced Research
CHM 7980: Research for Doctoral Dissertation
CHS 5110L: Radiochemistry Laboratory

Classics Department

Chair: Victoria Pagán.
Graduate Coordinator: Jennifer Rea.

Complete faculty listing: Follow this link.

The department offers the following degrees and programs: the Doctor of Philosophy in classical studies; the Master of Arts degree in classical studies or Latin; the Master of Latin degree,
and the Master of Arts in Teaching degree in Latin. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Within the Ph.D. program are three tracks:

- Philology (prepares students for careers in colleges and universities)
- Classical civilization (available via distance course work)
- Latin and Roman studies (available via distance course work).

Requirements for the philology track of the doctoral degree include:

- 60 credit hours after the M.A. (or a total of 90 credit hours)
- Five additional seminars after the M.A. in classics at the 500 level or higher
- Three of the following seminars: GRE 6425, GRW 6105, LAT 6425, LNW 6105, and CLA 6805
- A reading knowledge of two modern languages, one of which must be German
- Reading lists in Greek and Roman authors
- Supervised experience in teaching Latin, Greek, or civilization courses is advised
- Successful completion of a series of qualifying examinations appropriate to the chosen specialization (Greek reading; Latin reading; classical Greek literature in its historical context; classical Latin literature in its historical context; special author/topic)
- An oral preliminary examination, dissertation, and final examination

The M.A. degree in classical studies is recommended for students who plan to continue on to the doctoral level. The M.A. degree in Latin is recommended for students who plan to pursue a career in secondary teaching. Both M.A. programs require 30 credit hours, including 6 credits of GRW 6971 or LNW 6971, a thesis, and final examination.

The Master of Latin degree is a non-thesis degree, designed for currently employed and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of classics, and enhance their professional qualifications through a program of summer course work and directed independent study and/or distance learning courses during the regular academic year. The Master of Arts in Teaching, a non-thesis degree, is offered with a program in Latin and is intended for students preparing to teach in community colleges or high schools.

CLA 6125: Augustan Age

CLA 6515: Roman Dynasty: Nero and the Julio-Claudians

CLA 6795: Greek and Roman Archeology

CLA 6805: The Classical Research Tradition

CLA 6885: Roman Law and Society

CLA 6895: Athenian Law and Society

CLA 6905: Individual Work

CLA 6930: Greece and the Near East

CLT 6295: Greek Drama in Translation

GRE 6425: Greek Prose Composition

GRE 6755: Epigraphy

GRK 6905: Individual Work in Modern Greek

GRW 6105: The Greek Tradition

GRW 6216: Greek Novel

GRW 6316: Greek Tragedy

GRW 6317: Ancient Greek Comedy

GRW 6345: Greek Lyric Poetry

GRW 6346: Pindar

GRW 6347: Homer

GRW 6386: Greek Historians

GRW 6506: Plato

GRW 6705: Attic Orators
GRW 6905: Individual Work
GRW 6930: Special Topics in Greek Literature
GRW 6931: Comparative Study of Greek and Latin Literature
GRW 6971: Research for Master's Thesis
GRW 7979: Advanced Research
GRW 7980: Research for Doctoral Dissertation
LAT 6425: Latin Prose Composition
LNW 5325: Roman Elegiac Poetry
LNW 5655: Roman Poets: Horace
LNW 5665: Roman Poets: Vergil
LNW 5675: Roman Poets: Ovid
LNW 5931: Comparative Study of Latin and Greek Literature
LNW 6105: The Roman Tradition
LNW 6225: The Ancient Roman Novel
LNW 6335: Roman Oratory and Rhetoric
LNW 6365: Studies in Roman Satire
LNW 6385: Roman Historians
LNW 6495: Late Latin Literature
LNW 6905: Individual Work
LNW 6933: Special Topics in Latin Literature
LNW 6935: Proseminar in Classics
LNW 6940: Supervised Teaching
LNW 6971: Research for Master's Thesis
LNW 7979: Advanced Research
LNW 7980: Research for Doctoral Dissertation

Computer and Information Science and Engineering Department

College of Liberal Arts and Sciences

Chair: Paul Gader
Graduate Coordinator: Jih-kwon Peir.

Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, Engineer, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.
The CISE Department has six broad areas of specialization:

- **Computer systems**: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents, with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below "B." Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A maximum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: [http://www.cise.ufl.edu](http://www.cise.ufl.edu)

### Sociology and Criminology & Law Department

Chair: Barbara Zsembik  
Graduate Coordinator: Barbara Zsembik

Complete faculty listing by department: [Follow this link](http://www.cise.ufl.edu).

The Department of Sociology and Criminology & Law offers several programs of graduate study leading to the Ph.D. in Sociology, the Ph.D. in Criminology, Law and Society, the MA in Sociology, the MA in Criminology, Law and Society, and a Joint MA in Criminology/JD degree. The department also partners with the School of Natural Resources and Environment Department to offer the Ph.D. or MA in Interdisciplinary Ecology. Advanced undergraduate majors may complete a combined BA/MA degree in Sociology or a combined BA/MA degree in Criminology, Law and Society.

**CCJ 5934: Contemporary Issues in Criminology and Law**

**CCJ 6063: Communities and Crime**

**CCJ 6285: Criminal Justice Process**

**CCJ 6619: Crime and the Life Course**

**CCJ 6643: White Collar Crime**

**CCJ 6658: Drugs, Crime, and Policy**

**CCJ 6705: Research Methods in Crime, Law, and Justice**

**CCJ 6708: Research Issues in Crime and Deviance**

**CCJ 6712: Evaluation Research**
CCJ 6905: Independent Study

CCJ 6910: Supervised Research

CCJ 6920: Seminar in Criminological Theory

CCJ 6936: Proseminar in Crime, Law, and Justice

CCJ 6971: Research for Master's Thesis

CCJ 7742: Research Methods in Crime, Law, and Justice II

CCJ 7921: Professional Development in Criminology, Law, and Society

CCJ 7979: Advanced Research

CCJ 7980: Research for Doctoral Dissertation

CJC 6120: Corrections and Public Policy

CJL 6039: Law and Society

CJL 6089: Humanitarian Law

CJL 6090: Law and Social Science

CJL 6091: Anthropology of Law

CJL 6095: Human Rights in Cultural Context

SYA 6018: Classical Social Theories

SYA 6126: Contemporary Sociological Theory

SYA 6305: Methods in Social Research I

SYA 6306: Methods in Social Research II

SYA 6315: Qualitative Research Methods

SYA 6327: Research Problems in Deviance

SYA 6407: Quantitative Research Methods

SYA 6905: Individual Work

SYA 6910: Supervised Research

SYA 6942: Applied Social Research Project

SYA 6971: Research for Master's Thesis

SYA 7933: Special Study in Sociology

SYA 7979: Advanced Research

SYA 7980: Research for Doctoral Dissertation

SYD 6436: Metropolitan Growth and Development

SYD 6517: Seminar in Environment and Society

SYD 6518: Core Issues in Environmental and Resource Sociology
SYD 6706: Racial and Ethnic Relations
SYD 6707: Black and White Americans: Sociological Perspectives
SYD 6806: Gender and Society
SYD 6807: Sociology of Gender
SYD 6825: Men and Masculinities
SYD 7808: Reproduction and Gender
SYO 6107: American Families
SYO 6126: Family Theories
SYO 6175: Topics in Family Research
SYO 6407: Health Disparities
SYO 6427: Health and Aging
SYO 6535: Social Inequality
SYP 6115: Seminar in Symbolic Interaction
SYP 6517: Theories of Crime and Deviance
SYP 6545: Sociology of Law
SYP 6735: Sociology of Aging and the Life Course
SYP 6736: Sociology of the Aged
SYP 6745: Aging and End-of-Life Issues

English Department

Chair: K. Kidd
Graduate Coordinator: S. I. Dobrin

Complete faculty listing by department: Follow this link.

The Department of English offers the Master of Arts degree (thesis and nonthesis options) and the Doctor of Philosophy degree in English, along with the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog. For more information about our programs, please follow the hyperlinks below or visit our website: http://www.english.ufl.edu/programs.html.

AML 6017: Studies in American Literature Before 1900
AML 6027: Studies in 20th-Century American Literature
CRW 6130: Fiction Writing
CRW 6166: Studies in Literary Form
CRW 6331: Verse Writing
CRW 6906: Individual Work
ENC 5236: Advanced Business Writing for Accounting
ENC 6428: Digital English
ENG 6016: Psychological Approaches to Literature
ENG 6075: Literary Theory: Issues
ENG 6076: Literary Theory: Theorists
ENG 6077: Literary Theory: Forms
ENG 6137: The Language of Film
ENG 6138: Studies in the Movies
ENG 6906: Individual Work
ENG 6910: Supervised Research
ENG 6932: Film and Video Production
ENG 6971: Research for Master’s Thesis
ENG 7939: Seminar in Variable Topics
ENG 7979: Advanced Research
ENG 7980: Research for Doctoral Dissertation
ENL 6206: Studies in Old English
ENL 6216: Studies in Middle English
ENL 6226: Studies in Renaissance Literature
ENL 6236: Studies in Restoration and 18th-Century Literature
ENL 6246: Studies in Romantic Literature
ENL 6256: Studies in Victorian Literature
ENL 6276: Studies in 20th-Century British Literature
LAE 6940: Supervised Teaching
LAE 6947: Writing Theories & Practices
LIT 5335: Approaches to Children's and Adolescent Literature
LIT 6037: Studies in Verse
LIT 6047: Studies in Drama
LIT 6236: Postcolonial Studies
LIT 6308: Studies in Comics and Animation
LIT 6309: Communications and Popular Culture
LIT 6327: Studies in Folklore
LIT 6357: African-Amer. or African Diaspora Lit./Cultures
LIT 6358: Theoretical Approaches to Black Cultural Studies
LIT 6855: Issues in Cultural Studies
LIT 6856: Cultural Studies: Interventions
The focus of the Department is in human-environment interactions, with "environment" interpreted very broadly. The Department provides four main areas of specialization for graduate research: economic and cultural geography; resource management and land use and land cover change; medical geography; and physical geography. Economic and cultural geography concerns such topics as spatial economic theory and housing and care of the elderly. Resource management and land-use and land-cover change focus on agricultural change and resource conservation and development in the tropics and subtropics, and rural and urban land use and land cover change in tropical and temperate regions. Africa and Latin America are the primary areas of regional emphasis outside of the U.S. Physical geography in the Department concentrates on climatology, fluvial geomorphology, and hydrology. Medical geography studies the geographic aspects of human health including disease ecology and transmission and healthcare issues. The Department's extensive geographic information system, remote sensing, and computer cartography teaching and research facilities contribute to and support all of the areas of research. Faculty from the Department are also major participants in the Emerging Pathogens Institute, Florida Climate Institute, Land Use and Environmental Change Institute (L.U.E.C.I.), and the Water Institute. Prospective students should examine the research interests of the Graduate Faculty to obtain a more detailed sense of the Department's specialties (see the departmental website: www.geog.ufl.edu).

To ensure the incorporation of relevant interdisciplinary perspectives in each student's program, the Department maintains close ties with other departments in Liberal Arts and Sciences, and with programs in African studies, Latin American studies, the School of Natural Resources and Environment, the Institute on Aging, urban and regional planning, tropical agriculture, tropical ecology, water resources, the Warrington College of Business Administration, the College of Agricultural and Life Sciences, College of Public Health and Health Professions, and the Hydrological Sciences Academic Cluster. Certificates in certain of these fields may be obtained in addition to graduate degrees in geography. Geography administers the Graduate Certificate in Applied Atmospheric Sciences.

A graduate student should preferably have an undergraduate major in geography, but applicants with degrees in one of the social or physical sciences are accepted into the Department's graduate program. Deficiencies in undergraduate work in geography must be corrected concurrently with registration in graduate level courses. All students in the graduate program are required to take courses in contemporary geographic thought and geographic research skills.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

GEA 6419: Seminar: South America

GEA 6466: Seminar on Geography of Amazonia

GEA 6468: Resource Utilization and Conservation in Latin America

GEO 5305: Environmental Biogeography

GEO 5346: Natural Hazards

GEO 5556: Geography of Innovation and Technological Change

GEO 5605: Advanced Urban Geography

GEO 5809: Geography of World Agriculture

GEO 5905: Individual Study: Directed Reading

GEO 5920: Geography Colloquium

GEO 5945C: Field Course in Geography

GEO 6118: Contemporary Geographic Thought and Research

GEO 6119: Proposal Writing in Geography

GEO 6160: Introduction to Quantitative Methods for Geographers

GEO 6161: Intermediate Quantitative Methods for Geographers

GEO 6166: Advanced Quantitative Methods for Spatial Analysis

GEO 6255: Climatology
GEO 6282: Fluvial Morphology
GEO 6348: Floods Seminar
GEO 6375: Land Change Science Seminar
GEO 6429: Seminar: Cultural Geography
GEO 6435: Seminar in Population
GEO 6451: Medical Geography
GEO 6495: Environment and Behavior
GEO 6905: Individual Work
GEO 6921: How to Survive and Thrive in Academia
GEO 6931: Seminar in Cultural and Political Ecology
GEO 6938: Selected Topics in Geography
GEO 6971: Research for Master’s Thesis
GEO 7979: Advanced Research
GEO 7980: Research for Doctoral Dissertation
GEY 6341: Shelter and Care Options for U.S. Elderly
GIS 5008C: Maps and Graphs
GIS 5009C: Advanced Cartography
GIS 5028C: Advanced Aerial Photo Interpretation
GIS 5038C: Remote Sensing
GIS 5107C: Geographic Information Systems in Research
GIS 5306: Geographic Information Systems Applications in Environmental Systems
GIS 5540: Business Geography and New Real Estate Market Analysis
GIS 6104: Spatial Networks
GIS 6425C: GIS Models for Public Health
MET 5504: Weather and Forecasting
MET 6530: Hurricanes
MET 6565: Seminar in Atmospheric Teleconnections
MET 6752: Atmospheric Data Analysis

Geological Sciences Department

Chair: P. A. Mueller.
Graduate Coordinator: J. M. Jaeger.
Complete faculty listing Follow this link.

The Department of Geological Sciences is composed of a group of internationally recognized faculty, graduate students, and dedicated support staff. Faculty and students in the Department of Geological Sciences are involved in exciting and groundbreaking research projects throughout the world and in Florida. The Department houses world-class analytical and computing facilities.
for research and teaching.

The Department has identified six primary areas of emphasis in its research and teaching programs: environmental geology and hydrology, paleoclimatology, tectonophysics, geochemistry and mineralogy/petrology, marine and coastal geology, and paleomagnetism. For more detailed information on current departmental activities, faculty, and research centers, see [http://web.geology.ufl.edu](http://web.geology.ufl.edu). The Department has collaborative, interdisciplinary programs of study and research with the Florida Museum of Natural History, the Center for Wetlands Research, the Land Use and Environmental Change Institute (L.U.E.C.I.), and the hydrological sciences cluster.

ESC 5211: Current Topics in Earth Science for Teachers

GLY 5156: Geologic Evolution of North America

GLY 5245: Hydrogeochemistry

GLY 5246: Geochemistry

GLY 5247: Surface and Ground Water Interactions

GLY 5248: Physical Geochemistry

GLY 5255: Organic Geochemistry and Geobiology

GLY 5328: Advanced Igneous Petrology

GLY 5455: Introduction to Geophysics and Tectonics

GLY 5466: Seismology and Earth Structure

GLY 5468: Terrestrial Gravity and Magnetism

GLY 5476: Environmental Geophysics

GLY 5558C: Sedimentology

GLY 5576: Continental Margin Stratigraphy

GLY 5705: Geomorphology

GLY 5736: Marine Geology

GLY 5786L: Topics in Field Geology

GLY 5827: Ground Water Geology

GLY 6075: Global Climate Change: Past, Present, and Future

GLY 6268C: Isotope Geology

GLY 6297: Topics in Geochemistry

GLY 6425: Tectonics

GLY 6519: Stratigraphy and Timescales

GLY 6620C: Micropaleontology

GLY 6695: Topics in Paleoclimatology

GLY 6826: Hydrogeologic Modeling

GLY 6862: Numerical Methods in Earth Sciences

GLY 6905: Individual Work

GLY 6931: Seminar
History Department

College of Liberal Arts and Sciences

Chair: Sean P. Adams
Graduate Coordinator: Elizabeth Dale

The Department of History offers the following graduate degrees: Master of Arts with fields of specialization in African, Asian, European, Latin American, and United States history, and the Doctor of Philosophy with fields of specialization in African, European, Latin American, and United States history. In addition to materials required by the Graduate School for admission, applicants must send directly to the History Department the following evidence of aptitude and interest: Three recommendations, from persons competent to evaluate your potential for graduate work; A 3- to 5-page essay identifying your career goals and particular areas of interest; a sample of your written work in history. Interested students should consult the department web page for more information.

AFH 5297: History of African Agriculture
AFH 5348: History of West Africa
AFH 5458: Southern Africa
AFH 5934: Topics in African History
AFH 6259: Seminar in Modern Africa
AFH 6805: Theories and Methods of African History
AFH 6934: Africa
AFH 6936: Readings in African History
AMH 5405: The South to 1860
AMH 5905: Special Studies
AMH 5930: Topics in United States History
AMH 6198: Early American Society
AMH 6199: Nineteenth Century America
AMH 6290: Modern America
AMH 6356: Research in U.S. History
AMH 6406: Readings in Southern History, 1607-1865
AMH 6465: Seminar in U.S. Urban History
AMH 6506: Seminar in American Labor History
AMH 6516: Seminar in American Foreign Relations and Expansion
AMH 6557: Seminar in Constitutional or Legal History of the United States
ASH 5388: Topics in East Asian History
EUH 5195: The Archaeology of the Middle Ages
EUH 5546: Topics in British History
EUH 5934: Topics in European History
EUH 6126: Readings in Medieval History
EUH 6174: Conversion in the Middle Ages
EUH 6175: Ethnicity in the Middle Ages
EUH 6176: Villages and Peasants in the Middle Ages
EUH 6177: Economy and Society in Late Antiquity and the Early Middle Ages
EUH 6213: Europe, 1500-1763
EUH 6289: Readings, Modern Europe
EUH 6469: Modern German History
EUH 6935: Readings, Early Modern Europe
EUH 6937: Readings in Mediterranean History
HIS 5450: Slavery in the New World: Comparative Perspectives
HIS 5484: Science and the Enlightenment
HIS 5485: Special Studies in the History of Science
HIS 6060: Historical Method
HIS 6061: Introduction to Historiography
HIS 6416: Problems in Comparative Legal History
HIS 6445: Postcolonial Theories
HIS 6469: Topics in Historiography of History of Science
HIS 6478: Topics in the Scientific Revolution
HIS 6480: Pre-Newtonian Sciences
HIS 6488: Readings in the History of Science
HIS 6905: Individual Study
HIS 6910: Supervised Research
HIS 6940: Supervised Teaching
HIS 6943: Internship in College Teaching
HIS 6957: Nonthesis Project in History
HIS 6971: Research for Master's Thesis
HIS 7979: Advanced Research
HIS 7980: Research for Doctoral Dissertation
LAH 5438: Modern Mexico

LAH 5475: Caribbean, Nineteenth and Twentieth Centuries

LAH 5476: Caribbean History to 1800: Slavery, Colonization, and International Conflict

LAH 5527: Andean Nations

LAH 5607: History of Amazonia

LAH 5637: Brazil Since 1750

LAH 5933: Topics in Caribbean History

LAH 5934: Topics in Latin American History

LAH 6934: Seminar in Colonial Spanish America

LAH 6936: Seminar in History of Brazil

LAH 6938: Seminar in Modern Spanish America

Department of Languages, Literatures and Cultures

Complete faculty listing by department: Follow this link.

FLE 6385: Foreign Languages Teaching Methods

FRE 6060: Beginning French for Graduate Students I

FRE 6061: Beginning French for Graduate Students II

FRE 6466: Advanced Translation and Stylistics

FRE 6735: Special Studies in French Linguistics

FRE 6736: The French language in the Americas

FRE 6785: French Phonetics and Phonology

FRE 6827: Sociolinguistics of French

FRE 6845: History of the French Language

FRE 6855: Structure of French

FRE 6856: French in the 21st Century

FRE 6940: Supervised Teaching

FRE 6943: Romance Language Teaching Methods

FRE 6945: Practicum in Advanced College Teaching

FRE 6956: Overseas Studies in French

FRW 6217: Seventeenth-Century French Prose

FRW 6276: Readings in Eighteenth-Century Literature

FRW 6288: Twentieth-Century French Novel

FRW 6315: Seventeenth-Century French Drama
FRW 6328: Twentieth-Century French Theater
FRW 6346: French Poetry of the Renaissance
FRW 6355: Modern French Poetry
FRW 6396: French Cinema
FRW 6416: Later French Medieval Literature
FRW 6536: The Romantic Period
FRW 6556: French Realism and Naturalism
FRW 6715: The Philosophic Movement
FRW 6780: Studies in Francophone Literature and Culture (Excluding the Caribbean and Sub-Saharan Africa)
FRW 6805: Introduction to Graduate Study and Research
FRW 6825: French Critical Theory
FRW 6900: Special Study in French Literature
FRW 6905: Individual Work
FRW 6910: Supervised Research
FRW 6938: Seminar in French Literature
FRW 6971: Research for Master's Thesis
FRW 7979: Advanced Research
FRW 7980: Research for Doctoral Dissertation
GER 6060: Beginning German for Graduate Students I
GER 6061: Beginning German for Graduate Students II
GER 6505: German Culture
GER 6940: Supervised Teaching
GET 6295: Weimar Cinema
GET 6299: New German Cinema and Its Legacy
GEW 6205: Foundations of Literary Study
GEW 6266: History of the German Novel
GEW 6305: Studies in German Drama and Theater
GEW 6405: Medieval and Renaissance Literature
GEW 6425: From Luther to Lessing: Early Modern German Literature
GEW 6535: German Classical and Romantic Literature
GEW 6558: Young Germany, Biedermeier, Realism, and Naturalism
GEW 6725: Culture and Society in the Weimar Republic
GEW 6735: Modern German Literature
GEW 6736: Contemporary German Literature
GEW 6745: Literature and Culture in the Third Reich
GEW 6826: German Literary Theory
GEW 6900: Seminar in Germanic Languages and Literatures
GEW 6901: Special Study in Germanic Languages and Literatures
GEW 6905: Independent Study
GEW 6910: Supervised Research
GEW 6971: Research for Master's Thesis
GEW 7979: Advanced Research
GEW 7980: Research for Doctoral Dissertation

Latin American Studies Department

Director: C. D. Deere.
Graduate Coordinator: R. F. Brown.

Complete faculty listing by department: Follow this link.

The Center for Latin American Studies offers the following graduate programs:

- Latin American Studies
- Sustainable Development Practice

FOT 6940: Translation Studies Practicum

LAS 6008: Ecological Principles

LAS 6220: Issues and Perspectives in Latin American Studies
LAS 6290: Tropical Conservation and Development
LAS 6291: Conservation and Development Skills
LAS 6292: Tropical Conservation and Development Research Methods
LAS 6293: Design and Methods of Research in Latin American Studies
LAS 6295: Latin American Business Environment
LAS 6296: Latin American Business Topics
LAS 6905: Individual Work
LAS 6938: Seminar in Modern Latin American Studies
LAS 6940: Tropical Conservation and Development Practicum
LAS 6943: Development Theory and Practice in Latin America
LAS 6971: Research for Master's Thesis

Linguistics Department

Chair: F. McLaughin
Graduate Coordinator: E. Potsdam

Complete faculty listing by department: Follow this link.
The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in:

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

Requirements for these degrees are given in the Graduate Degrees section of this catalog. For detailed information on the program, please visit the link below. For further information on the program, including financial aid, please visit [http://lin.ufl.edu](http://lin.ufl.edu).

**EAP 5835: Academic Spoken English I**

**EAP 5836: Academic Spoken English II**

**EAP 5837: Academic Spoken English Tutorial**

**EAP 5845: Academic Writing**

**EAP 5846: Research and Technical Writing**

**EAP 5937: Special Topics in Academic Spoken English**

**LIN 5657: Gender and Language**

**LIN 5741: Applied English Grammar**

**LIN 6084: Introduction to Graduate Research**

**LIN 6165: Field Methods**

**LIN 6208: Phonetics for Linguists**

**LIN 6226: Advanced Phonetics**

**LIN 6323: Phonology**

**LIN 6341: Issues in Phonology**

**LIN 6402: Morphology**

**LIN 6410: Issues in Morphology**

**LIN 6501: Syntax**

**LIN 6520: Issues in Syntax**

**LIN 6571: Structure of Specific Language**

**LIN 6601: Sociolinguistics**

**LIN 6622: Bilingualism**

**LIN 6707: Psycholinguistics**

**LIN 6708C: Methods in Psycholinguistics**

**LIN 6720: Second Language Acquisition**

**LIN 6773: Topics in Computational Linguistics**

**LIN 6796: Cognitive Neuroscience of Language**

**LIN 6804: Semantics I**
LIN 6826: Introduction to Formal Pragmatics
LIN 6856: Semantics II
LIN 6905: Individual Study
LIN 6910: Supervised Research
LIN 6932: Special Topics
LIN 6940: Supervised Teaching
LIN 6971: Research for Master's Thesis
LIN 7118: History of Linguistics
LIN 7641: Seminar in Language Variation
LIN 7725: Topics in Second Language Acquisition
LIN 7885: Discourse Analysis and Pragmatics
LIN 7979: Advanced Research
LIN 7980: Research for Doctoral Dissertation
TSL 6171: TESL I: Materials and Techniques
TSL 6172: TESL II: Materials for Special Purposes

Mathematics Department

Chair: D. Ceccher
Graduate Coordinator: J. A. Larson

Complete faculty listing: Follow this link.

The Department of Mathematics offers the degrees of Doctor of Philosophy, Master of Science and Master of Arts, and the Master of Arts in Teaching and Master of Science in Teaching, each with a major in mathematics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

Interdisciplinary Programs — The Department offers a co-major program in conjunction with the Statistics Department leading to the Doctor of Philosophy degree in mathematics and statistics. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Statistics, Industrial and Systems Engineering, and Finance, Insurance, and Real Estate Departments.

Combined Program — The Department has an accelerated bachelor's/master's program designed for superior undergraduate students who have the ability to pursue such a plan of study leading to the Master of Science or Master of Arts degree. The main feature of the program is that up to 12 semester hours of approved graduate level mathematics courses may be used as dual credit for both the undergraduate and the graduate degree. All other requirements for both the bachelor's degree and the master's degree must be met. For admission requirements for this program, see the undergraduate coordinator.

There are opportunities for concentrated study in a number of specific areas of pure and applied mathematics at both the master's and doctoral levels. The faculty directs studies and research in algebra, number theory, analysis, geometry, topology, logic, differential equations, dynamical systems, probability theory, numerical analysis, numerical optimization, approximation theory, combinatorial analysis, graph theory, computer applications, biomathematics, mathematical physics, inverse problems, and medical imaging. In addition to the requirements of the Graduate School, the minimum prerequisite for admission to the program of graduate studies in mathematics is the completion, with an average grade of B or better, of at least 24 credits of undergraduate mathematics, including a full year of calculus and three semesters of appropriate work beyond the calculus. The most appropriate courses for this purpose are advanced calculus, linear algebra and abstract algebra. Students lacking part of the requirements will be required to make up the deficiency early in their graduate work. Prerequisites to individual courses should be determined before registration by consultation with the instructor concerned. Some of the courses listed are offered only as needed. Since times of offering courses are estimated a year in advance, certain changes may be made if needs are known by the Department. The courses MAA 5228, MAA 5229, MAS 5311, and MAS 5312 are required for all advanced degree programs in mathematics. The requirements for the master's degree nonthesis option include a minimum of 32 semester hours of course work. Students pursuing the master's degree in mathematics must pass two comprehensive written examinations, one in algebra and one in analysis. Students pursuing the master's degree with a specialization in applied mathematics have two options: the examination option requires passage of the algebra and analysis examinations; the thesis option requires instead the preparation and oral defense of a thesis on original research conducted under the supervision of a faculty advisor. Students pursuing the Master of Arts in Teaching or the Master of Science in Teaching degree must prepare a teaching portfolio and pass an oral examination. Each of these programs normally requires two years for completion. The requirements for a doctoral degree include 36 hours of 6000-level course work in mathematics; no hours of teaching, colloquium, dissertation, or individual work will count toward this requirement. To become a candidate for the doctoral degree, the student must pass a comprehensive preliminary examination with written and oral components administered by the Department. The doctoral student must also pass a reading knowledge examination in one of the following foreign languages: French, German, or Russian. The dissertation is an important requirement for the doctoral degree in mathematics. The topic for the dissertation may be chosen from a number of areas of current research in pure and applied mathematics. Every graduate student is expected to attend the regular colloquium. Details concerning all requirements for graduate degrees in mathematics may be obtained by writing the Mathematics Department Graduate Selection Committee or consulting the Department website, http://www.math.ufl.edu.

MAA 5104: Advanced Calculus for Engineers and Physical Scientists I
MAA 5105: Advanced Calculus for Engineers and Physical Scientists II
MAA 5228: Modern Analysis I
MAA 5229: Modern Analysis II
MAA 5404: Introduction to Complex Variables for Engineers and Physical Scientists
MAA 6236: Mathematical Analysis for Statisticians
MAA 6406: Complex Analysis I
MAA 6407: Complex Analysis II
MAA 6616: Analysis I
MAA 6617: Analysis II
MAA 7526: Advanced Topics in Functional Analysis I
MAA 7527: Advanced Topics in Functional Analysis II
MAD 6206: Combinatorial Theory I
MAD 6207: Combinatorial Theory II
MAD 6406: Numerical Linear Algebra
MAD 6407: Numerical Analysis
MAD 7396: Topics in Combinatorial Theory I
MAD 7397: Topics in Combinatorial Theory II
MAE 6940: Supervised Teaching
MAE 6943: Internship in College Teaching
MAP 5304: Intermediate Differential Equations for Engineers and Physical Scientists
MAP 5345: Introduction to Partial Differential Equations
MAP 5489: Modeling in Mathematical Biology
MAP 6208: Numerical Optimization
MAP 6327: Applied Differential Equations I
MAP 6356: Partial Differential Equations I
MAP 6357: Partial Differential Equations II
MAP 6375: Numerical Partial Differential Equations
MAP 6376: Finite Element Method
MAP 6467: Stochastic Differential Equations and Filtering Theory I
MAP 6468: Stochastic Differential Equations and Filtering Theory II
MAP 6472: Probability and Potential Theory I
MAP 6473: Probability and Potential Theory II
MAP 6487: Biomathematics Seminar I
MAP 6488: Biomathematics Seminar II
MAP 6505: Mathematical Methods of Physics and Engineering
MAP 6506: Mathematical Methods of Physics and Engineering II
MAP 6941: Internship in Applied Mathematics
MAP 7436: Seminar in Applied Mathematics I
MAP 7437: Seminar in Applied Mathematics II
MAS 5311: Introductory Algebra I
MAS 5312: Introductory Algebra II
MAS 6331: Algebra I
MAS 6332: Algebra II
MAS 7215: Theory of Numbers I
MAS 7216: Theory of Numbers II
MAS 7396: Advanced Topics in Algebra I
MAS 7397: Topics in Algebra II
MAT 6905: Individual Work
MAT 6910: Supervised Research
MAT 6932: Special Topics in Mathematics
MAT 6971: Research for Master's Thesis
MAT 7979: Advanced Research
MAT 7980: Research for Doctoral Dissertation
MHF 5107: Introduction to Set Theory
MHF 5207: Foundations of Mathematics
MHF 6306: Mathematical Logic I
MHF 6307: Mathematical Logic II
MTG 5316: Introduction to Topology I
MTG 5317: Introduction to Topology II
MTG 5411: Introduction to Fractal Geometry
MTG 5412: Introduction to Dynamical Systems and Chaos
MTG 6256: Differential Geometry I
MTG 6257: Differential Geometry II
MTG 6346: Topology I
MTG 6347: Topology II
MTG 6401: Ergodic Theory and Dynamical Systems I
MTG 6402: Ergodic Theory and Dynamical Systems II
Philosophy Department

Chair: G. Witmer.
Graduate Coordinator: C. Liu.

Complete faculty listing by department: [Follow this link](#).

The Department offers the Master of Arts and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog.

Admission to the program requires a bachelor's degree in philosophy or sufficient course work in philosophy, as determined by the department. Applicants are evaluated on the basis of academic achievement, GRE scores, three letters of recommendation, a statement of purpose, and a sample essay in philosophy. Students may be admitted as for a terminal M.A. degree or for the Ph.D. Program.

The M.A. degree requires two years (36 hours) of course work. All graduate students take foundational courses in their first four semesters: the graduate Proseminar (PHI 5935), Graduate Logic (PHI 5135), a course in Ancient Philosophy (PHP 5005 or PHP 5015), a course in Modern Philosophy (PHI 5405 or PHI 5406), and other Foundations of Analytic Philosophy (PHP 5785) or Epistemology (PHI 5365).

The Ph.D. requires 90 credit hours, which may include 36 used as credit for the M.A. In addition to the foundational courses required for the M.A., the Ph.D. requires Ethical Theory (PHI 5665) and both of PHI 5785 and PHI 5365. It also requires six courses at the advanced 6000-level, 3 proposal research hours and 12 doctoral research hours, and of course the successful completion and defense of a dissertation.

Further information about the department's programs and admissions can be obtained on the department's website [web.phil.ufl.edu](http://web.phil.ufl.edu) or by contacting the Graduate Coordinator, 330 Griffin-Floyd Hall, (352)392-2084 or gradcoord@phil.ufl.edu.

### PHI 5405: Modern Philosophy I

### PHI 5406: Modern Philosophy II

### PHH 5605: Studies in Continental Philosophy

### PHH 6105: Seminar in Ancient Philosophy

### PHH 6425: Seminar in Modern Philosophy

### PHI 5135: Graduate Logic

### PHI 5225: Philosophy of Language

### PHI 5325: Philosophy of Mind

### PHI 5365: Epistemology

### PHI 5405: Philosophy of Science

### PHI 5425: Philosophy of Social Science

### PHI 5505: Metaphysics

### PHI 5665: Ethical Theory

### PHI 5905: Individual Work

### PHI 5934: Topics in Philosophy

### PHI 5935: Proseminar

### PHI 6105: Seminar in Logic

### PHI 6226: Seminar in Philosophy of Language

### PHI 6306: Seminar in Epistemology

### PHI 6326: Seminar in Philosophy of Mind

### PHI 6406: Seminar in Philosophy of Science
The Department of Physics offers the Master of Science (thesis or nonthesis) and the Doctor of Philosophy degrees. The nonthesis Master of Science in Teaching is also offered. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Areas of specialization for graduate research include astrophysics and cosmology, atomic and molecular physics, biological physics, chemical physics, condensed matter physics (theory and experiment), nuclear physics, particle physics (theory and experiment), statistical physics, and low temperature physics.

Special interdisciplinary research programs include the Institute for Fundamental Theory (carried out jointly with the Department of Mathematics), the Institute for Theoretical and Computational Studies in Molecular and Materials Science (carried out jointly with the Department of Chemistry), the Institute of High Energy and Particle Astrophysics, and Microfabritech (jointly with the College of Engineering). A curriculum is offered by the Center for Chemical Physics for students interested in research related to chemistry or chemical engineering. The Center for Condensed Matter Sciences provides opportunities for investigations in a diverse range of subjects and fields, including the Microkelvin Research Laboratory. The University of Florida operates the National High Magnetic Field Laboratory jointly with Florida State University and Los Alamos National Laboratory.

The core curriculum is designed to provide a thorough foundation for all physics graduate students. It consists of PHY 6246, PHY 6346, PHY 6347, PHY 6536, PHY 6645, and PHY 6646. Doctoral students must achieve a 3.30 GPA in the core curriculum. All students must pass a preliminary examination at the undergraduate level. All degree candidates are required, as part of their graduate education, to participate continuously in the research and/or teaching programs of the Department.

For more information, please see the program page below, and visit our website: [http://www.phys.ufl.edu](http://www.phys.ufl.edu).

**Physics Department**

**College of Liberal Arts and Sciences**

*Chair:* Kevin Ingersent  
*Graduate Coordinator:* Guido Mueller

Complete faculty listings: [Follow this link](http://www.phys.ufl.edu).

For more information, please see the program page below, and visit our website: [http://www.phys.ufl.edu](http://www.phys.ufl.edu).

**PHY 5277:** Physics of Accident Reconstruction and Biomechanics

**PHY 5905:** Individual Work

**PHY 6246:** Classical Mechanics

**PHY 6346:** Electromagnetic Theory I

**PHY 6347:** Electromagnetic Theory II

**PHY 6536:** Statistical Mechanics I
PHY 6555C: Cryogenics
PHY 6645: Quantum Mechanics I
PHY 6646: Quantum Mechanics II
PHY 6648: Quantum Field Theory I
PHY 6905: Individual Work
PHY 6910: Supervised Research
PHY 6920: Departmental Colloquium
PHY 6932: Seminar in Molecular and Computational Physics
PHY 6943: Internship in College Teaching
PHY 6971: Research for Master's Thesis
PHY 7097: Advanced Topics in Theoretical Physics
PHY 7669: Quantum Field Theory II
PHY 7939: Special Topics
PHY 7979: Advanced Research
PHY 7980: Research for Doctoral Dissertation
PHZ 5155C: Physical Modeling and Simulation
PHZ 5245: Introduction to Magnetic Resonance
PHZ 5354: Introduction to Particle Physics
PHZ 5405: Introduction to Solid-State Physics
PHZ 6156: Computer Methods in Physics
PHZ 6166: Qualitative Methods of Theoretical Physics
PHZ 6355: Elementary Particle Physics I
PHZ 6358: Standard Model of Elementary Particles I
PHZ 6391: Seminar in Astrophysics
PHZ 6392: Seminar in Particle Physics
PHZ 6426: Solid State I
PHZ 6493: Seminar in Condensed Matter Physics
PHZ 6607: Special and General Relativity
PHZ 7357: Elementary Particle Physics II
PHZ 7359: Standard Model of Elementary Particles II
PHZ 7427: Solid State II
PHZ 7428: Modern Condensed Matter Physics
PHZ 7429: Phases of Condensed Matter

PHZ 7608: Special and General Relativity II

Plant Molecular and Cellular Biology Department

College of Agricultural and Life Sciences
College of Liberal Arts and Sciences
College of Medicine

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology, within the colleges of Agriculture and Life Sciences, Medicine, and Liberal Arts and Sciences.

Political Science Department

Chair: Ido Oren
Graduate Coordinator: Daniel Smith

Complete faculty listing: Follow this link.

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science–international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information, please contact the Political Science Department or follow the hyperlinks below to more information about the specific programs offered.

CPO 5935: Advanced Topics in Comparative Politics

CPO 6046: Politics in Advanced Industrial Societies

CPO 6059: Democracy and Its Competitors

CPO 6077: Social Movements in Comparative Perspective

CPO 6091: Introduction to Comparative Political Analysis

CPO 6206: Seminar in African Politics

CPO 6307: Latin American Politics I

CPO 6732: Democratization and Regime Transition

CPO 6736: Post-Communist politics

CPO 6756: Comparative Elections and Party Systems

CPO 6757: The European Union In Comparative Perspective

CPO 6786: Peasant Politics and Society

CPO 6795: Environmental Politics

CPO 6796: Water Politics

INR 5935: Advanced Topics in International Relations

INR 6036: Globalization, Regionalism, and Governance

INR 6039: International Political Economy

INR 6208: Advanced International Relations Theory

INR 6213: Seminar: Politics of the European Union

INR 6249: Inter-American Relations

INR 6305: Politics of American Foreign Policy Making
INR 6337: Survey of International Security
INR 6352: International Environmental Relations
INR 6507: International Organization
INR 6607: International Relations Theory
INR 6936: Seminar in Transnational and Global Studies
INR 6938: Seminar in Culture and World Politics
PAD 5935: Advanced Topics in Public Administration
PAD 6108: Public Administration Theory
PAD 6227: Public Budgeting and Finance
PAD 6434: Leadership and Ethics in Public Agencies
PAD 6946: Internship in Government
POS 5935: Advanced Topics in Political Science
POS 6045: Seminar in American Politics
POS 6048: American Political Development
POS 6127: State Government and Politics
POS 6146: Urban Politics
POS 6157: Community Analysis
POS 6196: Patrons, Clients, Corruption, and Accountability
POS 6207: Political Behavior
POS 6208: Empirical Political Research
POS 6272: Political Participation
POS 6274: Political Campaigning
POS 6278: Advanced Campaign Strategy
POS 6279: The Politics of Direct Democracy
POS 6292: Religion and Politics
POS 6427: Legislative Process
POS 6453: Political Parties and Interest Groups
POS 6458: Politics of Campaign Finance
POS 6476: Bureaucratic Politics in the U.S.
POS 6707: Qualitative Research Methods for Political Science
POS 6712: Empirical Theories of Politics
POS 6716: Scope and Epistemologies of Political Science
POS 6736: The Conduct of Inquiry
POS 6737: Political Data Analysis
POS 6747: Topics in Political Research Methodology
POS 6757: Survey Research
POS 6909: Individual Work
POS 6910: Supervised Research
POS 6933: Special Topics
POS 6940: Supervised Teaching
POS 6971: Research for Master's Thesis
POS 7979: Advanced Research
POS 7980: Research for Doctoral Dissertation
POT 5935: Advanced Topics in Political Theory
POT 6016: Ancient Political Thought
POT 6056: Modern Political Thought
POT 6067: Contemporary Political Theory
POT 6306: Liberalism and Its Critics
POT 6314: Democratic Theory
POT 6416: The Marxist Tradition and its Critics
POT 6505: Politics and Theory
POT 6516: Political Judgment
PUP 5935: Advanced Topics in Public Policy
PUP 6006: Policy Evaluation
PUP 6007: Policy Process
PUP 6009: Public Policy Analysis
PUP 6315: Race, Gender, and Politics

Psychology Department

College of Liberal Arts and Sciences

Chair: Lise Abrams
Graduate Coordinator: Julia A. Graber

Complete faculty listing by department: Follow this link.

The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees section of this catalog. Students are not accepted for a terminal master's degree.

For more information, please see the program page below and our website: http://www.psych.ufl.edu.

CBH 6056: Comparative Psychology
CLP 6169: Seminar: Psychology and Deviant Behavior
CLP 7525: Best Methods for Studying Psychological Change

DEP 6057: Advanced Developmental Psychology I

DEP 6058: Advanced Developmental Psychology II

DEP 6059: Seminar: Special Topics in Developmental Psychology

DEP 6099: Survey of Developmental Psychology

DEP 6406: Advanced Adulthood and Aging

DEP 6409: Seminar: Adult Development and Aging

DEP 6799: Current Research Methods in Developmental Psychology

DEP 6936: Current Research in Developmental Psychology

DEP 7608: Theories of Developmental Psychology

EAB 5436: Behavioral Pharmacology

EAB 6099: Survey of Behavior Analysis

EAB 6118: Theoretical Foundations of Behavior Analysis

EAB 6707: Applied Behavior I

EAB 6712: Experimental Psychopathology

EAB 6716: Behavior Analysis in Developmental Disabilities

EAB 6719: Seminar: Strategies and Tactics of Human Behavioral Research

EAB 6750: Quantitative Methods

EAB 6780: Ethics and Professional Issues

EAB 6937C: Seminar: Special Topics in Experimental Analysis of Behavior

EAB 6939: Seminar: Special Topics in Applied Behavior Analysis

EAB 7089: Advanced Seminar: Experimental Analysis of Behavior

EAB 7090: Verbal Behavior

EXP 6099: Survey of Cognition and Sensory Processes

EXP 6609: Seminar: Cognition

EXP 6939: Seminar: Current Issues in Cognition and Sensory Processes

PCO 6057: Psychology of Counseling I

PCO 6058: Psychology of Counseling II

PCO 6059: Psychology of Counseling III

PCO 6278: Diversity and Multiculturalism in Counseling Psychology

PCO 6316C: Psychological Assessment I

PCO 6317C: Psychological Assessment II
PCO 6931: History and Contemporary Issues in Counseling Psychology
PCO 6939: Seminar: Current Topics in Counseling Psychology
PCO 7217: Professional Ethics and Skills in Counseling Psychology
PCO 7247: Group Counseling/Psychology
PCO 7537: Vocational Psychology
PCO 7944: Practicum in Counseling Psychology
PCO 7945: Advanced Practicum in Counseling Psychology
PCO 7949: Internship in Counseling Psychology
PPE 6059: Seminar in Personality
PSB 5445: Drug Use and Abuse
PSB 5935: Seminar in Physiological Psychology
PSB 6082: Neuroethology
PSB 6087: Advanced Physiological Psychology
PSB 6088L: Behavioral Neurobiology
PSB 6099: Survey of Physiological and Comparative Psychology
PSB 7248: Neurobehavioral Relations
PSB 7249: Seminar in Neural Mechanisms and Behavior
PSY 6608: History of Psychology
PSY 6905: Individual Work
PSY 6910: Supervised Research
PSY 6930: Topics in Psychology
PSY 6939: Seminar: The Teaching of Psychology
PSY 6940: Supervised Teaching
PSY 6971: Research for Master's Thesis
PSY 7979: Advanced Research
PSY 7980: Research for Doctoral Dissertation
SOP 6099: Survey of Social Psychology
SOP 6219C: Advanced Research Techniques in Social-Personality Psychology
SOP 6409: Seminar: Current Topics in Social-Personality Psychology
SOP 6419: Seminar: Attitudes and Social Cognition
SOP 6509: Seminar: Interpersonal Relations and Group Processes
SOP 6929: Colloquium on Research in Social-Personality Psychology
The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asia
- Religion and nature.

Minimum requirements for these degrees are given in the General Information section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religions and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at [http://religion.ufl.edu/graduate-studies/](http://religion.ufl.edu/graduate-studies/) under "Graduate Program." In special instances, and with the agreement of the supervisory committee and two sponsoring faculty members, master's degree students may choose an area outside the three specialty fields.

In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest:

- Three references from persons competent to evaluate the applicant's potential for graduate work
- An essay of 3 to 5 double-spaced, typewritten pages identifying the applicant's goals and particular interests pertinent to the three available specialty fields (this essay is extremely important and applicants should attend to it carefully)
- A writing sample.

Beyond these requirements, applicants need to show clear evidence of solid preparation before admission. This usually includes formal study of the primary language in the specialty field. Acceptable scores on the GRE General Test are required. In addition to evidence of preparation and academic promise, the Department gives careful consideration to the fit between an applicant's central scholarly interests and the resources the Department and University have to offer.

**Master of Arts:** The M.A. degree provides a broad background in the study of religious traditions, theoretical orientations in the discipline, and an initial concentration in one of the three specialty fields. Course work culminates in a thesis and oral examination on the thesis and course work.

**Total credits:** Thirty credit hours are required. These include Method and Theory I and II, the core course(s) of the major field (or equivalent for those not in one of the three specialty fields), and 6 hours of thesis research credits. The additional hours shall consist of further courses in the specialty field, other graduate seminars, and up to 6 hours of research language study.

**Language study:** All M.A. students are required to demonstrate competency in a scholarly language other than English before beginning the thesis. Most languages are acceptable, though students should consult the individual field requirements. The chosen language must be approved by the student's mentor and the graduate coordinator.

**Thesis:** Each student, guided by a supervisory committee, will prepare a Master of Arts thesis, acceptable to the Department of Religion and the Graduate School, and undergo an oral examination.

**Promotion to doctoral status:** The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish that status to be changed. A review and decision will be made by the field faculty and the graduate committee.

**Doctor of Philosophy:** The Ph.D. program trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religious master's degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master's degree with additional religion course work. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

**Course requirements:** The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours credited toward the Ph.D. is at the discretion of department faculty. A minimum of 45 hours is devoted to course work at the doctoral level. The specific distribution of course work depends on the specialization but will include intensive work in the major area of specialization, 6 hours of method and theory (If not taken at the M.A. level) and 15 hours devoted to dissertation writing and research.

**Language requirements:** All doctoral students must demonstrate proficiency in at least one and in many cases two languages other than English. The chosen language(s) as well as how and when the student's competence will be judged must be approved by the student's supervisory committee chair. Frequently language competence is documented by 1) taking an appropriate course or courses in the language with a grade of "B" or better, or 2) passing a translation exam (usually administered by a department member or a language department at the University). Basic course work for scholarly languages will not count toward the required 90 credit hours. However, students studying a scholarly language connected to their research needs (above and beyond basic competence) can receive 6 (or more) credit hours for such advanced courses toward the required 90 total credit hours, with approval of the student's supervisory committee chair.

**Qualifying examinations:** Qualifying examinations form a bridge between course work and dissertation research. Normally students will take qualifying examinations during their third year in residence. The precise area of questioning and the reading list are decided by the supervisory committee in consultation with the student, well in advance of the examinations, but no later than the beginning of the term in which the student intends to take the qualifying examinations.

**Dissertation proposal:** Each doctoral candidate submits a formal dissertation proposal to the candidate's supervisory committee chair at least 3 weeks before the end of the semester after the qualifying examination.

**Admission to candidacy:** On successfully completing the qualifying examination and the dissertation proposal, and all other course and language requirements, and with the approval of the supervisory committee, students make formal application to the Department and Graduate School for admission to Ph.D. candidacy.

**Dissertation and its defense:** The final years of the program are devoted to dissertation research and writing. The student is expected to present the completed dissertation and defend it at a public oral defense conducted by the supervisory committee.

**Mentoring:** Each student is assigned a faculty mentor on admission to the program, based on expressions of faculty interest and the student's intended area of concentration. The mentor and graduate coordinator answer questions and provide support for the student in choosing courses and planning a program. By the end of the second semester, all master's degree students must designate their supervisory committee chair and one additional department committee member. By the end of the second semester, all doctoral students must designate their supervisory committee chair and one member from outside the department. For details about the programs listed above, visit [http://religion.ufl.edu/graduate-studies/](http://religion.ufl.edu/graduate-studies/).

**REL 6347: American Buddhism**

**REL 6368: Islam in Asia**

**REL 6369: Hindu Sacred Texts and Their Ritual Context**
RLG 5143: Religion and Social Change
RLG 5195: Topics in Religion and Society
RLG 5297: Topics in Biblical Studies
RLG 5338: Topics in Asian Religions
RLG 5365: Studies in Islam
RLG 5396: Religion and Animals
RLG 5495: Topics in Religious Thought
RLG 5549: Studies in Christianity
RLG 5696: Topics in Jewish Thought
RLG 5906: Individual Work
RLG 5937: Topics in Religious Studies
RLG 6035: Method and Theory I
RLG 6036: Method and Theory II
RLG 6095: Utopias and Dystopias
RLG 6107: Core Seminar in Religion and Nature
RLG 6125: Religion and Politics in the Americas
RLG 6126: Religion in the Americas
RLG 6129: Hindu Traditions in America
RLG 6137: Religion in North America
RLG 6138: New Religious Movements
RLG 6167: Radical Environmentalism
RLG 6181: Ethics and the Natural Sciences
RLG 6183: Religion and Environmental Ethics
RLG 6187: Nature in Asian Religions
RLG 6196: Globalizing the Sacred
RLG 6310: Religion and Nature in South Asia
RLG 6319: Interpreting Asian Religions
RLG 6339: Women in the Hindu Tradition
RLG 6346: Buddhist Traditions
RLG 6385: Native Religions in the Americas
RLG 6387: Religions in Latin America
RLG 6910: Supervised Research
The Department of Spanish and Portuguese Studies offers a Master of Arts degree (M.A.) in Spanish (thesis and non-thesis options) and a Doctor of Philosophy degree (Ph.D.) in Romance Languages and Literatures, with a concentration in Spanish. Descriptions of the minimum requirements for both degrees are provided in the General Information section of this catalog. For specific information about the program, please visit the graduate section of the departmental webpage:

http://www.spanishandportuguese.ufl.edu/spanish/graduate.html

Candidates for graduate degrees (both M.A. and Ph.D.) in Spanish can choose between two specializations–literature/culture or linguistics. In conjunction with their master’s or doctoral work, students may also earn a Certificate in Latin American Studies. Though a graduate degree is not offered in Portuguese, extensive course offerings at the graduate level permit students to develop a strong specialization in Portuguese language and Luso-Brazilian literature, film and culture.

The main prerequisite for admission to the M.A. program is an undergraduate major in Spanish, ideally including advanced courses in the proposed area of specialization. Applicants for the Ph.D. should hold an M.A. or equivalent degree in Spanish. At the discretion of the Graduate Studies Committee, candidates from related fields of study (History, Sociology…) may be offered a conditional admission into the Ph.D. program pending the passing of the M.A. Comprehensive Examination within the first year of study.

All M.A. and Ph.D. students in Spanish who are appointed as teaching assistants must take Romance Language Teaching Methods (FOL / FOL 6943). Besides, all M.A. and Ph.D. students specializing in literature and culture must take Introduction to Graduate Study and Research (SPW 6806). Other requirements vary with degree and specialization. For details, consult the graduate section of the departmental webpage (see above).

The Department is able to offer most students a teaching assistantship that provides a maintenance stipend and includes a tuition waiver. Contingent on positive performance in teaching and graduate work, M.A. students are guaranteed four semesters of support, and Ph.D. students are guaranteed eight semesters of support beyond the M.A. In addition, there are several fellowships, supplements and stipends for which students may apply, and summer teaching may be available.

Prospective students are encouraged to review the departmental webpage in order to familiarize themselves with the program and the application process. Only those applications including all required materials and submitted by the advertised deadlines will be considered. For any questions about the program or how to apply, please contact the graduate coordinator: lacastro@ufl.edu.

Highly qualified UF undergraduate students majoring in Spanish may apply for a combined B.A./M.A. program in Spanish that allows up to 12 graduate credits to be counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details.

FOL 6326: Technology in Foreign Language Education
FOL 6943: Romance Language Teaching Methods
FOW 6930: Special Study in Romance Languages and Literatures
POW 6276: Twentieth-Century Brazilian Novel
POW 6385: Brazilian Lyric
POW 6386: Brazilian Drama
POW 6905: Individual Work
POW 6930: Rotating Topics in Brazilian or Portuguese Literature
SPN 6166: Teaching Spanish for the Professions
SPN 6315: Advanced Composition and Syntax
SPN 6425: Writing for the Profession
SPN 6705: Foundations of Hispanic Linguistics
SPN 6715: Formal Instruction and Acquisition of Spanish
SPN 6735: Special Study in Spanish Linguistics
SPN 6785: Advanced Spanish Phonetics
SPN 6827: Sociolinguistics of the Spanish-Speaking World
SPN 6835: Spanish and Spanish-American Dialectology
SPN 6845: History of the Spanish Language
SPN 6848: Medieval Spanish Linguistics
SPN 6855: Structure of Spanish
SPN 6856: Spanish in Contact: Issues in Bilingualism
SPN 6900: Directed Readings in Spanish
SPN 6940: Supervised Teaching
SPN 6945: Practicum in Advanced College Teaching
SPW 6209: Colonial Spanish-American Literature
SPW 6216: Spanish Prose Fiction of the Golden Age
SPW 6236: Spanish-American Narrative from the origins to Criollismo
SPW 6269: Spanish Novel of the Nineteenth Century
SPW 6278: Postwar Spanish Fiction
SPW 6285: Contemporary Spanish-American Narrative I
SPW 6286: Contemporary Spanish-American Narrative II
SPW 6306: Spanish-American Theater
SPW 6315: Spanish Drama of the Golden Age
SPW 6337: Golden Age Poetry
SPW 6345: Twentieth-Century Spanish Poetry
SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
SPW 6357: Contemporary Spanish-American Poetry
SPW 6366: Spanish-American Essay
SPW 6535: Spanish Romanticism
SPW 6545: Spanish Romanticism
SPW 6606: Cervantes
SPW 6729: The Generation of 1898
SPW 6806: Introduction to Graduate Study and Research
SPW 6902: Special Study in Spanish or Spanish-American Literature
SPW 6905: Individual Work
SPW 6910: Supervised Research

SPW 6934: Seminar in Spanish American Literature and Culture

SPW 6938: Seminar in Spanish Literature and Culture

SPW 6971: Research for Master's Thesis

SPW 7979: Advanced Research

SPW 7980: Research for Doctoral Dissertation

Statistics Department

Chair: M. J. Daniels
Graduate Coordinator: J. P. Hobert

Complete faculty listing [Follow this link](#).

Graduate programs are available leading to Master of Science in Statistics, Master of Statistics, and Doctor of Philosophy degrees. Minimum requirements for these degrees are described in the General Information section of this catalog.

Both master's programs usually require 2 years of course work including material covered in STA 6208, 6208, STA 6326, STA 6327, STA 6246, and STA 6329. In addition to earning a "Ph.D. pass" on the first-year evaluation, requirements for the Ph.D. degree include STA 6466, 6467, STA 7249, and STA 7346.

Interdisciplinary programs: The Department offers a co-major program in conjunction with the Fisher School of Accounting leading to the Doctor of Philosophy degree in statistics and business administration accounting. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Departments of Mathematics; Industrial and Systems Engineering and Finance, Insurance, and Real Estate. For information on these programs, consult the departmental graduate coordinator.

Combined program: The Department offers a bachelor's/master's degree program. Contact the graduate coordinator for information.

STA 5106: Computer Programs in Statistical Analysis

STA 5507: Applied Nonparametric Methods

STA 5823: Stochastic Process Methods

STA 5856: Applied Time Series Methods

STA 6126: Statistical Methods in Social Research I

STA 6127: Statistical Methods in Social Research II

STA 6167: Statistical Methods in Research II

STA 6177: Applied Survival Analysis

STA 6178: Genetic Data Analysis

STA 6207: Regression Analysis

STA 6208: Basic Design and Analysis of Experiments

STA 6209: Design and Analysis of Experiments

STA 6226: Sampling Theory and Application

STA 6246: Theory of Linear Models

STA 6326: Introduction to Theoretical Statistics I

STA 6327: Introduction to Theoretical Statistics II

STA 6329: Matrix Algebra and Statistical Computing

STA 6505: Analysis of Categorical Data
Women's Studies Department

Director: Bonnie Moradi
Graduate Coordinator: Kendal Broad

Complete faculty listing by department: Follow this link.

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as two certificates. These options give students the opportunity to take advantage of scholarship in this dynamic field, and to become acquainted with different research perspectives and methodologies. Students become well grounded in theories of gender in cultural systems and in ways that gender intersects with other categories of difference such as race, ethnicity, religion, class, sexuality, nation, physical and mental ability, age, and economic and civil status. Faculty and students employ feminist and other appropriate theoretical approaches and methodologies.

The Center offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring. The Center in Ustler Hall houses archives, a small library, offices, and meeting space.

For more information about our program, please see the program page below or our website: http://web.wst.ufl.edu.

WST 5933: Proseminar in Women's Studies

WST 6348: Ecofeminism

WST 6508: Advanced Feminist Theory
WST 6905: Independent Study
WST 6935: Special Topics in Women's Studies
WST 6936: Feminist Challenges to Disciplinary Paradigms
WST 6946: Internship in Applied Women's Studies and Gender Research
WST 6957: International Studies in Women's Studies and Gender Research
WST 6971: Research for Master's Thesis

College of the Arts Courses

College of the Arts

Dean: L. Lavelli
Complete faculty listings: Follow this link

The arts program at UF began in the 1920s to serve the state of Florida's needs. Meeting these needs over the past 80 years has propelled the college to excel on a national and international level and has defined its mission to provide instruction for students seeking professional careers in the arts. In addition to providing rich educational experiences and programs in the arts, the college brings national and international recognition to the university through the high-level professionalism associated with the faculty and alumni, and the competence of students and graduates.

For more information about the College of the Arts, please see our website: http://www.arts.ufl.edu

Departments and Programs within the College of the Arts
College of the Arts Courses

HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
HUM 5595: Arts in Medicine in Practice
HUM 6340: Arts Advocacy and Public Policy
HUM 6353: Arts in Medicine Professional Seminar
HUM 6354: Arts in Medicine Advanced Professional Seminar
HUM 6358: Arts in Medicine Capstone Proposal
HUM 6359: Arts in Medicine Capstone
HUM 6930: Special Topics in Fine Arts
HUM 6942: Arts in Medicine Graduate Practicum
HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

School of Art and Art History

College of the Arts
Director: Richard C. Heipp
Graduate Coordinator: Patrick Grigsby
Complete faculty listing: Follow this link

The School of Art and Art History offers the M.F.A. degree in art with specializations in art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. The school also offers Master of Arts degrees in art education, art history, and museology (museum studies) and the Doctor of Philosophy degree in art history. Requirements for these degrees can be found in the Graduate Degrees section of this catalog, and information about each of these graduate programs can be found at the links below.

For more information, please see our website: http://www.arts.ufl.edu/welcome/art

ARE 6049: History of Teaching Art
ARE 6148: Curriculum in Teaching Art
ARE 6246C: Principles of Teaching Art
ARE 6247C: Teaching Art: The Study of Practice
ARE 6386: Teaching Art in Higher Education
ARE 6641: Issues in Art Education
ARE 6746: Methods of Research in Art Education
ARE 6905: Individual Study
ARE 6910: Capstone Project
ARE 6933: Special Topics in Art Education
ARE 6944: Internship in Teaching Art
ARE 6971: Research for Master's Thesis
ARE 6973: Individual Project

ARH 5357: French Art of the Ancien Regime: 1680-1780
ARH 5420: Art in the Age of Revolution
ARH 5440: Beginnings of Modernism
ARH 5527: Arts of Central Africa
ARH 5528: Art of West Africa
ARH 5529: Clothing and Textiles in Africa
ARH 5655: Indigenous American Art
ARH 5667: Colonial Andean Art
ARH 5816: Methods of Research and Bibliography
ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
ARH 5905: Individual Study
ARH 6141: Greek Art Seminar
ARH 6292: Medieval Art Seminar
ARH 6394: Renaissance Art Seminar
ARH 6422: Beginnings of Modernism. Realism to Post-Impressionism 1848-1890
ARH 6477: Eighteenth-Century European Art Seminar
ARH 6481: Contemporary Art Seminar
ARH 6496: Modern Art Seminar
ARH 6596: Chinese Art Seminar
ARH 6597: African Art Seminar
ARH 6654: Pre-Columbian Art Seminar
ARH 6666: Colonial Latin American Art Seminar
ARH 6694: Nineteenth-Century Art–Seminar
ARH 6696: American Art Seminar
ARH 6797: Museum Education
ARH 6836: Exhibitions Seminar
ARH 6895: Collections Management Seminar
ARH 6900: Independent Study in Museology
ARH 6910: Supervised Research
ARH 6911: Advanced Study
ARH 6914: Independent Study in Ancient Art History
ARH 6915: Independent Study in Medieval Art History
ARH 6916: Independent Study in Renaissance and Baroque Art History
ARH 6917: Independent Study in Modern Art History
ARH 6918: Independent Study in Non-Western Art History
ARH 6930: Special Topics in Museology
ARH 6938: Seminar in Museum Studies
ARH 6941: Supervised Internship
ARH 6946: Museum Practicum
ARH 6948: Gallery Practicum
ARH 6971: Research for Master’s Thesis
ARH 7979: Advanced Research
ARH 7980: Research for Doctoral Dissertation
ART 5674C: Digital Fabrication
ART 5905C: Directed Study
ART 5930C: Special Topics
ART 6410C: Printmaking Seminar: Mastering Process and Content
ART 6411C: Printmaking Seminar: Transformation and Change
ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
ART 6413C: Printmaking Seminar: Interdisciplinary Studio
ART 6671C: Advanced Experiments in Digital Art
ART 6672: Hypermedia
ART 6673C: Video Art
ART 6675C: Digital Art and Animation
ART 6691: Digital Art Studio
ART 6794C: Vessel Aesthetic 1
ART 6795C: Vessel Aesthetic 2
ART 6797C: Ceramic Sculpture 2
ART 6835C: Research in Methods and Materials of the Artist
ART 6849C: Reactive Environments
ART 6897: Professional Practices for the Visual Artist
ART 6910C: Supervised Research
ART 6925C: Art + Technology Workshop
ART 6926C: Advanced Study I
ART 6927C: Advanced Study II
ART 6928C: Advanced Study III
ART 6929C: Advanced Study IV
ART 6933: Area Methods: Rotating Topics
ART 6971: Research for Master's Thesis
ART 6973C: Individual Project
DIG 6746C: Graduate Seminar in Sensors and Electronics
IDC 6505C: Programming for Artists
PHC 7935: Critical Thinking in Environmental and Global Health

Digital Worlds Institute

College of the Arts
Director: James C. Oliverio
Graduate Coordinator: Marko Suvajdzic
Complete faculty listing: Follow this link.

The Digital Worlds Institute exists to nurture leading edge education between the arts, communications, engineering and the sciences, utilizing advanced media systems and digital culture. By bringing together the diverse talents of University of Florida faculty, students, and staff in a multifaceted collaborative environment, the Institute serves as a platform for interdisciplinary research and teaching that would not have occurred within the confines of any one college or department. Through the use of interactive tools and technologies, the Institute promotes transdisciplinary creativity across classrooms, continents and cultures.

For more information, please see the program page below and our website: http://www.digitalworlds.ufl.edu.

DIG 5555C: Digital Media Projection Design I
DIG 5931C: Special Topics
DIG 6027C: Interactive Storytelling
DIG 6028: Roots of Digital Culture
DIG 6050C: Entertainment Technology
DIG 6125C: Digital Design & Visualization
DIG 6126C: Interaction Design
DIG 6256C: Audio Design For Digital Production
DIG 6358C: APPLIED 3D MODELING
DIG 6556C: Digital Media Projection Design II
DIG 6589C: Digital Portfolio
DIG 6719: Videogame Theory and Analysis
DIG 6744C: Movement, Media and Machines
DIG 6751C: Protocols for Multimedia Interfaces
DIG 6788C: Digital Production & Game Design
DIG 6840C: Interdisciplinary Research Seminar in Digital Arts & Sciences
DIG 6850C: Digital Arts & Sciences Convergence
DIG 6906: Independent Study - Graduate Level
DIG 6950C: Digital Performance Production
DIG 6971: Research for Master’s Thesis
DIG 6973: Capstone Project in Lieu of Thesis

Music Department

College of the Arts
Director: J. A. Duff.
Graduate Coordinator: L. S. Odom.
Complete faculty listing by department: Follow this link.

The School of Music offers programs leading to the Master of Music degree in music and music education. Program concentrations in music include choral conducting, composition, instrumental conducting, musicology, ethnomusicology, music theory, performance, and sacred music. In addition, the School of Music offers the Doctor of Philosophy degree in music and in music education.

The Ph.D. program in music education emphasizes college music teaching. The Ph.D. program in music includes concentrations in:

- Music history and literature, with options in traditional musicology and ethnomusicology
- Composition, with options in acoustic and electroacoustic specialization

All Ph.D. students are encouraged to find opportunities to teach and lecture in their specializations; and with the assistance of their principal professors, to prepare papers, workshops, and clinics for presentation at professional conferences, in the public schools, and at colleges and universities. Students also are encouraged to publish their research in appropriate journals. Minimum requirements for the M.M. and Ph.D. degrees are given in the General Information section of this catalog. The week before classes begin, students must take placement examinations in music history and in music theory. Students wanting to study privately in a performance studio must be auditioned and accepted by the appropriate area faculty. Voice students must demonstrate appropriate skills in language and diction. All deficiencies must be remedied.

For more information, please see the program pages below and our website: http://www.arts.ufl.edu/welcome/music.

DIG 6288: Music and Sound Design for Digital Media
MUC 5315: Introduction to Electroacoustic Music
MUC 6444: Composition of Electronic Music
MUC 6445: Electroacoustic Music Composition: Digital I
MUC 6446: Electroacoustic Music Composition--Digital II
MUC 6900: Secondary Graduate Composition
MUC 6930: Graduate Composition
MUC 6932: Composition Seminar
MUC 7447: Advanced Seminar in Electroacoustic Music
MUC 7931: Advanced Graduate Composition
MUC 7938: Seminar in Digital Sound Processing, Control, and Composition
MUE 6080: Historical and Philosophical Foundations of Music Education
MUE 6385: Music in Higher Education
MUE 6399: Creative Thinking in Music
MUE 6444: Materials and Methods of String Class Teaching
MUE 6497: Public School Orchestral Literature
MUE 6647: Trends in Teaching and Learning Music
MUE 6696: Technology Assisted Music Learning
MUE 6747: Assessing Music Learning
MUE 6785: Research in Music Education
MUE 6790: Capstone Project for Music Education
MUE 6931: Instructional Design in Music Education
MUE 7746: Measurement and Evaluation of Music
MUE 7938: Music Education Seminar
MUG 6105: Graduate Conducting
MUG 7106: Advanced Graduate Conducting
MUH 5219: Graduate Music History Review
MUH 5505: Introduction to Ethnomusicology
MUH 5684: Introduction to Historical Musicology
MUH 6526: American Vernacular Music
MUH 6545: The Guitar in Latin American Culture
MUH 6548: Seminar in Caribbean Music
MUH 6549: Seminar in Brazilian Music
MUH 6635: Seminar in American Music
MUH 6665: History of Opera
MUH 6671: Seminar in Renaissance Music
MUH 6672: Seminar in Baroque Music
MUH 6673: Seminar in Classical Music
MUH 6674: Seminar in Nineteenth-Century Music
MUH 6675: Seminar in Twentieth-Century Music
MUH 6931: Nationalism in Music
MUH 6935: Special Topics in Music History
MUH 7411: Medieval and Renaissance Notation
MUH 7938: Musicology Seminar
MUL 6435: String Literature
MUL 6486: Piano Literature
MUL 6495: Graduate Organ Literature
MUL 6555: Survey of Wind Literature
MUL 6565: Chamber Music Literature
MUL 6645: Choral Literature
MUN 6010: Graduate Ensemble
MUN 6125: Concert Band
MUN 6135: Symphonic Band
MUN 6145: Symphonic Wind Ensemble
MUN 6215: University Orchestra
MUN 6315: University Choir
MUN 6325: Women’s Chorale
MUN 6335: Men’s Glee Club
MUN 6445: Percussion Ensemble
MUN 6495: Steel Drum Ensemble
MUN 6496: World Music Ensemble
MUN 6497: New Music Ensemble
MUN 6715: Jazz Band
MUR 6206: Survey of Hymnody
MUR 6705: Sacred Music Literature
MUS 5911: Directed Study
MUS 6685: Psychology of Music
MUS 6716: Methods of Musical Research and Bibliography
MUS 6905: Projects and Problems
MUS 6910: Supervised Research
MUS 6940: Supervised Teaching
MUS 6971: Research for Master’s Thesis
MUS 6973: Individual Project
MUS 7656: Teaching Music and the Creative Process
MUS 7905: Projects and Problems
MUS 7979: Advanced Research
MUS 7980: Research for Doctoral Dissertation
MUT 6051: Graduate Music Theory Review
MUT 6445: Advanced Counterpoint
MUT 6531: Figured Bass and Continuo Performance
MUT 6565: Late Nineteenth- and Twentieth-Century Styles
MUT 6576: Contemporary Styles
MUT 6617: Approaches to Theoretical Analysis in Music Education
MUT 6624: Seminar in Set Theory
MUT 6627: Seminar in Reductive Analysis
MUT 6629: Analytical Techniques
MUT 6751: Pedagogy of Music Theory
MUT 6936: Music Theory Seminar
MUT 7316: Advanced Orchestration
MUT 7585: Seminar in Musical Style
MUT 7760: History of Music Theory
MVK 5156: Improvisational Keyboard Skills and Related Technology
MVK 6605: Organ Pedagogy
MVK 6651: Piano Pedagogy
MVK 6661: Advanced Piano Pedagogy
MVO 6250: Secondary Music Performance
MVO 6460: Music Performance
MVO 7460: Music Performance
MVS 6651: String Pedagogy I
MW 6651: Vocal Pedagogy

School of Theatre and Dance

Director: J. Dickey
Graduate Performance Program Coordinator: Ralf Remshardt
Graduate Design Program Coordinator: S. Kaye

Complete faculty listing by department: Follow this link.

The graduate program offered by the School of Theatre and Dance leads to the degree of Master of Fine Arts in Theatre. Minimum requirements for this degree are given in the General Information section of this catalog.
The M.F.A. degree prepares students for professional entry in acting, production, or teaching. Placement in the M.F.A. program is determined by audition/portfolio review, academic credentials, and personal interview. Candidates for admission should have adequate training in theatre. Deficiencies may be corrected before beginning graduate study.

The program emphasizes the study and practice of theatre as an art and discipline. Students of acting and design study concepts of theatre together while working in their areas of specialization. Focus is on the collaboration and synthesis of theatre artistry. Each incoming class is composed of approximately 12 to 18 students in acting and all design areas.

The student's artistic and academic progress will be reviewed at the end of each semester. The School of Theatre Handbook gives details on the form and focus of each review. This information is online at [http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp](http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp).

During the final year of study, each student must successfully complete the comprehensive examination and oral defense. The project in lieu of thesis includes research, analysis, rehearsal process, and evaluation. Development and execution of the project includes public performance (acting or design). The written document and oral defense of the project which follow must demonstrate the ability to communicate the creative process.

Graduate acting students audition for all departmental productions.

**ARC 6670: Lighting Design Seminar**

**DAA 6757: Pilates Technique for the Dancer**

**DAA 6905: Graduate Dance Project**

**DAN 6436: Laban Movement Analysis**

**DAN 6949: Dance Clinical Practice**

**THE 5238: African-American Theatre History and Practice**

**THE 5287: History of Decor and Architecture for the Stage**

**THE 5910: Introduction to Graduate Study in Theatre**

**THE 6265: Costume History**

**THE 6525: History, Literature, and Criticism I**

**THE 6526: History, Literature, and Criticism II**

**THE 6565: Seminar in Creative Process**

**THE 6905: Individual Study**

**THE 6940: Supervised Teaching**

**THE 6941: Internship**

**THE 6950: Applied Theatre**

**THE 6955: Summer Repertory Theatre**

**THE 6971: Research for Master's Thesis**

**THE 6973C: Project in Lieu of Thesis**

**TPA 5025: Lighting Design I**

**TPA 5047: Costume Design I**

**TPA 5067: Scene Design I**

**TPA 5072: Drawing and Rendering**

**TPA 5079: Graduate Scene Painting**

**TPA 5082: Advanced Theatre Graphics**

**TPA 5236: Costume Technologies Workshop**

**TPA 6005: Design I**
TPA 6006: Design II
TPA 6009: Design Studio
TPA 6026: Lighting Design II
TPA 6048: Costume Design II
TPA 6054: Detail Design for Costume Designers
TPA 6069: Scene Design II
TPA 6235: Costume Construction
TPA 6237: Pattern Making: Flat Patterning
TPA 6243: Pattern Making: Draping
TPA 6258: Computer Drafting 2D
TPA 6357: Programming and Presentation for the Lighting Designer
TPP 5234: Mutli-Cultural Performance Workshop
TPP 6115: Graduate Acting I: Modern Acting Theory and Practice
TPP 6116: Graduate Acting II: Shakespeare and High Style
TPP 6145: Graduate Acting III: Period Styles
TPP 6149: Acting IV: Contemporary Realism
TPP 6225: Professional Seminar: Acting
TPP 6237: MFA Company Acting Workshop
TPP 6266: Acting for the Camera
TPP 6285: Voice and Movement I
TPP 6286: MFA Voice and Speech II: Shakespeare and High Styles
TPP 6297: The Alexander Technique I
TPP 6298: The Alexander Technique II
TPP 6299: The Alexander Technique III
TPP 6385: Directing
TPP 6515: Graduate Movement Training
TPP 6536: Graduate Stage Combat
TPP 6717: MFA Voice and Speech III: Period Styles
TPP 6718: MFA Voice and Speech IV: Advanced Vocal Training for the Actor
TPP 6946: Performance Practicum

Colleges
College of Agricultural and Life Sciences

Dean: Elaine Turner

Complete faculty listings: Follow this link.

The College of Agricultural and Life Sciences offers academic programs and grants advanced degrees in 17 departments and the Schools of Forest Resources and Conservation, and Natural Resources and Environment. These academic units are all a part of the Institute of Food and Agricultural Sciences (IFAS). Additional components of IFAS include 16 research centers located throughout the state and cooperative extension offices in each of the 67 counties of the state.

The following courses are offered under the supervision of the office of the dean by an interdisciplinary faculty and deal with material of concern to two or more IFAS academic units. The courses are also open to students of other colleges, with the permission of the course instructor.

For more information, please see our website: http://cals.ufl.edu

Departments and Programs within the College of Agricultural and Life Sciences

College of Agricultural and Life Sciences Courses

College of the Arts

Dean: L. Lavelli

Complete faculty listings: Follow this link.

The arts program at UF began in the 1920s to serve the state of Florida's needs. Meeting these needs over the past 80 years has propelled the college to excel on a national and international level and has defined its mission to provide instruction for students seeking professional careers in the arts. In addition to providing rich educational experiences and programs in the arts, the college brings national and international recognition to the university through the high-level professionalism associated with the faculty and alumni, and the competence of students and graduates.

For more information about the College of the Arts, please see our website: http://www.arts.ufl.edu

Departments and Programs within the College of the Arts

College of the Arts Courses

Warrington College of Business Administration

Dean: Jamie Kraft

Complete faculty listings: Follow this link.

Graduate degrees offered by the Warrington College of Business Administration are the Doctor of Philosophy with major programs in business administration and in economics; the Master of Arts with major programs in economics, in international business, and in business administration with concentrations in insurance and marketing; the Master of Science with major programs in Information Systems and Operations Management (with a concentration in supply chain management), in finance, in management, and in real estate; and the Master of Business Administration, including concentrations in entrepreneurship, insurance, marketing and retail, the Master of Science in Management and the Master of Business Administration. Fields of concentration and requirements for the M.B.A. are given under Graduate Degrees of this catalog, as well as admission and degree requirements for the Ph.D., M.A., and M.S. degrees.

Master of Arts: The M.A. degree with a major in international business is designed to provide students with quantitative and application skills to be used in an international business setting. The program provides practical training with a brief study trip to a major international city, where students are required to participate actively in business tours and lectures. The students also have the opportunity to gain credits for the degree by studying at one or more foreign universities for a period of 2 weeks to 8 months.

Master of Science: The M.S. degree with a major in management targets students from nonbusiness backgrounds who would like to gain "core" business knowledge and application skills. Requirements span the traditional business disciplines to produce a sound knowledge base for students seeking a solid business foundation. Students are required to take such courses as accounting, finance, economics, entrepreneurship, management, marketing, organizational behavior, and statistics. Typical positions for graduates include managers, consultants, and analysts.

Doctor of Philosophy: For the Ph.D. in business administration, students must have a concentration in one of the following:

- Accounting
- Information Systems and Operation Management
- Finance
- Insurance
- Management
- Marketing
- Real estate and urban analysis.

Specific requirements for the various departments and specialties are given in the Graduate Degrees section in this catalog. (Requirements for the Ph.D. degree in economics are described under the Economics section of the catalog.) All candidates for the Ph.D. in business administration must satisfy the following general requirements:

Breadth requirement: All applicants for Ph.D. in the business administration program are expected to have completed prior business-related course work at either the advanced undergraduate or graduate level. Students entering without prior work are required to take a minimum of three graduate courses in at least two fields other than their chosen area of concentration. Most often, the appropriate courses will be found in the M.B.A. first-year core; the particular courses to be taken by a student will be decided in consultation with the student's academic adviser. After a student enters the Ph.D. program, the courses taken to satisfy the breadth requirement must be taken in the College of Business Administration.

Research foundations requirement: All students must complete a six-course research skills sequence that prepares them for scholarly research in their chosen area of concentration. Research foundations are defined as essential methodological tools (e.g., statistics, quantitative analysis) and/or substantive content domains (e.g., psychology, economics) outside the student's major field that are considered essential to conducting high quality research in the chosen field. The specific research skills required by each area of concentration can be found in the field descriptions in this Catalog.

Other requirements include satisfactory completion of graduate course work in the major field of concentration, as well as one or two minor fields designed to add depth to the student's research training. Minors are selected by the student in consultation with his or her advisory committee, and may be within or outside the College of Business Administration. Other requirements for the Ph.D. are given in the Graduate Degrees section of this catalog.

Departments and Programs within Warrington College of Business Administration

Details of each department can be found in the corresponding sections within this page.
Advanced education has progressed over the years to be an integral component of the College of Dentistry, growing from six certificate residency programs, with an enrollment of only 36 students in 1979, to fourteen certificate programs and various fellowship programs. Enrollment is now over 140. In 1993, the college started master degree programs in endodontics, orthodontics, periodontics and prosthodontics, and continues today to grow. Follow this link for more information about UF's College of Dentistry graduate programs: http://admissions.dental.ufl.edu/advanced-graduate-programs/programs-application-process/
Complete faculty listings: Follow this link.

The College of Engineering is organized into a number of departments focusing on today's most pressing engineering questions. There is an interdisciplinary culture at the core of Gator Engineering, though, and researchers regularly collaborate with colleagues in departments and colleges beyond their own.

For more information, please see our website: http://www.engineering.ufl.edu

Departments and Programs within the College of Engineering

College of Engineering Courses

College of Health and Human Performance

Dear: M. Reid

Complete faculty listings: Follow this link.

Research and teaching in HHP has an impact on almost every aspect of the human condition. The college's four centers – the Florida Center for Health Promotion, Center for Exercise Science, and the Eric Friedholm Tourism Institute, as well as its three primary departments – Applied Physiology and Kinesiology, Health Education and Behavior, and Tourism, Recreation, and Sport Management Department – places the college firmly in a position to influence and improve an array of societal problems and challenges.

For more information about the College of Health and Human Performance, please see our website: http://hhp.ufl.edu

Departments and Programs within the College of Health and Human Performance

College of Health and Human Performance Courses

College of Journalism and Communications

Dear: D. McFarlin

Senior Associate Dean for Graduate Studies and Research: D. Treise

Graduate Coordinators:

(Advertising) J. R. Goodman
(Communication) M. Leslie
(Journalism) R. Rodgers
(Public Relations) M. A. Ferguson
(Soience/Health Communication) D. Treise
(Telecommunication) J. Cleary

Complete faculty listings: Follow this link.

Through the Division of Graduate Studies and Research, the College of Journalism and Communications offers the Doctor of Philosophy degree, the Master of Arts in Mass Communication (thesis or project option) degree, and the Master of Advertising (thesis) degree. Requirements for these degrees are given in the Graduate Degree section of this catalog.

Doctoral students work closely with faculty members in research leading to a dissertation embodying a humanities, law/policy, or social sciences approach. Emphases within these approaches for which faculty members have expertise include advertising, journalism, public relations, telecommunication, international communication, and political communication. Details of doctoral faculty research interests and other aspects of the program are given in the College's Ph.D. Handbook.

Master's students may complete a thesis in advertising, journalism, public relations, telecommunication, international communication, or science/health communication. With the approval of the Sr. Associate Dean of Graduate Studies and Research and other faculty members, master's students may develop an individualized program of study, with thesis, to meet their specific needs and interests. A project in lieu of thesis option is available for some specializations.

Mass Communication/Law joint degree programs: Programs leading to the Master of Arts in Mass Communication or the Doctor of Philosophy and the Juris Doctor are offered under the joint auspices of the College of Journalism and Communications and the College of Law. For students interested in scholarship or practice of communication law or in reporting on the law, the programs offer the opportunity to blend relevant work from the two colleges. Students must meet the entrance requirements of both colleges. A thesis or dissertation is required. Interested students should apply for admission to both the Graduate School and the College of Law, noting on the applications the joint nature of the admission requests. Further information on the programs and on application procedures is available from the Holland Law Center and from the Division of Graduate Studies and Research of the College of Journalism and Communications.

General admission: Admission is granted to applicants with and without background in mass communication. Students without academic preparation in mass communication or appropriate experience may be required to take articulation work. These courses are taken concurrently with general graduate courses, starting in the first term of registration. Some degree plans require a background course in statistics. Students who have satisfied that requirement must provide written verification. Including articulation courses, the master's degree normally can be earned in one and one-half or two years of full-time study. Doctoral studies require three or more years of full-time study and research. Students who may require articulation courses should contact the Sr. Associate Dean of Graduate Studies and Research.

Grading policy: Any student whose cumulative GPA falls below 3.0 will be placed on probation. Any doctoral student who receives one grade below B- or a Master's student who receives one grade below C+ will be placed on probation, with the exception of courses taken from the Levin College of Law. For these courses, any student receiving one grade below C in any course from the Levin College of Law will be placed on probation. A requirement of the probation is that the student must achieve or maintain a cumulative grade point average of 3.0 or higher at the end of the next academic term in residence. A student who fails to satisfy the requirement will be suspended. A Doctoral student who accumulates two grades below "B"- or a Master's student who accumulates two grades below C+ during graduate studies will be suspended, as will a student who receives one grade of "D+" or lower at any time. Students will be allowed only one suspension.

Combined degree program: The College offers a combined bachelor's/master's program. For information, contact the Associate Dean for Graduate Studies.

For additional information, please see our website: http://www.jou.ufl.edu/grad

College of Journalism and Mass Communication Courses

Fredric G. Levin College of Law

Dear: R. Jerry II

Complete faculty listings: Follow this link.

The University of Florida Levin College of Law has a longstanding tradition of producing national leaders, including current American Bar Association President Stephen Zack, and is one of the nation's best values in legal education.
For more information, please see our website: http://www.law.ufl.edu

Departments and Programs within Levin College of Law

Levin College of Law Courses

College of Liberal Arts and Sciences

Interim Dean: David Richardson

Complete faculty listings: Follow this link.

The College of Liberal Arts and Sciences constitutes the intellectual core of the university. Its principal mission is to lead the academic quest to understand our place in the universe, and to help shape our society and environment.

For more information, please see our website: http://www.clas.ufl.edu

Departments and Programs within the College of Liberal Arts and Sciences

College of Liberal Arts and Sciences Courses

College of Medicine

Dean: M.L. Good

Complete faculty listings: Follow this link.

The College of Medicine offers training opportunities leading to either the Doctor of Philosophy or Master of Science degree in medical sciences. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog. For more information, please see our website http://med.ufl.edu.

The interdisciplinary program (IDP) in biomedical sciences is the major focus leading to the Doctor of Philosophy degree. Other graduate courses and programs are listed under departmental headings. For further information, visit http://idp.med.ufl.edu.

Departments and Programs within the College of Medicine

College of Medicine Courses

College of Nursing

Dean: A.M. McDaniel

Complete faculty listings: Follow this link.

The nationally ranked College of Nursing offers the graduate degrees of Master of Science in Nursing, Doctor of Nursing Practice, and Doctor of Philosophy in nursing sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog. Students may request special review by the College of Nursing Admissions Committee if they believe they are strong candidates for graduate study but do not fully meet all criteria.

The College offers the master's degree and post-master's certification for nurse midwifery and the following nurse practitioner roles: adult acute care, adult, family, pediatric, and neonatal. Additional offerings include:

- Psychiatric/mental clinical nurse specialists/nurse practitioners
- Clinical Nurse Leader

For additional information about the Nursing programs, visit http://www.nursing.ufl.edu or call (352) 273-6331.

College of Nursing Courses

College of Pharmacy

Dean: J. Johnson

Complete faculty listings: Follow this link.

The College of Pharmacy offers the Doctor of Philosophy and the Master of Science in Pharmacy degrees in the pharmaceutical sciences, with concentrations in medicinal chemistry, pharmacodynamics, pharmaceutical outcomes and policy, and pharmacy which includes pharmaceutics. There are two additional concentrations in the Master of Science in Pharmacy program in pharmaceutical sciences: forensic drug chemistry, and forensic serology and DNA. Both offered in a distance-learning, nontesis format. Complete descriptions of the minimum requirements for the M.S.P. and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

The Graduate Faculty and courses offered are listed under department headings in this catalog. The courses listed below consist of seminar, supervised teaching and research, and research for thesis or doctoral dissertation. These courses are offered in each of the departments.

Students who wish to pursue graduate studies in the College of Pharmacy must have an undergraduate degree in pharmacy, chemistry, biology, or related sciences.

Satisfactory completion of a thesis or dissertation based on research is a requirement for a graduate degree in the pharmaceutical sciences.

Inquiries regarding applications and general information about the graduate programs are processed through the Office of Research and Graduate Studies, College of Pharmacy, P.O. Box 100484, Health Science Center.

For more information, please see our website: http://pharmacy.ufl.edu.
College of Public Health and Health Professions

Dean: Michael G. Perri
Executive Associate Dean: Stephanie L. Hanson

Complete faculty listings: Follow this link.

The University of Florida College of Public Health and Health Professions has established a new educational model that focuses on the integration of public health problem-solving and individual patient care. The college's mission is to preserve, promote and improve the health and well-being of populations, communities and individuals. To fulfill this mission, we foster collaborations among public health and the health professions in education, research and service.

For more information, please see our website: http://phhp.ufl.edu

Departments and Programs within the College of Public Health and Health Professions
College of Public Health and Health Professions Courses

College of Veterinary Medicine

Dean: G. F. Hoffsis

Complete faculty listings: Follow this link.

The UF College of Veterinary Medicine is the state's only veterinary college. UF's College of Veterinary Medicine offers comprehensive services to the public through teaching, research, extension and state-of-the-art patient care.

For more information, please see our website: http://www.vetmed.ufl.edu

Departments and Programs within the College of Veterinary Medicine
College of Veterinary Medicine Courses

Colleges and Departments

University of Florida

College of Agricultural and Life Sciences

Dean: Elaine Turner

Complete faculty listings: Follow this link.

The College of Agricultural and Life Sciences offers academic programs and grants advanced degrees in 17 departments and the Schools of Forest Resources and Conservation, and Natural Resources and Environment. These academic units are all a part of the Institute of Food and Agricultural Sciences (IFAS). Additional components of IFAS include 16 research centers located throughout the state and cooperative extension offices in each of the 67 counties of the state.

The following courses are offered under the supervision of the office of the dean by an interdisciplinary faculty and deal with material of concern to two or more IFAS academic units. The courses are also open to students of other colleges, with the permission of the course instructor.

For more information, please see our website: http://cals.ufl.edu

Departments and Programs within the College of Agricultural and Life Sciences
College of Agricultural and Life Sciences Courses

Agricultural and Biological Engineering Department

Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

Agricultural Education and Communication Department
The Department of Agricultural Education and Communication offers the degrees of Master of Science and Doctor of Philosophy. Graduate students who obtain a degree in Agricultural Education and Communication will focus their study in one of four areas of specialization. The areas of specialization are agricultural communication, agricultural education, extension education, and leadership development. These degree programs are individually tailored to meet the student's unique needs for professional development. The requirements for each degree are described in the Graduate Degrees section of the University of Florida Graduate Catalog. More information about our program can be found by following the link below.

Agronomy Department

Chair: R. A. Gilbert
Graduate Coordinator: L. E. Sollenberger

The Agronomy Department offers the degrees of Doctor of Philosophy and Master of Science (thesis and non-thesis options) in agronomy with specializations in plant physiology, ecology, management and nutrition, weed science (terrestrial and aquatic), and plant breeding and genetics. Requirements for these degrees are given in the Graduate Degrees section of this catalog. Graduate programs emphasize the development and subsequent application of basic principles in each specialization to the management of agricultural and natural ecosystems in Florida and throughout the world. The continuing need for increased plant production for food, fiber and energy to meet the demands of a rapidly escalating population is reflected in departmental research programs. When compatible with a student's program and permitted by prevailing circumstances, some thesis and dissertation research may be conducted wholly or in part in one or more of several countries.

Students seeking a graduate program in the Agronomy Department should hold a Bachelor of Science degree from an accredited college or university with a major in an area of plant science, or closely related discipline. A science background with basic courses in biology, botany, mathematics, chemistry, and physics is required of new graduate students.

Animal Molecular and Cellular Biology Department

Director: P. J. Hansen

For more information about the program, contact P. J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program’s website at http://www.animal.ufl.edu/amcb/.

Animal Sciences Department

Chair: G. E. Dahl
Graduate Coordinator: G. Adesogan

Animal Sciences is an academic department of the College of Agriculture and Life Sciences (CALS), a unit of the Institute of Food and Agricultural Sciences (IFAS). Creating new solutions to tomorrow's problems underlies everything we do in the Animal Sciences Program. In the areas of teaching, research, and extension, our faculty integrates the most modern technologies available with personal expertise and attention to the needs of students and our industry. For more information about the Animal Sciences program, please follow the link below.

Entomology and Nematology Department

College of Agricultural and Life Sciences

Chair: John L. Capinera.
Graduate Coordinator: Heather J. McAuslane.

The Entomology and Nematology Department offers the Master of Science (thesis and non-thesis options) and Doctor of Philosophy degrees in entomology and nematology with the following specializations: entomology, nematology, and pest management. Minimum requirements for the M.S. and Ph.D. degrees are described in the Graduate Degrees section of this catalog. The Department also offers a cooperative Doctor of Philosophy degree with Florida A&M University and distance education courses leading to the M.S. degree. Members of the Graduate Faculty include the department resident faculty, faculty located on University of Florida campuses away from Gainesville, scientists with other State of Florida agencies such as the Division of Plant Industry and Florida Department of Agriculture and Consumer Services, and scientists of the U.S. Department of Agriculture. The Graduate Faculty is qualified to direct graduate students in all specialties of entomology, nematology, and acarology.

New graduate students should have backgrounds in biology, chemistry, physics, and mathematics. Minor deficiencies may be made up after entering graduate school.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

For more information, please see the program page below, and visit our website: http://entnemdept.ufl.edu.

Family, Youth, and Community Sciences Department
Interim Chair: Tracy Irani  
Graduate Coordinator: Larry F. Forthun

Complete faculty listing by department: Follow this link

The FYCS graduate program is an interdisciplinary applied social science program that prepares students for advanced degrees (e.g., Ph.D.) and careers in such areas as family and youth services, Extension and community-based education, community development and nonprofit management, program planning and evaluation, and social policy. Graduates find careers in both the public and private sectors including:

- Child and Youth Development in areas such as juvenile justice, dropout prevention programs, recreational and camp programs, and youth ministry;
- Community Development Practice in local and regional government, private nonprofit organizations (such as chambers of commerce; local development corporations, and local, national and international foundations) and citizen's groups;
- Nonprofit Organizational Management, such as management of community based, nonprofit organizations;
- Family and Social Services, such as family preservation programs, assistance for abused and neglected children and other public assistance programs; and
- Cooperative Extension Service in such areas as youth development, family and consumer sciences and community development.

Contact the graduate coordinator for more information.

**Food and Resource Economics Department**

Chair: Susan S. Percival  
Graduate Coordinators: Harry S. Sireen (M.S. in Food Science and Human Nutrition / Ph.D. in Food Science), James F. Collins (Ph.D. in Nutritional Sciences)

Complete faculty listing by department: Follow this link

The Food and Resource Economics Department offers the Master of Agribusiness (M.AB) (non-thesis), Master of Science with Concentration in Agribusiness (M.S.AB.) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Department participates in programs with the Center for Latin American Studies, the Center for African Studies, the Center for Tropical Agriculture, the School of Natural Resources and Environment, the College of Law, and the Florida Sea Grant College Program.

The Department programs reflect the diversity of Florida's agriculture which has more than fifty major commodities. With over thirty faculty involved in a full range of research, extension, and teaching programs in areas including Agricultural Marketing, International Trade, Policy, Production/Farm Management, International Development, Marine Economics, Natural Resource and Environmental Economics, Community/Regional Development and Labor Economics. In addition to the main campus location, the department has faculty at research centers throughout the state.

Several members of the faculty have garnered international reputations in diverse fields such as trade policy, generic advertising, citrus economics, sugar policy, business retention and expansion, leadership development, consumer attitudes towards genetically modified food, and dairy marketing.

The Department offers a combined bachelor's/master's degree program for the Master of Science and Master of Science with Concentration in Agribusiness. Contact the Graduate Program Office in 1170 McCarty Hall for information.

For more information, please see the program pages below, and see our website: [http://www.fred.ifas.ufl.edu](http://www.fred.ifas.ufl.edu).

**Food Science and Human Nutrition Department**

Chair: Susan S. Percival  
Graduate Coordinators: Harry S. Sireen (M.S. in Food Science and Human Nutrition / Ph.D. in Food Science), James F. Collins (Ph.D. in Nutritional Sciences)

Complete faculty listing by department: Follow this link

The Food Science and Human Nutrition Department (FSHN) is one of the world's largest combined academic programs where food science, nutritional sciences, and dietetics are all studied within one department. FSHN has nearly 30 full-time faculty members, 80 graduate assistants, and close to 1,000 undergraduate students. Our programs are accredited by the Institute of Food Technologists (IFT) and the Academy of Nutrition and Dietetics. After completing undergraduate degrees, our students typically move on to professional employment, further education or training in food or nutrition graduate programs, or on to professional school programs. We have a strong record of excellent placement of our graduate students in industry and professional organization employment positions, as faculty members at colleges and universities, or in postdoctoral training experiences.

Our faculty has trained at institutions from around the world; they have been widely successful in their teaching, research, and extension efforts. Throughout our programs in food science, nutrition, and dietetics, our faculty is recognized nationally and internationally as experts in their respective fields.

The Food Science and Human Nutrition Department offers programs leading to the degrees of Master of Science in Food Science and Human Nutrition, Doctor of Philosophy in Food Science, and Doctor of Philosophy in Nutritional Sciences (offered under the auspices of the [Center for Nutritional Sciences](http://ifs.fshn.ifas.ufl.edu)). Minimum requirements for these degrees are located in the Graduate Degrees section of this catalog.

For more information please click the links to the program pages below, or see our website: [http://ifs.fshn.ifas.ufl.edu](http://ifs.fshn.ifas.ufl.edu).

**Horticultural Sciences Department**

Chair: K.M. Folta (Interim Chair, Horticultural Sciences) and W. Mackay (Environmental Horticulture)  
Graduate Coordinator: G. A. Moore (Horticultural Sciences) and L. Trenholm (Environmental Horticulture)

Complete faculty listing: Follow this link

The Horticultural Sciences Department Graduate Program at the University of Florida has a wide array of opportunities for graduate study.

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HSE) and Horticultural Sciences (HS) departments and offers graduate
Microbiology and Cell Science Department

Chair: E. Triplett.
Graduate Coordinator: Tony Romeo.

Complete faculty listing by department: Follow this link.

Graduate study is offered leading to the Master of Science and Doctor of Philosophy degrees in microbiology and cell science, with emphasis in one or more of the disciplines of biochemistry, cell biology, and microbiology.

Requirements for these degrees are provided in the Graduate Degrees section of this catalog and also at the Department webpage: http://microcell.ufl.edu/

Instruction and guidance are collaborative among faculty in the Colleges of Agricultural and Life Sciences, Liberal Arts and Sciences, and Medicine.

Research spans broad areas in the cellular and molecular aspects of bacterial, plant, and animal life functions: Areas of research include microbial biochemistry, biotechnology; biomass conversion; genetic and metabolic regulation; environmental microbiology; cell biology; molecular biology; molecular genetics; genomics and bioinformatics; immunology; virology; parasitology; host-pathogen interactions; cellular ultrastructure.

Preliminary examination requirements for admission to graduate study, in addition to those of the Graduate School, are a broad educational background including mathematics, physics, and chemistry through organic analysis, and physical chemistry; basic courses in biology, botany, and/or zoology; and at least one course in microbiology and biochemistry. An undergraduate major in biochemistry, physical or chemical science, engineering, or general biology may be an acceptable alternative to a degree in microbiology or cell science. Receipt of an advanced degree requires detailed knowledge in microbiology, biochemistry, and chemistry; undergraduate deficiencies may necessitate additional course work prior to entry into the graduate program.

In addition, the Microbiology and Cell Science Department also offers a combined B.S./M.S. program that allows qualified students to earn both the Bachelor's and Master's degrees with 12 credit hours of jointly counted course work. This program is considered a "4/1" because students may be awarded both degrees within a five-year period. For further information on this program, follow this link: http://microcell.ufl.edu/graduate-program/combined-degree-program/

Plant Molecular and Cellular Biology Department

College of Agricultural and Life Sciences
College of Liberal Arts and Sciences
College of Medicine

Complete faculty listing by department: Follow this link.

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology within the colleges of Agriculture and Life Sciences, Medicine, and Liberal Arts and Sciences.

Plant Pathology Department

Chair: R. Loria
Graduate Coordinators: J. Jones

Complete faculty listing by department: Follow this link.

The Department of Plant Pathology offers graduate studies leading to the Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees. The Department also participates in the Doctor of Plant Medicine interdisciplinary professional degree.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

School of Forest Resources and Conservation

Complete faculty listing by department: Follow this link.

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Joint program: Students may simultaneously earn a juris doctorate from the College of Law and a graduate degree (M.F.R.C., M.S., or Ph.D.) in Forest Resources and Conservation.

Combined program: The School offers a combined bachelor's/master's degree program, which allows qualified students to earn both a bachelor's degree and a master's degree with a savings
of 1 semester. Ph.D. students may pursue a co-major with the Department of Statistics (see below).

**Concentration in geomatics:** Students completing 15 or more credits with an SUR designation, as part of an SFRC graduate degree, may earn the concentration in geomatics. Geomatics is the collection, analysis, and management of spatial information and includes such fields as surveying, mapping, land tenure, cadastral systems, geographic information systems, and remote sensing.

**Concentration in ecological restoration:** This concentration is available to M.S. non-thesis students. To earn this concentration a student must complete Ecosystem Restoration Principles and Practice and four of the following courses: Ecological Distribution and Management of Invasive Plants, Ecology and Restoration of Invaded Ecosystems, Ecology and Restoration of Longleaf Pine Ecosystem, Watershed Restoration and Management, Natural Resource Policy and Administration, or Agroforestry in the Southeastern U.S. Ecological restoration seeks to return ecosystems to a close approximation of condition before a disturbance.

**Statistics co-major:** Ph.D. students with the School may elect the co-major offered jointly with the Department of Statistics. Students focusing on forest genetics, tree improvement, and other statistics-intensive aspects of natural resource management are potential candidates for this option.

**Certificates:** The School administers the Graduate Certificate in Agroforestry, and SFRC students regularly earn certificates in Geographic Information Systems and in Environmental Education and Communication. Requirements are described under *Interdisciplinary Graduate Certificates and Concentrations* in this catalog.

For additional information, please visit the School's web page at [http://sfrc.ufl.edu](http://sfrc.ufl.edu).

For details on what terms courses will be offered, please visit [http://sfrc.ufl.edu/gradcourses.html](http://sfrc.ufl.edu/gradcourses.html).

**School of Natural Resources and Environment**

**Graduate coordinator:** T. Frazier

**Complete faculty listing by department:** [Follow this link](http://sfrc.ufl.edu).

The University of Florida School of Natural Resources and Environment offers interdisciplinary coursework in the basic and applied science of ecology, the related social sciences, and sustainability, leading to M.S. and Ph.D. degrees. Choose from about 450 courses, 280 faculty advisors, and 44 participating departments. Research areas of ecology graduate students range across natural resource ecology, environmental policy and management, and sustainable development.

Environmental problems are fundamentally human problems and should be understood in terms of human motivations and actions in a biophysical context. Their solution requires holistic thinking about dynamic ecological systems and the social, economic, and political forces driving human action. To this end, the goal of the Interdisciplinary Ecology graduate program is to provide advanced training in ecosystem thinking and the main theories and methodologies of the biophysical and social sciences to foster integrative approaches to complex real-world problems. Interdisciplinary Ecology students are intensely interested in the sustainability problem, and they welcome the challenge of addressing it through more than one traditional discipline.

**Soil and Water Science Department**

**Chair:** K. Ramesh Reddy

**Graduate Coordinator:** Max Teplitski

**Complete faculty listing by department:** [Follow this link](http://soils.ifas.ufl.edu/academics/degree-certificates.shtml).

The Soil and Water Science Department offers Master of Science (thesis or professional non-thesis option) and Doctor of Philosophy degrees in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The Department also offers Master of Science (thesis or professional option) specialization in environmental science via distance education for place bound students ([http://soils.ifas.ufl.edu/distance](http://soils.ifas.ufl.edu/distance)). Requirements for the M.S. and Ph.D. degrees are given in the [Graduate Degrees section of this catalog](http://soils.ifas.ufl.edu/academics/degree-certificates.shtml).

Soil and Water are vital resources in urban, agricultural, and natural ecosystems. The Soil and Water Science Department (SWSD) provides highly visible leadership in teaching, research, and extension outreach programs as related to improving the productivity of agriculture with environmentally sound management practices, improving water quality, and protection and conservation of natural resources. Our department is one of the few in the nation that offers a comprehensive research and educational programs (molecular to landscape level) involving terrestrial, wetlands and aquatic ecosystems of the landscape. In addition to traditional on-campus educational programs, we use innovative e-technologies to offer educational programs to place-bound students. Our graduates and postdoctoral fellows are well placed at universities, state and federal agencies, and private industry.

The SWSD programs are designed to meet the changing needs of our clientele at state, national and international levels. To meet new challenges and explore new opportunities, the SWSD's research, teaching, and extension programs are focused in five areas, with broader implication to water quality, carbon sequestration, greenhouse gases, and climate change:

- Nutrient, Pesticide, and Waste Management
- Soil, Water, and Aquifer Remediation
- Carbon Dynamics and Ecosystem Services
- Landscape Analysis and Modeling
- Wetlands and Aquatic Ecosystems

The Department offers graduate level certificates in Biodegradation and Remediation, Sustainable Land Resource and Nutrient Management, Soil Ecosystem Services, and Wetland and Water Resource Management for both on-campus students and via distance education for place bound students ([http://soils.ifas.ufl.edu/academics/degree-certificates.shtml](http://soils.ifas.ufl.edu/academics/degree-certificates.shtml)).

An additional option offered by the Department is a combined bachelor/master's degree program that permits a B.S in Soil and Water Science or Interdisciplinary Studies – Environmental Management in Agriculture and Natural Resources and M.S. Degree to be completed in five years. Contact the graduate coordinator for more information.

For more information, please see the program page below and our website: [http://soils.ifas.ufl.edu](http://soils.ifas.ufl.edu).

**Wildlife Ecology and Conservation Department**

**College of Agricultural and Life Sciences**

**Chair:** Eric C. Hellgren

**Graduate Coordinator:** Kathryn E. Skeving

**Complete faculty listing by department:** [Follow this link](http://soils.ifas.ufl.edu/academics/degree-certificates.shtml).

The Department of Wildlife Ecology and Conservation offers Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees in wildlife ecology and conservation. Requirements for these degrees are described in the [Graduate Degrees section of this catalog](http://soils.ifas.ufl.edu/academics/degree-certificates.shtml).
Program emphases include wildlife biology, ecology, and management; landscape ecology and restoration; human dimensions; tropical and international conservation; and conservation education. Graduate students should have appropriate undergraduate training in the biological, social, and physical sciences including physics, chemistry, and mathematics. Students with inadequate backgrounds may be required to take (without credit at the graduate level) remedial undergraduate courses pertinent to their fields of interest.

For more information, please see our website: [http://www.wec.ufl.edu](http://www.wec.ufl.edu).

**College of the Arts**

Dear: L. Lavelli

Complete faculty listings: [Follow this link](http://www.wec.ufl.edu/).

The arts program at UF began in the 1920s to serve the state of Florida's needs. Meeting these needs over the past 80 years has propelled the college to excel on a national and international level and has defined its mission to provide instruction for students seeking professional careers in the arts. In addition to providing rich educational experiences and programs in the arts, the college brings national and international recognition to the university through the high-level professionalism associated with the faculty and alumni, and the competence of students and graduates.

For more information about the College of the Arts, please see our website: [http://www.arts.ufl.edu](http://www.arts.ufl.edu).

**School of Art and Art History**

College of the Arts

Director: Richard C. Heipp
Graduate Coordinator: Patrick Grigsby
Complete faculty listing: [Follow this link](http://www.arts.ufl.edu/).

The School of Art and Art History offers the M.F.A. degree in art with specializations in art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. The school also offers Master of Arts degrees in art education, art history, and museology (museum studies) and the Doctor of Philosophy degree in art history. Requirements for these degrees can be found in the [Graduate Degrees](http://www.arts.ufl.edu/graduate-degrees) section of this catalog, and information about each of these graduate programs can be found at the links below.

For more information, please see our website: [http://www.arts.ufl.edu/welcome/art](http://www.arts.ufl.edu/welcome/art).

**Digital Worlds Institute**

College of the Arts

Director: James C. Oliverio
Graduate Coordinator: Marko Srcejdrzic
Complete faculty listing: [Follow this link](http://www.digitalworlds.ufl.edu/).

The Digital Worlds Institute exists to nurture leading-edge education between the arts, communications, engineering and the sciences, utilizing advanced media systems and digital culture. By bringing together the diverse talents of University of Florida faculty, students, and staff in a multifaceted collaborative environment, the Institute serves as a platform for interdisciplinary research and teaching that would not have occurred within the confines of any one college or department. Through the use of interactive tools and technologies, the Institute promotes transdisciplinary creativity across classrooms, continents and cultures.

For more information, please see the program page below and our website: [http://www.digitalworlds.ufl.edu](http://www.digitalworlds.ufl.edu).

**Music Department**

College of the Arts

Director: J. A. Duff.
Graduate Coordinator: L. S. Odom.
Complete faculty listing by department: [Follow this link](http://www.music.ufl.edu/).

The School of Music offers programs leading to the Master of Music degree in music and music education. Program concentrations in music include choral conducting, composition, instrumental conducting, musicology, ethnomusicology, music theory, performance, and sacred music. In addition, the School of Music offers the Doctor of Philosophy degree in music and in music education.

The Ph.D. program in music education emphasizes college music teaching. The Ph.D. program in music includes concentrations in:

- Music history and literature, with options in traditional musicology and ethnomusicology
- Composition, with options in acoustic and electroacoustic specialization

All Ph.D. students are encouraged to find opportunities to teach and lecture in their specializations; and with the assistance of their principal professors, to prepare papers, workshops, and clinics for presentation at professional conferences, in the public schools, and at colleges and universities. Students also are encouraged to publish their research in appropriate journals. Minimum requirements for the M.M. and Ph.D. degrees are given in the General Information section of this catalog. The week before classes begin, students must take placement examinations in music history and in music theory. Students wanting to study privately in a performance studio must be auditioned and accepted by the appropriate area faculty. Voice students must demonstrate appropriate skills in language and diction. All deficiencies must be remedied.
For more information, please see the program pages below and our website: [http://arts.ufl.edu/welcome/music](http://arts.ufl.edu/welcome/music).

**School of Theatre and Dance**

Director: J. Dickey  
Graduate Performance Program Coordinator: Ralf Remshardt  
Graduate Design Program Coordinator: S. Kaye

Complete faculty listing by department: [Follow this link](http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp).

The graduate program offered by the School of Theatre and Dance leads to the degree of Master of Fine Arts in Theatre. Minimum requirements for this degree are given in the [Graduate Degrees section](http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp) of this catalog.

The M.F.A. degree prepares students for professional entry in acting, production, or teaching. Placement in the M.F.A. program is determined by audition/portfolio review, academic credentials, and personal interview. Candidates for admission should have adequate training in theatre. Deficiencies may be corrected before beginning graduate study.

The program emphasizes the study and practice of theatre as an art and discipline. Students of acting and design study concepts of theatre together while working in their areas of specialization. Focus is on the collaboration and synthesis of theater artistry. Each incoming class is composed of approximately 12 to 18 students in acting and all design areas.

The student's artistic and academic progress will be reviewed at the end of each semester. The [School of Theatre Handbook](http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp) gives details on the form and focus of each review. This information is online at [http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp](http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp).

During the final year of study, each student must successfully complete the comprehensive examination and oral defense. The project in lieu of thesis includes research, analysis, rehearsal, and evaluation. Development and execution of the project includes public performance (acting or design). The written document and oral defense of the project which follow must demonstrate the ability to communicate the creative process.

Graduate acting students audition for all departmental productions.

**Warrington College of Business Administration**

Dear: Jamie Kraft

Complete faculty listing: [Follow this link](http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp).

Graduate degrees offered by the Warrington College of Business Administration are the Doctor of Philosophy with major programs in business administration and in economics; the Master of Arts with major programs in economics, in international business, and in business administration with concentrations in insurance and marketing; the Master of Science with major programs in Information Systems and Operations Management (with a concentration in supply chain management), in finance, in management, in real estate, and in business administration, including concentrations in entrepreneurship, insurance, marketing and retail; the Master of Business Administration; and the Master of Accounting. Fields of concentration and requirements for the M.B.A. are given under [Graduate Degrees](http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp) of this catalog, as well as admission and degree requirements for the Ph.D., M.A., and M.S. degrees.

Master of Arts: The M.A. degree with a major in international business is designed to provide students with quantitative and application skills to be used in an international business setting. The program provides practical training with a brief study trip to a major international city, where students are required to participate actively in business tours and lectures. The students also have the opportunity to gain credits for the degree by studying at one or more foreign universities for a period of 2 weeks to 8 months.

Master of Science: The M.S. degree with a major in management targets students from nongovernment backgrounds who would like to gain "core" business knowledge and application skills. Requirements span the traditional business disciplines to produce a sound knowledge base for students seeking a solid business foundation. Students are required to take such courses as accounting, finance, economics, entrepreneurship, management, marketing, organizational behavior, and statistics. Typical positions for graduates include managers, consultants, and analysts.

Doctor of Philosophy: For the Ph.D. in business administration, students must have a concentration in one of the following:

- Accounting
- Information Systems and Operation Management
- Finance
- Insurance
- Management
- Marketing
- Real estate and urban analysis.

Specific requirements for the various departments and specialties are given in the [Graduate Degrees](http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp) section of this catalog. (Requirements for the Ph.D. degree in economics are described under the Economics section of the catalog.) All candidates for the Ph.D. in business administration must satisfy the following general requirements:

**Breadth requirement:** All applicants for Ph.D. in the business administration program are expected to have completed prior business-related course work at either the advanced undergraduate or graduate level. Students entering without prior work are required to take a minimum of three graduate courses in at least two fields other than their chosen area of concentration. Most often, the appropriate courses will be found in the M.B.A. first-year core; the particular courses to be taken by a student will be decided in consultation with the student's academic adviser. After a student enters the Ph.D. program, the courses taken to satisfy the breadth requirement must be taken in the College of Business Administration.

**Research foundations requirement:** All students must complete a six-course research skills sequence that prepares them for scholarly research in their chosen area of concentration. Research foundations are defined as essential methodological tools (e.g., statistics, quantitative analysis) and/or substantive content domains (e.g., psychology, economics) outside the student's major field that are considered essential to conducting high quality research in the chosen field. The specific research skills required by each area of concentration can be found in the field descriptions in this Catalog.

Other requirements include satisfactory completion of graduate course work in the major field of concentration, as well as one or two minor fields designed to add depth to the student's research training. Minor courses are selected by the student in consultation with his or her advisory committee, and may be within or outside the College of Business Administration. Other requirements for the Ph.D. are given in the [Graduate Degrees](http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp) section of this catalog.

**Departments and Programs within Warrington College of Business Administration**

Warrington College of Business Courses

**Fisher School of Accounting**

Warrington College of Business Administration

Director: Gary A. McGill
Graduate Coordinators: Dominique DeSantiago, Stephen Asare
Complete faculty listing by department: Follow this link.

As a professional school in a major public research university, the Fisher School of Accounting (FSOA) is committed to scholarly research, teaching, and service to advance knowledge and prepare future leaders for business, professional, and academic careers.

The Fisher School of Accounting offers graduate work leading to the Master of Accounting (M.Acc.) degree with a major in accounting, and the Ph.D. degree with a major in business administration and an accounting concentration. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below, or visit our website: http://warrington.ufl.edu/accounting.

Economics Department

Chair: R. D. Blair
Graduate Coordinator: S. M. Slutsky.
Complete faculty listing: Follow this link.

The department offers the Master of Arts (thesis and nonthesis option) and Doctor of Philosophy degrees in economics with specializations in econometrics, economic theory, industrial organization, international economics, monetary economics, and public finance.

**MA requirements:** A minimum of 36 credits of course work is required for the M.A. with and without thesis. A minimum of six credits of the research course ECO 6971 may be included for a master’s degree with thesis. The following core courses are required: ECO 7408 and ECO 7404 or equivalent, ECO 7415 or equivalent, ECO 7115, and ECO 7206.

**Ph.D. requirements:** Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) an acceptable score on the GRE, and (c) for nonnative speakers of English, an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

All core courses must be completed in the first year. In addition, students must complete courses in three fields of specializations and pass qualifying examinations in two of those fields. Complete descriptions of the minimum requirements for the M.A. and Ph.D. degrees are provided elsewhere in this catalog.

Finance, Insurance, and Real Estate Department

Chair: Michael D. Ryngaert
Graduate Coordinator: Mahen Nimalendran
Complete faculty listing: Follow this link.

The Department of Finance, Insurance, and Real Estate offers graduate work leading to the Master of Science degree with major programs in finance and real estate; the Master of Science in Entrepreneurship (M.S.E.); and the Doctor of Philosophy degree in business administration with a concentration in finance, insurance, quantitative analysis, or real estate. Complete descriptions of the minimum requirements for the M.S., M.S.E, and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

Finance, Real Estate, and Entrepreneurship are also available as concentrations within the M.B.A program. For information about the M.B.A. program, please consult that listing in the Graduate Degrees section.

For more information see the program pages below, and visit our website: http://warrington.ufl.edu/departments/fire.

Information Systems and Operations Management Department

Warrington College of Business Administration

Chair: Haldun Aytug
Graduate Coordinator: Praveen Pathak
Complete faculty listing: Follow this link.

The primary mission of the Department of Information Systems & Operations Management is a commitment to scholarly research, teaching and service to advance the state of knowledge in information systems and supply chain management and to train future leaders for professional and academic careers.

The Department offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Combined Bachelor/Master of Science: The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.

For more information, please see the program pages below and our website: http://warrington.ufl.edu/departments/isom.

Management Department

Warrington College of Business Administration

Chair: Robert E. Thomas
Graduate Coordinator: Amir Erez
Complete faculty listing: Follow this link.

The Management Department offers graduate work leading to a Ph.D. degree with a major in Business Administration and a concentration in Management; a Master of Business Administration degree with a concentration in Management; a Master of Science degree with a major in Management; and a Master of International Business (M.I.B.). Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees Section of this catalog.
The Department participates in combined bachelor's/master's degree programs for the Master of International Business (M.I.B.) and Master of Science (M.S.) with a major in management. The Master of International Business is open to students pursuing a bachelor's degree in a business discipline or minor in business administration. The M.S. with a major in management program is only open to non-business majors. Contact the graduate coordinator for information.

For more information, please see the program pages below and our website: [http://warrington.ufl.edu/departments/mgt](http://warrington.ufl.edu/departments/mgt).

**Marketing Department**

Chair: Joseph W. Alba  
Graduate Coordinator: Lyle A. Brenner  
Complete faculty listing: [Follow this link](http://warrington.ufl.edu/departments/mgt)

The Marketing Department at the University of Florida is a recognized leader in the discipline of marketing. For over a decade, our faculty has ranked as one of the most productive and influential in the field. Our faculty is known for conducting provocative, cutting-edge research that contributes both to the scientific understanding and practice of marketing. Our Ph.D. program has produced many leading researchers in the discipline. And the David F. Miller Center for Retailing Education and Research is known as one of the foremost centers for developing the science of retailing.

The Marketing Department offers graduate work leading to the Ph.D. degree in business administration, the M.S. degree in business administration, and a concentration in the Master of Business Administration (M.B.A.) program. Requirements for the M.B.A., M.S., and Ph.D. degrees are described in the [Graduate Degrees](http://warrington.ufl.edu/departments/mgt) section of this catalog.

For more information, please see our website: [http://warrington.ufl.edu/departments/mkt](http://warrington.ufl.edu/departments/mkt).

**College of Dentistry**

Interim Dean: Boyd Robinson  
Associate Dean & Director: Roberta Pileggi

Complete faculty listings: [Follow this link](http://warrington.ufl.edu/departments/mkt)

Advanced education has progressed over the years to be an integral component of the College of Dentistry, growing from six certificate residency programs, with an enrollment of only 36 students in 1979, to fourteen certificate programs and various fellowship programs. Enrollment is now over 140. In 1993, the college started master degree programs in endodontics, orthodontics, periodontics and prosthodontics, and continues today to grow.

Follow this link for more information about UF's College of Dentistry graduate programs: [http://admissions.dental.ufl.edu/advanced-graduate-programs/programs-application-process/](http://admissions.dental.ufl.edu/advanced-graduate-programs/programs-application-process/)

**Departments and Programs within the College of Dentistry**

**College of Dentistry Courses**

**College of Dentistry**

Endodontics Chair and Graduate Coordinator: Roberta Pileggi
Orthodontics Chair and Graduate Coordinator: Calogero Dolce
Periodontology Chair: Iramuddin Aukhil; Graduate Coordinator: Rodrigo Neiva
Restorative Dental Sciences Interim Chair: Williams Willis; Graduate Coordinator: Edgar O'Neill

Complete faculty listing: [Follow this link](http://warrington.ufl.edu/departments/mkt)

The College of Dentistry offers the Master of Science degree in dental sciences with concentrations in endodontics, orthodontics, periodontics, and prosthodontics. These concentrations include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include:

- Satisfactory completion of all course work
- Meeting the requirements for clinical certification in the respective dental specialty
- Thesis or project based on research.

Prerequisites for admission, in addition to those of the Graduate School, include:

- D.D.S. or D.M.D. degree
- Completion of Parts I and II of the American Dental Association's National Board of Dental Examinations.

The application deadline for Endodontics, Periodontics, and Prosthodontics is August 1

The application deadline of Orthodontics is September 2

Send applications to:

Master of Science Program,  
College of Dentistry,  
P.O. Box 100402,  
Health Science Center,  
University of Florida,  
Gainesville, FL 32610-0402

Requirements for the M.S. degree are provided in the [Graduate Degrees](http://warrington.ufl.edu/departments/mkt) section of this catalog.

For further information, see the Dental Science program link below.

**College of Design, Construction, and Planning**

Dean: C. Silver
Most states require individuals intending to become architects to hold an accredited degree. The National Architectural Accrediting Board acknowledges two types of degrees: the Bachelor of Architecture, which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 3-year, 3-year to 4-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Florida School of Architecture offers the following NAAB-accredited degree programs:

**Master of Architecture: (pre-professional degree + 52 graduate credits)**
Master of Architecture (professional degree + 30 graduate credits) Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits)

Master of Architecture (pre-professional degree + 52 graduate credits) : For those students who have a 4-year baccalaureate degree from an accredited architectural program, 2 years in residence (52 credits) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for both the thesis. ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or master's project. Course sequences in history and theory, technology, structures, and practice must also be completed.

Master of Architecture (professional degree + 30 graduate credits): For students who have a baccalaureate degree with an architecture or related major (interior design, landscape architecture) and who have completed 4 or 6 architecture or design studies courses, three years of residence (53 credits, approximately) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or master's project. Undergraduate courses 3000 and 4000 level in the major do not count toward the minimum requirements for the graduate degree.) Course sequences in history and theory, materials and methods, technology, structures, and practice must be completed.

Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits) : For students with a baccalaureate degree in a non-related academic area and have completed fewer than 4 design studies courses, 4 years of residence (112 credits, approximately) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 4071, ARC 4072, ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or project. Undergraduate courses 3000 and 4000 level in the major do not count toward the 52-hour minimum requirements for the graduate degree. Course sequences in history and theory, materials and methods, technology, structures, and practice must be completed.

Accredited 5-year professional base: For students with a baccalaureate degree in architecture from an accredited 5-year professional degree program, a 1-year degree program is available. In these cases, a specialized curriculum is developed that complements the needs of the applicant. Minimum registration is 30 credits; however, the minimum increase may include if transcript reviews show that further course work is needed to meet registration and curriculum requirements. ARC 6356 is a prerequisite for the thesis or master's project.

Most states require individuals intending to become architects to hold an accredited degree. The National Architectural Accrediting Board acknowledges two types of degrees: the Bachelor of Architecture and the Master of Architecture. It is important to note that the Bachelor of Architecture degree is a pre-professional degree and cannot be used as a direct path to licensure. To become a licensed architect, a professional degree in architecture is required.
Architecture (minimum 5 years of study) and the Master of Architecture (minimum 3 years of study after an unrelated bachelor's degree, or 2 years after a related pre-professional bachelor's degree). These professional degrees educate those who aspire to registration and licensure to practice as architects.

Student work: The College may retain student work for the purpose of record, exhibition, or instruction.

Master of Science in Architectural Studies: The M.S.A.S. is a nonprofessional degree for advanced investigations in specialized areas of architectural history, architectural pedagogy, theory, technology, design, preservation, or practice. Students with a bachelor's degree in any discipline from an accredited university are eligible to apply to this program; the proposed area of focus should be precisely defined in the application. This is a 3- to 4-semester program (32 hours minimum) that includes a thesis. (No more than 6 hours of ARC 6971 may be counted in the minimum credit hours for the degree.) Interdisciplinary study is encouraged. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design.

The School sponsors special curricula in architecture to enhance the academic program. Preservation Institute: Caribbean, Preservation Institute: Nantucket, and Vicenza Institute of Architecture (Italy) accepts students from the University of Florida, and also from academic circles throughout the United States and the world for year-round study. Any student in a graduate architecture program at the University of Florida may apply for one or more of these programs.

Requirements for the M.Arch., M.S.A.S., and Ph.D. degrees are described in the General Information section of this catalog.

The School also participates in a program granting an Interdisciplinary Concentration and Certificate in Sustainable Architecture. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

Applications: All applications for fall term graduate admission (including official transcripts, GRE scores, and TOEFL scores, if necessary) must be received by the Office of the Registrar by January 15. In addition to satisfying University requirements for admission, applicants are required to submit to the Graduate Program Assistant, School of Architecture, 231 ARCH, Box 115702, the following: a portfolio of their creative work; a scholarly statement of intent and objectives; and three letters of recommendation. This material must be received by January 15 to be considered for admission in the next fall term. Students may apply after the January 15 deadline but will only be considered if space becomes available. (Updates of portfolios are accepted after January 15; however, applications will not be considered until they are complete.)

The School reserves the right to retain student work for purposes of record, exhibition, or instruction. Field trips are required of all students; students should plan to have adequate funds available. It may be necessary to assess studio fees to defray costs of base maps and other generally used materials.

M.E. Rinker, Sr., School of Construction Management

Director: Robert Ries
Director of Master's Programs: Robert E. Minchin

Complete faculty listing: Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary doctoral program in design, construction, and planning. Areas of specialization in the program include architecture, construction management, interior design, landscape architecture, and urban and regional planning. Within the area of construction management, specialization options include sustainable construction, information systems, construction safety, affordable housing productivity, and human resource management. These specializations prepare students to assume college-level faculty positions and industry research positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115703.

The M.E. Rinker Sr. School offers courses leading to the degrees of Master of Science in Construction Management (thesis), Master of Construction Management (nonthesis), and Master of International Construction Management (nonthesis distance education program for experienced professionals). An individual plan of study is prepared for each student to assure that the student's goals are achieved within the broad policy guidelines of the Rinker School. Specialization may be in such areas as construction management, sustainable construction, information systems, construction safety, and construction law. Requirements for the M.I.C.M., M.S.C.M., M.I.C.M., and Ph.D. degrees are given in the General Information section of this catalog.

Master of Construction Management (M.C.M.) or Master of Science in Construction Management (M.S.C.M.): To be eligible for admission to the M.C.M. or M.S.C.M. programs, a student must hold a 4-year undergraduate degree in building construction or its equivalent in related fields. "Equivalent in related fields" should include studies in construction materials and methods, structures, and management. Students with deficiencies in these related fields may need longer residence for the master's degree, as they will be required to take specified basic courses to provide a foundation for advanced courses. There is no foreign language requirement.

No more than 3 credits of BCN 6971 may be used to satisfy the credit requirements for the M.S.C.M. degree without written permission of the Director of Master's Programs.

Master of International Construction Management (M.I.C.M.): This program prepares students to assume upper-level management responsibilities in a multinational company. To be eligible for admission to the M.I.C.M. program, a student must have

- A 4-year undergraduate degree
- At least 5 years of meaningful, supervisory-level construction management experience
- Acceptable GRE scores (verbal and quantitative)
- A grade point average of 3.0 on a 4.0 scale
- Employer sponsorship
- International students must submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

No more than 3 credits of ICM 6934 may be used to satisfy the credit requirements for the M.I.C.M. without written permission of the Director. All candidates are required to take ICM 6930. In addition to the 6 research-oriented graduate credit hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses and special electives. All candidates are required to pass a comprehensive oral and/or written examination at the completion of the course work and their master's research report/project.

The M.E. Rinker Sr. School reserves the right to retain student work for purposes of record, exhibition, or instruction.

Research facilities: The Shumberg Center for Housing Studies, operating within the School, researches the problems and possible solutions associated with developing and producing affordable housing. The Powell Center for Construction and the Environment conducts research on implementing sustainability in creating, operating, and constructing a built environment. The Flavor Program for Construction Safety researches and disseminates information on matters related to construction safety and health. The Center for Advanced Construction Information Systems educates members of the AECO industry about new and emerging technologies in virtual design and construction.

Combined program: The School offers a combined bachelor's/master's degree program. Contact the Director of Master's Programs for information.

For more information, please see our website: http://www.bcn.ufl.edu.

Interior Design Department

Chair: M. Portillo
Complete faculty listing by department: [Follow this link](#).

**Doctor of Philosophy:**

The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning, 331 ARCH, P.O. Box 115701.

**Master of Interior Design:**

The Master of Interior Design (M.I.D.) provides opportunities for students to direct their attention toward a variety of topics, including:

- Design pedagogy and processes
- Sustainable, safe, and secure environments
- Creative performance and innovation
- Built heritage conservation.

Regardless of the study emphasis selected by the student, the M.I.D. program has a central focus with three categories of course work:

- **Design studio**
- Seminars in current interior design topics
- Theories and methods of research.

All M.I.D. students must complete an approved research topic with a written thesis. Requirements for the M.I.D. and Ph.D. degrees are given in the General Information section of this catalog.

**Applications:**

All applications must include acceptable GRE scores, transcripts for all previous academic work, and if the applicant's native language is not English, a satisfactory score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute. This information must be received in the Office of the Registrar by February 2. In addition to satisfying University requirements for admission, the applicants are required to submit to the Graduate Program Assistant, Department of Interior Design, 336 Architecture, P.O. Box 115705, University of Florida, Gainesville, FL 32611-5705, the following:

- A portfolio of your design work (if applicable). The portfolio must be accompanied by a self-addressed, stamped envelope.
- A written essay on your goals and aspirations related to graduate studies.
- Three letters of recommendation.
- A personal interview is not required, but many applicants choose to visit the campus and Department as a part of the application process.

Students enrolled in the Bachelor of Interior Design program at the University of Florida may apply to the M.I.D. program during their junior year (see below).

The Department reserves the right to retain student course work for the purposes of record, exhibition, or instruction. Field trips are required for all students; students should plan to have adequate funds available. Students are required to purchase a computer for course work. It may be necessary to assess studio fees to defray costs of base maps, plans, and other generally used materials.

**Admission:**

Applications are processed through February 2 for fall term and all applicants are encouraged to apply as soon as possible. Admission decisions are made between February and the end of April. All new students begin their studies in the fall to coincide with curriculum sequencing.

**Graduate course requirements according to background:**

After assessment of previous design work, leveling courses may be required to prepare the student for the M.I.D. 36 hours of graduate course work. Therefore, each student entering the Master of Interior Design program works with the graduate coordinator to evaluate the student's unique background to determine the specific courses needed to facilitate interest and experience. Estimated credit hours and length of study time vary according to each student's individual baccalaureate degree and experience.

Estimates of the number of credit hours and length of study time may be adjusted based on the individual student's previous preparation including experience as a practicing designer, architect, or other professional.

**Program requirements:**

After leveling courses are completed and with approval by the graduate coordinator and supervisory committee chair, a student completes 24 hours of departmentally approved graduate work in the Department of Interior Design. In addition, with the graduate coordinator's approval, the student is required to take 3 hours of course work in graduate statistics and 9 hours of multidisciplinary graduate electives that reinforce and extend the research.

Courses from such academic units as Psychology, Anthropology, Sociology, Engineering, Education, and Business Administration provide possible electives. The College of Design, Construction and Planning offers the Certificate in Historic Preservation. If the focus of a student is the renovation and preservation of built environments, then historic preservation courses leading to a certificate would strengthen the research and design effort. Likewise, existing appropriate courses in Architecture, Landscape Architecture, Urban and Regional Planning, and Building Construction offer both collaborative study and research opportunities for M.I.D. students.

Each student must select a two-member supervisory committee to guide course selection and to guide thesis selection, study, and production.

**Landmark Architecture Department**

[Follow this link](#)

[Graduate Coordinator: Gina Gurucharri](#)

**Chair:** Gina Gurucharri

**Graduate Coordinator:** Kevin Thompson

Complete faculty listing by department: [Follow this link](#).

The mission of the Department of Landscape Architecture is to advance the ethical, creative, and skillful application of the art and science of planning and designing urban, rural, and natural environments. The Master of Landscape Architecture seeks excellence through professional practice and service, and through research and scholarly pursuit.

Interstate field trips are planned as a part of the normal program curriculum. Students should plan to have adequate funds for field trips and for studio materials. Students are also required to
own a laptop computer meeting minimum department requirements. These specifications are available through the department of Landscape Architecture's website at URL: http://www.dx.pfl.edu/landscape.

The Graduate program in Landscape Architecture offers flexibility in meeting the needs of applicants with varied backgrounds. Students entering the graduate program in landscape architecture follow one of the four following tracks:

**Pre MLA Program**
Graduate students who do not possess an LAAB accredited professional degree in landscape architecture are invited to enroll in the Pre MLA program. The Pre MLA Program aids the development of basic analytical, design and graphic skills. Upon successful completion of the Pre MLA Summer term, students advance into a two-semester sequence of articulation courses that provide a foundation of applied landscape design and planning theory as well as competencies in landscape construction.

**MLA Advanced Graduate Studies Program**
Graduate students having completed the Pre MLA program or entering the MLA program with an LAAB accredited professional baccalaureate degree in Landscape Architecture commence a two year program of advanced graduate coursework towards the completion of the MLA degree.

**MLA Program + Construction**
Graduate students with a non-accredited or non-LAAB accredited degree in Landscape Architecture may apply directly to the MLA program but may be required to take additional coursework to develop core competencies required for advanced graduate study.

**MLA Research Degree**
Graduate students with an LAAB accredited professional degree in Landscape Architecture and a significant history of achievement in professional practice may tailor a program of advanced study to meet their specific needs. Proposals for the MLA Research Degree option are reviewed by the Graduate Coordinator and an approved course of study is determined through consultation with the Graduate Committee.

The normal tenure of advanced graduate study is five semesters which includes a summer semester internship. Students complete a minimum of 52 credit hours composed of lecture courses, seminars, design and construction studios, internship and individual study (special studies, supervised research and thesis or terminal project).

This time period would be extended should a student elect to expand the course work or seek a concurrent degree in a related field.

**Design studios:** Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio's selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

**Thesis or terminal project:** The Department recognizes that students have different professional goals and personal strengths and interests. A thesis is appropriate for students interested in further research or teaching, or in pursuing advanced degrees. A project (with a significant research component) is appropriate for students interested in design or project-oriented aspects of landscape architecture, or if their specific areas of interest suggest a nontraditional approach.

**Programs, centers, and institutes:** The College of Design, Construction, and Planning has several research centers and institutes. The course work and summer sessions afforded by these programs offer both required and elective coursework in landscape architecture:

- **The Center for Landscape Conservation Planning:** The Center for Landscape Conservation Planning conducts applied research on the relationship between conservation and land use while providing learning opportunities for students.
- **The Center for International Design and Planning:** The Center for International Design and Planning conducts interdisciplinary research with a focus on emerging design and planning trends in an era of globalization with a focus on resilient development systems and adaptive design and planning strategies.
- **The Preservation Institute:** Nantucket gives students an opportunity to receive specialized educational experience in a broad range of preservation topics using Nantucket as a resource for case-study projects.
- **The Preservation Institute:** Caribbean gives students an opportunity to conduct and apply research regarding the conservation of the rich cultural traditions of the Greater Caribbean basin.
- **The GEOPLAN Center:** is dedicated to the development of geographic and spatial information systems. Graduate students receive instruction in geographic information systems and are involved in a multidisciplinary studio that applies the tools and systems understanding afforded by GIS.

**Graduate advisement:** Students are initially advised by the Graduate Coordinator. He or she has guided the student's application through the acceptance process and is familiar with the student's background and needs. A plan of study is developed that includes required and optional courses. By the end of the second semester of study, each student is required to form a supervisory committee composed of two faculty members. The primary purpose of the graduate committee is to advise the student on educational objectives and the thesis or terminal project course work.

**Application Procedure**
Details of application procedure are found on the Department of Landscape Architecture's website. Applicants are encouraged to familiarize themselves with the details of the application procedures and the application requirements. Applications will ONLY be considered for the track for which they have been submitted. Make certain you are applying to the correct track based on your background and credentials and the criteria detailed above.

**Application Dates**
Applications are to be completed and submitted prior to the deadline noted on the Department's website. Unless otherwise noted, international applications must be received by November 1st. Applications from within the US are to be received no later than February 1st. Early applications are encouraged.

**Application materials to be submitted online and/or to the Office of the Registrar**
Application materials include the online application form accompanied by official transcripts, Letters of Recommendation, GRE scores, and TOEFL scores (applicants with English as a second language) to Office of the Registrar: Admissions Section, Criser Hall, University of Florida, Gainesville, Florida 32611.

**Application Materials to be submitted directly to the Department**
In addition to the materials submitted to the registrar's office, applicants must also submit a letter of intention to the Department of Landscape Architecture (Graduate Program Assistant).

**Application Portfolio**
All applicants are encouraged to submit a portfolio of creative works.

Post professional degree applicants applying for either the Pre MLA Fall Start or MLA Advanced Graduate Study program are required to submit a portfolio that both exhibits creative work experience and shows evidence of acquired technical efficiencies in the practice of landscape architecture. All portfolio must be digital. PDF is preferred.

**Application Status**
Applications will be processed once all material has been received and must be complete prior to the application deadline. Applicants will be contacted by the Program Assistant if their application is incomplete. Please respond quickly if you have been contacted to increase the chances of your application being considered in the current review period. Only completed applications will be processed for review.
Once the application has been processed for review, applicants will receive written notification of their application status, generally sometime in the middle of March. Please do not contact the department with inquiries of your application status prior to the end of March.

Preparatory courses (see Undergraduate Catalog): LAA 2330, LAA 2350, LAA 2360, LAA 2370, LAA 3420, LAA 3350, LAA 3352, LAA 3421, LAA 3550, LAA 6716, and ORH 3513.

Urban and Regional Planning Department

Director of School of Landscape Architecture and Planning: Kristin Larsen
Chair: Joseli Macedo
Graduate Coordinator: Linda B. Eldridge
Graduate Coordinator of Online Degree program: Patricia Ashton
Complete faculty listing by department: Follow this link.

Doctor of Philosophy: The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in Design, Construction, and Planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

Master of Arts in Urban and Regional Planning: The Department of Urban and Regional Planning offers graduate work leading to the degree of Master of Arts in Urban and Regional Planning (M.A.U.R.P.). Students are encouraged to enter the program in the fall semester. The program is usually completed in two academic years. The student entering with an undergraduate degree and no graduate study must complete 52 hours of credit for the M.A.U.R.P. degree. Students who have a master's degree in a related field may transfer up to 18 graduate semester hours toward the 52 hour requirement. Such a transfer of credit requires the approval of the Department. The Department encourages students with any undergraduate degree who are interested in the field of planning to apply for admission.

Complete descriptions of the requirements for the M.A.U.R.P. and Ph.D. degrees are provided in the General Information section of this catalog. The urban and regional planning curriculum is designed to provide a set of core studies and contextual projects which prepare the graduate for the practice of planning in public or private agencies at both national and international levels. The core studies include history and theory of planning, planning methods, growth management at local, regional, and state levels, and related studies in community and regional social, natural, and economic systems. Contextual projects include, among many subject areas, urban design, transportation, regional planning, community redevelopment and preservation, housing, real estate, and economic development. The program emphasizes planning, policies, and design for the physical environment. Current specializations include growth management and transportation, urban design, housing, community, and economic development, information technologies for planning, and environmental planning. Students are also encouraged to take advantage of the extensive faculty, course offerings, and other resources available in the College of Design, Construction, and Planning and throughout the University.

The Department has two research centers: The Geo-facilities Planning and Information Center (GeoPlan), the Center for Building Better Communities (CBBC), and the Center for Health and the Built Environment (CHBE).

The curriculum is supported by an extensive GIS laboratory, and a visual aid library. Variation from the core studies may be approved by the Department if the student can demonstrate education and experience to the faculty that would support such an alternative. The M.A.U.R.P. degree is accredited by the Planning Accreditation Board, a joint undertaking of the American Institute of Certified Planners and the Association of Collegiate Schools of Planning, for having achieved the highest applicable standards for graduate education in the field of planning.

Graduates of the Department are prepared to practice urban and regional planning.

The Department of Urban and Regional Planning and the College of Law offer a joint degree program (see Requirements for Master's Degrees in the General Information section of this catalog). Areas of concentration with other programs in the Graduate School may be developed to meet the individual needs of students. In addition to course work the student is required to complete an internship with a public or private planning office and the student must complete a thesis.

The Department reserves the right to retain student work for purposes of record, exhibition, or instruction.

College of Education

Dear: G. Good.

Complete faculty listing: Follow this link.

Graduate study in education, allows individuals with bachelor's degrees in agriculture, business, education, engineering, mathematics, sciences, humanities, foreign languages, preprofessional studies and other fields to prepare for rewarding professional careers in education and related fields.

The College of Education offers 19 master's or specialist programs, 12 doctoral programs, and a J.D./Ph.D. program with the College of Law through its three schools: Human Development and Organizational Studies in Education, Special Education, School Psychology and Early Childhood Studies; and School of Teaching and Learning.

Follow these links for more information about UF’s College of Education graduate programs:
http://education.ufl.edu/graduate-studies
http://education.ufl.edu/programs

Departments and Programs within the College of Education

College of Education Courses

Human Development and Organizational Studies in Education Department

Director: Linda B. Eldridge
Graduate Coordinator: Patricia Ashton

Complete faculty listing by department: Follow this link.

Programs leading to the Master of Arts in Education (M.A.E.), Master of Education (M.Ed.), Education Specialist (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees are offered through this school with programs in Counseling and Counselor Education, Educational Leadership, Higher Education Administration, Marriage and Family Counseling.
Mental Health Counseling, Research and Evaluation Methodology, School Counseling and Guidance, and Student Personnel in Higher Education.

Requirements for these degrees are given in the Graduate Degrees section of this catalog.

More information can be found at our website: http://education.ufl.edu/hoose

Special Education, School Psychology and Early Childhood Studies Department

Director: Jean Crockett

Complete faculty listing by department: Follow this link.

The School of Special Education, School Psychology, and Early Childhood Studies offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 3 areas of specialization: Special Education, School Psychology, and Early Childhood Studies. Programs are accredited by the Florida Department of Education and approved by the National Council for Accreditation of Teacher Education (NCATE). The School Psychology program is approved by the NCATE and the National Association of School Psychologists (NASP). The Ph.D. program in School Psychology is accredited by the American Psychological Association (APA).

School of Teaching and Learning

Director: E. Bondy.
Graduate Coordinator: S. G. Terzian.

Complete faculty listing by department: Follow this link.

The School of Teaching and Learning (http://education.ufl.edu/school) offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis or project in lieu of thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees in curriculum and instruction. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 10 areas of specialization: curriculum, teaching, and teacher education; educational technology; elementary education; mathematics education; language and literacy education (including children's literature, English education, ESOL/bilingual education, language arts, and reading education); science and environmental education; social foundations of education; social studies education; and teacher leadership for school improvement.

The nationally recognized Proteach graduate program leads to the M.Ed. degree and state certification as a classroom teacher. Unified Elementary ProTeach admits undergraduates who complete the five-year program with a master's degree. Secondary Proteach (English, Science, Social Studies) prepares teachers who have completed a bachelor's degree in the discipline they will teach. Prospective elementary teachers who already hold a bachelor's degree in a non-education field may want to consider the School's SITE program (Site-based Implementation of Teacher Education), which leads to the M.Ed. degree in curriculum and instruction. Students may apply to the state for alternative certification.

Beyond the Graduate School and College of Education admission requirements, students should have academic preparation and teaching experience appropriate to the program being pursued. Students having deficiencies in their preparation will be required to follow a program to remove such deficiencies. A limited amount of support is available for graduate studies through fellowships, scholarships, research assistantships, and teaching assistantships.

College of Engineering

Dean: C. Abernathy

Complete faculty listings: Follow this link.

The College of Engineering is organized into a number of departments focusing on today's most pressing engineering questions. There is an interdisciplinary culture at the core of Gator Engineering, though, and researchers regularly collaborate with colleagues in departments and colleges beyond their own.

For more information, please see our website: http://www.eng.ufl.edu

Departments and Programs within the College of Engineering

College of Engineering Courses

Agricultural and Biological Engineering Department

College of Agricultural and Life Sciences

Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:
Agricultural production includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

Biological engineering includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

Information systems includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

Land and water resources includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Biomedical Engineering Department

Chair: C. Schmidt
Graduate Coordinator: D. Hintenlang

Complete faculty listing by department: Follow this link.

The mission of the J. Crayton Pruitt Family Department of Biomedical Engineering (BME) is to educate students with strong engineering and science backgrounds for Master's and/or Ph.D. degrees in biomedical engineering. Graduates in BME typically apply their skills and training directly to engineering solutions to clinical problems in medicine. The BME mission is accomplished through a core program of study that has strong collaborations with faculty in the Colleges of Engineering and Medicine. The Biomedical Engineering Department faculty members work collaboratively with joint, affiliate, and adjunct faculty from many other departments in the College of Engineering, the College of Medicine, and local industry. This diversity ensures students the highest-quality education and varied opportunities for cutting-edge research. The BME Department currently focuses in: neural engineering, biomaterials, tissue engineering, biomechanics, nanomedicine, biomedical imaging and medical physics. A concentration in Medical Physics is available at both the M.S. and Ph.D. level and prepares students for clinical or research careers in medical imaging or radiation therapy. The Medical Physics concentration is fully accredited by CAMPEP. Additional information on admissions requirements, faculty, and research projects is available at: http://www.bme.ufl.edu.

BME graduate students are admitted directly through the BME Department. The BME Graduate Academic Committee reviews and makes all decisions regarding admission. Each student's research adviser must hold a Graduate Faculty appointment in the BME Department. Supervisory committees for BME students normally include at least one member from the College of Engineering and one from the College of Medicine to emphasize the need for a clinical focus in the research.

Chemical Engineering Department

Chair: R. Dickinson.
Graduate Coordinator: A. Chauhan.

Complete faculty listing by department: Follow this link.

The Ph.D., M.E., and M.S. degrees in chemical engineering require course work in three core areas:

- The chemical engineering basis area, consisting of three core courses in the mathematical, the molecular, and the continuum bases of chemical engineering
- The chemical engineering science and systems area, consisting of a selection of courses in such areas as transport phenomena, electrochemical engineering, thermodynamics, kinetics, reaction engineering, process control, separation processes, and heat and mass transfer
- The research specialty area, consisting of courses designed to build depth in a field of specialization. Courses may be from other academic units, or may be chemical engineering courses such as colloid science, corrosion, polymer science, advanced materials, and biochemical engineering.

Civil and Coastal Engineering Department

Chair: K. Harfield
Graduate Coordinator: A. Dreischer

Complete faculty listing by department: Follow this link.

The Department of Civil and Coastal Engineering offers two distinct graduate programs: civil engineering and coastal and oceanographic engineering. All degrees except the Ph.D. are available in a thesis or nonthesis option. The nonthesis option has two formats: report and 30-hour non-report. Students who elect the nonthesis report must successfully complete a document of substantial engineering content for a minimum of two hours credit in CEEN 6974 for civil engineering majors, or EDOC 6988 for coastal and oceanographic engineering majors.

Civil and Coastal Engineering degree programs include areas of specialization in construction, civil engineering management, geotechnical engineering, water resources and hydrology, public works, structural engineering, civil engineering materials, geosynthetic systems engineering, coastal engineering, oceanographic engineering and offshore structures, and transportation engineering.

Minor or supporting work is encouraged from a variety of related or allied fields of study. Ph.D. students are required to take a preliminary examination. Requirements for the M.S., M.E., and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Computer and Information Science and Engineering Department
Graduate Coordinator: Jih-kwon Peir

Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems:** computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems:** database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, the web, and data warehousing
- **High-performance computing/applied algorithms:** design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art:** modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision:** artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security:** wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The nonthesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B. Students can select a thesis or nonthesis option for the Ph.D. degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. An additional 90 credit hours, including the following:

- A minimum of 6 credit hours must be taken in CIS 6971.

The nonthesis option requires:

- An additional 6 letter-graded credits from either CISE or (with approval) from some other department.
- An additional 12 credits beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.

For more information, please see the program pages below, or visit our website: http://www.cise.ufl.edu

**Electrical and Computer Engineering Department**

Chair: J. Harris.
Graduate Coordinators: G. Bosman, J. McNair

Follow this link.

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the Graduate Degrees Section of this catalog. For more information about our program, please visit the link below.

**Environmental Engineering Sciences Department**

Director: K. Harfield
Graduate Coordinator: P. Chadik

Follow this link.

The Department of Environmental Engineering Sciences offers graduate study in the following areas: Air Resources; Biogeochemical Systems; Environmental Nanotechnology; Solid and Hazardous Waste Management; Storm Water, Water Supply and Waste Water; Sustainability Science & Engineering Systems Ecology and Ecological Engineering and Water Resources. Students graduated from the program will demonstrate depth in individual focus areas as well as breadth of core knowledge concepts in all areas. Please visit the link below for more information.
information about our program in Environmental Engineering Sciences.

Industrial and Systems Engineering Department

Chair: J. Giannessi
Graduate Coordinator: J. C. Smith and P. Momcilovic

Complete faculty listing by department: Follow this link.

The Department of Industrial and Systems Engineering offers the Master of Engineering and the Doctor of Philosophy degrees, each with a thesis or nonthesis option, with specialization in manufacturing, operations research, quality engineering, and supply chain management and e-commerce. The department also offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Materials Science and Engineering Department

Chair: S. Phillpot
MSE Graduate Coordinator: J. J. Macholosky, Jr.
NE Graduate Coordinator: E. Dugan

Complete faculty listing by department: Follow this link.

The Department of Materials Science and Engineering offers the Master of Science and Doctor of Philosophy degrees in Materials Science and Engineering (MSE) and Nuclear Engineering (NE). Degrees in MSE include specific areas of research and study in biomaterials, ceramics, composites, computational materials science, electronic materials, metals, polymers, nanomaterials, and nuclear materials. Degrees in NE include specific areas of research and study in advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security.

Nontraditional Degree Programs: The Department offers combined bachelor/master's degree programs: MSE BS/MS, NE BS/MS, and students may also combine the MSE BS with the MS awarded through the Department of Biomedical Engineering. The combined bachelor/master's program allows qualified students to earn both degrees in materials science and engineering with savings of a tangible number of credit hours. Qualified students are allowed to begin master's coursework in their junior year and double-count specific graduate courses for both degrees. The master's degree may be completed within 2 to 3 semesters after completing the bachelor's degree. Program admission requirements are (1) satisfaction of Graduate School admission requirements prior to the beginning of the senior year, (2) an upper division GPA of at least 3.5 in MSE and 3.4 in NE, (3) for MSE, completion of a minimum of 18 credit hours of coursework, (4) admission by the Department's Graduate Admission Committee and approval by the College of Engineering and the Graduate School. For more information, contact the Department.

The J.D./M.S. in MSE (thesis/nonthesis) is a joint degree program culminating in both the Juris Doctor degree, awarded by the College of Law, and the Master of Science (thesis/nonthesis), awarded by the College of Engineering. Under this program, a student can earn both degrees in approximately 1 year less than it would take to attain both degrees if pursued consecutively.

Concurrent M.D./Ph.D. degrees are offered through a collaborative program between the College of Medicine and Materials Science and Engineering. For more information, please contact the Department.

To be eligible for regular admission to the graduate program within the Department, the student must hold a B.S. in an appropriate major. Because of the breadth of MSE graduate programs, students with degrees in materials, ceramics, metallurgy, other engineering, mathematics, or science areas (such as biology, chemistry, or physics) have found ample opportunities to pursue their research and training areas of interest.

The facilities of the Department of Materials Science and Engineering (MSE) of the University of Florida (UF) and the University of Rome Tor Vergata (URTV) have approved a cooperative degree program in Materials Science and Engineering culminating in a Doctor of Philosophy degree, awarded by both universities. Contact the Department for details.

Mechanical and Aerospace Engineering Department

Chair: D. W. Hahn
Graduate Coordinator: D. W. Mikolaitis

Complete faculty listing by department: Follow this link.

The Department of Mechanical and Aerospace Engineering offers the degrees of Master of Science (thesis or nonthesis), Master of Engineering (thesis or nonthesis), Engineer, and Doctor of Philosophy in aerospace engineering and mechanical engineering. Minimum requirements for these degrees are given in the General Information section of this catalog. Additional information can be found at http://www.mae.ufl.edu/graduate. Prospective students are expected to have strong backgrounds in engineering. For the first year of study, each student is generally required to take a minimum of three regular courses each semester. There are areas of specialization available for graduate studies: dynamics, systems, and control; solid mechanics, design, and manufacturing; thermal science and fluid dynamics. Within a specialization there are unique opportunities to conduct analytical, experimental, and/or numerical study in a wide variety of challenging problems. The Department offers a combined bachelor/master's degree program. Contact the graduate coordinator for information.

Nuclear and Radiological Engineering Department

Chair: D. Hintenlang
**Graduate Coordinator:** W. Bolch

Complete faculty listing: [Follow this link](http://hhp.ufl.edu).

The Department offers the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy in nuclear engineering sciences with emphases in nuclear power engineering, medical physics, and health physics. Complete descriptions of the minimum requirements for these degrees are provided in the [General Information section](http://hhp.ufl.edu) of this catalog.

The medical physics and health physics options are offered through interdepartmental programs in cooperation with the College of Medicine (see the [Health Physics and Medical Physics description](http://hhp.ufl.edu) under Interdisciplinary Graduate Studies).

**Combined Program** — The Department also offers a B.S.N.E./M.S. degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of one semester. Qualified students may begin their master's program while seniors counting 12 hours of specified nuclear engineering sciences graduate courses for both the bachelor's and master's degree requirements. Students admitted to the combined program are eligible for teaching and research assistantships. Program admission requirements are: (1) satisfaction of Graduate School admission requirements for a master's degree, (2) an upper-division (undergraduate) GPA of at least 3.6, and (3) completion of specified bachelor's degree requirements.

The graduate program has two major programs, Nuclear Engineering and Medical Physics. Specific areas of research and study in Nuclear Engineering include advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security. The Medical Physics program is a CAMPEP accredited program designed to meet the professional requirements for a career in clinical service or research and development. Areas of Medical Physics study and research include diagnostic medical imaging, radiation therapy, nuclear medicine imaging, and radiation dosimetry.

The requirement for admission to the graduate program in nuclear engineering sciences is a bachelor's degree in an approved program in engineering or in the sciences. Students applying to the Medical Physics program should have completed the equivalent of at least a minor in physics. If the student's background is considered deficient for the planned course of study, an articulation program of background courses will be required.

Depending on professional objectives, the student may select a non-thesis option for the MS degree and substitute 8 credits of graduate-level course work, of which at least 6 credits are in nuclear engineering sciences, including a 4-credit (minimum) special project. **ENS 6966.** Completion of 32 credits will meet the minimum requirements for the non-thesis MS degree.

Normally, the requirements for a master's degree can be completed in 12 months. Students in the medical physics option usually take 21 to 24 months to complete the master's degree, which requires 40-42 credit hours. For a master's degree in health physics, a student must complete 42 hours of credit. If articulation work is required, it may take longer, depending upon the extent of the student's deficiency.

**College of Health and Human Performance**

Dear: M. Reid

Complete faculty listings: [Follow this link](http://hhp.ufl.edu).

Research and teaching in HHP has an impact on almost every aspect of the human condition. The college's four centers – the Florida Center for Health Promotion, Center for Exercise Science, and the Eric Friedheim Tourism Institute – as well as its three primary departments – Applied Physiology and Kinesiology, Health Education and Behavior, and Tourism, Recreation, and Sport Management Department – place the college firmly in a position to influence and improve an array of societal problems and challenges.

For more information about the College of Health and Human Performance, please see our website: [http://hhp.ufl.edu](http://hhp.ufl.edu).

**Departments and Programs within the College of Health and Human Performance**

**College of Health and Human Performance Courses**

**Applied Physiology and Kinesiology Department**

Chair: S. Dodd

Graduate Coordinator: E. Christou

Complete faculty listing by department: [Follow this link](http://hhp.ufl.edu).

The Ph.D. program is offered with concentrations in biobehavioral science and exercise physiology. Students in the biobehavioral science concentration specialize in one of four areas: biomechanics, exercise / performance psychology, motor control / learning, or sports medicine. These interdisciplinary concentrations focus on preparing students as researchers with a blend of course work and research training.

A program leading to the **Master of Science** degree in applied physiology and kinesiology (thesis and non-thesis options) is also offered. Areas of concentration for the master's program include athletic training / sports medicine, biobehavioral science, clinical exercise physiology, exercise physiology, and human performance. The thesis option gives the student an opportunity to study, conduct research, and prepare a thesis in an area of special interest. The non-thesis option offers the student a specialization in a selected area of study, with additional work in other areas. A comprehensive written examination is required for this option, as is a capstone internship experience. Requirements for these degrees are given in the [General Information section](http://hhp.ufl.edu) of this catalog.

**Athletic training / sports medicine:** This concentration provides comprehensive academic preparation, research, and clinical experience in the areas of injury prevention, assessment, treatment, rehabilitation, and therapeutic modalities.

**Biobehavioral Science:** This thesis mandatory concentration is multidisciplinary and flexible, permitting students to tailor their scholarly experience to the development of research skills in one of several related disciplines: biomechanics, motor control and learning, and exercise and performance psychology. Each area of specialization is briefly described below.

- **Biomechanics:** The specialization in biomechanics draws from the fields of neuroscience, engineering, and medicine. The course work and training include kinematics and kinetics of movement. Course work also includes anatomy / kinesiology, biomechanics, engineering, neuroscience, medicine, psychology, physical therapy, and statistics.
- **Motor learning / control:** This interdisciplinary specialization draws on experiences and a knowledge base in the movement and sport sciences, cognitive sciences, and physical therapy. Students are prepared to conduct research and provide expertise in traditional motor performance and learning settings.
- **Exercise / performance psychology:** This area of specialization provides the basic understanding of the underlying thought processes and attitudes that will ultimately determine the performance of individuals involved in sport, exercise, and other achievement-oriented activities. The primary emphasis is to develop the scientific background and skills necessary for doctoral training and research.

**Clinical exercise physiology:** The purpose of this non-thesis program is to give students the opportunity to develop advanced knowledge and competencies in Exercise Physiology. Clinical Exercise Physiologists typically practice in hospitals, clinics, and wellness centers as part of a health care team that administers tests and develops programs of exercise, counseling, and education for patients with cardiopulmonary, metabolic, and musculoskeletal diseases.

**Exercise physiology:** This thesis mandatory area of concentration is concerned with the scientific study of how the various physiological systems of the human body respond to physical activity. It is a multidisciplinary field with strong ties to the basic life sciences and medicine, and application to clinical, normal, and athletic populations.

**Human performance:** This non-thesis master's concentration merges a range of specializations within the Department into a curriculum that provides educational experiences to graduate students interested in studying the factors that determine human performance in both athletic and nonathletic domains. This flexible approach allows students to focus on specific applications...
that best meet their individual interests. Human performance incorporates components such as nutrition, psychology, motor behavior, and physiology that are applicable to athletic and clinical populations.

**Department of Health Education & Behavior**

Chair: Julie A. Tucker  
Graduate Coordinator: Christine B. Stopka

Complete faculty listing by department: [Follow this link](#).

The Department of Health Education & Behavior offers a Doctor of Philosophy (Ph.D.) in Health and Human Performance with a concentration in Health Behavior, a non-thesis 30-credit hour Master of Science and a 36-credit Master of Science (M.S.) in Health Education and Behavior. Requirements for the Ph.D. and M.S. degrees are given in the General Information section of this catalog.

The Ph.D. degree program trains health behavior researchers for academic positions in federal health agencies such as the Centers for Disease Control and Prevention and the National Institutes of Health for postdoctoral research fellowships and for the private sector.

The 30-credit hour, non-thesis M.S. degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector. Full-time students can complete this M.S. option in one year. This degree may also give students unique and distinguishing training experiences when applying to professional schools such as law, medicine, physician assistant, dentistry, chiropractic, osteopathy, nursing, occupational therapy, and physical therapy.

The 36-credit hour project in lieu of thesis, and the 36-credit hour thesis options are designed for students interested in developing research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically can complete these options in about 4 semesters.

The Department also offers an accelerated B.S./M.S. program in health education and behavior to enable students to receive both B.S. and M.S. degrees with a reduction of 12 credits (about one semester of course work).

Students who complete a graduate degree program in the Department of Health Education & Behavior acquire a range of skills required to research, plan, implement, and evaluate health promotion policies and programs aimed at improving the health and well-being of individuals, families, and communities. Specific skills include:

- Conducting needs and capacity assessments to identify health priorities
- Planning, implementing, and evaluating health promotion policies and programs
- Conducting research on questions associated with health problems and their determinants and health promotion policies and programs
- Administering and managing health promotion programs
- Advocating for health promotion policies and programs in schools, communities, health care facilities, and workplaces
- Developing social marketing and health communication messages and campaigns
- Researching and developing social media and new media-based health promotion applications
- Serving as a resource person for health information and referrals
- Using a variety of teaching-learning strategies appropriate to the target audience and setting
- Writing scholarly and professional articles
- Working collaboratively with public and private agencies, nongovernmental organizations (NGOs) and the private sector to achieve the goal of a healthier population.

This degree prepares the health promotion specialists and health behavior scientists to work in:

- Local, state, and federal health, education and social agencies
- Nongovernmental health organizations
- Schools and universities
- Healthcare settings
- Private sector

Simple position titles for individuals with this degree include:

- Health education specialist
- Health promotion specialist
- Public health advisor or public health analyst
- Health promotion coordinator or health promotion consultant
- Campus health educator or patient health educator,
- Health communication specialist
- Wellness specialist
- Wellness promotion coordinator
- Prevention specialist

For additional information, visit [http://www.hhp.ufl.edu/heb](http://www.hhp.ufl.edu/heb).

**Tourism, Recreation, and Sport Management Department**

College of Health and Human Performance

Chair: Michael Sagas.  
Graduate Coordinator: Stephen Holland.

Complete faculty listing: [Follow this link](#).

The degree Master of Science is offered by the Department of Tourism, Recreation, and Sport Management with programs in sport management and in recreation, parks, and tourism. Both programs offer thesis and non-thesis formats. The Department participates in the Ph.D. program in Health and Human Performance. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Master's program provides advanced preparation of tourism, recreation, and parks and sport management professionals for positions of leadership in planning, developing, administering, and marketing of programs in a variety of employment settings; public and private. Concentrations of study may be developed in a number of areas, such as:

- Natural resource recreation management
- Tourism and commercial recreation
- Campus recreation
Departments and Programs within Levin College of Law

For more information please see our website:

http://www.jou.ufl.edu/grad

College of Journalism and Communications

Dean: D. McFarlin
Senior Associate Dean for Graduate Studies and Research: D. Treise

Graduate Coordinators:
- (Advertising) J. R. Goodman
- (International Communication) M. Leslie
- (Journalism) R. Rodgers
- (Public Relations) M.A. Ferguson
- (Science/Health Communication) D. Treise
- (Telecommunication) J. Cleary.

Complete faculty listings: Follow this link.

Through the Division of Graduate Studies and Research, the College of Journalism and Communications offers the Doctor of Philosophy degree, the Master of Arts in Mass Communication (thesis or project option) degree, and the Master of Advertising (thesis) degree. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Doctoral students work closely with faculty members in research leading to a dissertation embodying a humanities, law/policy, or social sciences approach. Emphases within these approaches for which faculty members have expertise include advertising, journalism, public relations, telecommunication, international communication, and political communication. Details of doctoral faculty research interests and other aspects of the program are given in the College's Ph.D. Handbook.

Master's students may complete a thesis in advertising, journalism, public relations, telecommunication, international communication, or science/health communication. With the approval of the Sr. Associate Dean of Graduate Studies and Research and other faculty members, master's students may develop an individualized program of study, with thesis, to meet their specific needs and interests. A project in lieu of thesis option is available for some specializations.

Mass Communication/Law joint degree program: Programs leading to the Master of Arts in Mass Communication or the Doctor of Philosophy and the Juris Doctor degrees are offered under the joint auspices of the College of Journalism and Communications and the College of Law. For students interested in scholarship or practice of communication law or in reporting on the law, the joint program is offered through the joint degree programs of the College of Journalism and Communications and the College of Law.

General admission: Admission is granted to applicants with and without background in mass communication. Students without academic preparation in mass communication or appropriate experience may be required to take articulation work.

Combined degree program: The College offers a combined bachelor's/master's program. For information, contact the Associate Dean for Graduate Studies.

For additional information, please see our website: http://www.jou.ufl.edu/grad

College of Journalism and Communications Courses

Fredric G. Levin College of Law

Dean: R. Jerry II

Complete faculty listings: Follow this link.

The University of Florida Levin College of Law has a longstanding tradition of producing national leaders, including current American Bar Association President Stephen Zack, and is one of the nation's best values in legal education.

For more information, please see our website: http://www.law.ufl.edu

Departments and Programs within Levin College of Law
Levin College of Law Courses

Comparative Law Department

Director and Graduate Coordinator: P.A. Malavet.

Complete faculty listing by department: Follow this link.

The LLM in Comparative Law degree is designed for graduates of foreign law schools who want to enhance their understanding of the American legal system and the English common law system from which it evolved. Requirements for this degree are given in the General Information section of this catalog.

The program begins with Introduction to American Law, a 4-credit summer course that gives students a foundation in the American legal process. It also helps students acclimate to the College of Law and the University community before the start of the academic year. During the fall and spring terms, and with the director's approval, students choose their remaining 22 credits from more than 100 Juris Doctor and LLM in Taxation courses and seminars. For admission information consult the College of Law Prospectus or write to the Comparative Law Office P.O. Box 117643, University of Florida, Gainesville, FL 32611-7643 USA.

Environmental and Land Use Law Department

Director and Graduate Coordinator: Christine A. Klein

Complete faculty listing by department: Follow this link.

Florida's sensitive, varied and beautiful natural environment makes the University of Florida a natural choice for students who want to focus on the national and global issues of land use and environmental law. Florida provides a perfect setting to study first-hand the efforts to reconcile growth and conservation.

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

For more information, please see the program page below and our website: http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law.

Taxation Department

Chair and Graduate Coordinator: M. K. Friel.

Complete faculty listing by department: Follow this link.

Graduate study in the field of taxation leading to the Master of Laws in Taxation degree or to the Master of Laws in International Tax degree is available in the College of Law.

Applicants for admission to the Graduate School for these degrees must hold a law degree from an accredited law school or in the case of international students, from a recognized foreign university but need not submit scores on the Graduate Record Examination. For further information concerning admission consult the Graduate Tax Program Catalog, or write the Tax Office, 320 Holland Law Center.

College of Liberal Arts and Sciences

Interim Dean: David Richardson

Complete faculty listings: Follow this link.

The College of Liberal Arts and Sciences constitutes the intellectual core of the university. Its principal mission is to lead the academic quest to understand our place in the universe, and to help shape our society and environment.

For more information, please see our website: http://www.clas.ufl.edu

Departments and Programs within the College of Liberal Arts and Sciences

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen

Complete faculty listing by department: Follow this link.

For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/

Anthropology Department

Chair: S. deFrance

Graduate Coordinator: P. Collings

Complete faculty listing by department: Follow this link.

The Anthropology Department takes pride in maintaining a holistic perspective, bridging the four traditional fields that have composed the discipline: sociocultural, archaeological, biological, and linguistic anthropology. Both graduate students and faculty conduct research that cut across the four-fields, and extend anthropological investigations into other disciplines.

The graduate program is a mentoring program emphasizing the PhD degree. Students are mentored by faculty advisors, together with supervisory committees chosen by students with the advice of advisors. Graduate students are expected to be in residence to attend classes and seminars, and receive individualized training. Distance-education graduate degrees are not offered. Students formally report on their progress each year, and the progress of each graduate student is evaluated by the faculty in their primary field.
Students receiving graduate degrees are well-prepared intellectually and professionally for success in a wide variety of careers, and become leaders in developing the next generation of anthropology. The department offers teaching experience and resources for presenting conference papers, submitting grant proposals, conducting fieldwork, and other activities appropriate to their professionalization. Graduate students are welcome to contribute to discussions in departmental meetings, and serve on some departmental committees.

**Astronomy Department**

Chair: C. Telesco  
Graduate Coordinator: V. Sarajedini.

Complete faculty listing by department: [Follow this link](#).

The University of Florida’s Astronomy Department is one of the largest in the country. Research is an integral part of the graduate program. Students have opportunities to work with faculty and staff on a broad range of astronomical problems using in-house, national and international, and ground- and space-based facilities. Support for graduate studies is available through fellowships, research assistantships, and teaching assistantships. For more information on the program, please follow the link below or visit our website.

**Biology Department**

[College of Liberal Arts and Sciences](#)  
Chair: Craig W. Osenberg  
Graduate Coordinator: W. Bradley Barbazuk

Complete faculty listing by department: [Follow this link](#).

The Department of Biology offers two graduate programs: Botany and Zoology. Both programs offer graduate work leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are available in the [Graduate Degrees](#) section of this catalog.

More information regarding these programs is available by following the links below and by visiting our departmental website: [http://www.biology.ufl.edu](http://www.biology.ufl.edu).

**Chemistry Department**

Chair: W. Dolbier  
Graduate Coordinator: B. W. Smith

Complete faculty listing: [Follow this link](#).

The Department of Chemistry granted its first master's degree in 1909 and the first Ph.D. in 1930. Specializations in biochemistry, organic, physical, inorganic and analytical are offered with extensive interdisciplinary research opportunities (e.g., bio/nano-science, particle science, green chemistry, polymer chemistry, chemical physics, health related biochemistry, chemistry-engineering, and genomics).

The Department presently offers the Master of Science and Doctor of Philosophy degrees with a major in chemistry. The non-thesis Master of Science in Teaching degree is also offered with a major in chemistry.

**Classics Department**

Chair: Victoria Pagán.  
Graduate Coordinator: Jennifer Rea.

Complete faculty listing: [Follow this link](#).

The department offers the following degrees and programs: the Doctor of Philosophy in classical studies; the Master of Arts degree in classical studies or Latin; the Master of Latin degree, and the Master of Arts in Teaching degree in Latin. Requirements for these degrees are given in the [Graduate Degrees](#) section of this catalog.

Within the Ph.D. program are three tracks:

- Philology (prepares students for careers in colleges and universities)  
- Classical civilization (available via distance course work)  
- Latin and Roman studies (available via distance course work).

Requirements for the philology track of the doctoral degree include:

- 60 credit hours after the M.A. (or a total of 90 credit hours)  
- Five additional seminars after the M.A. in classics at the 500 level or higher  
- Three of the following seminars: GRW 6425, GRW 6971, LAT 6425, LNW 6105, and CLA 6805  
- A reading knowledge of two modern languages, one of which must be German  
- Reading lists in Greek and Roman authors  
- Supervised experience in teaching Latin, Greek, or civilization courses is advised  
- Successful completion of a series of qualifying examinations appropriate to the chosen specialization (Greek reading; Latin reading; classical Greek literature in its historical context; classical Latin literature in its historical context; special author/topic)  
- An oral preliminary examination, dissertation, and final examination

The M.A. degree in classical studies is recommended for students who plan to continue on to the doctoral level. The M.A. degree in Latin is recommended for students who plan to pursue a career in secondary teaching. Both M.A. programs require 30 credit hours, including 6 credits of GRW 6971 or LNW 6971, a thesis, and final examination.

The Master of Latin degree is a non-thesis degree, designed for currently employed and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education...
in the field of classics, and enhance their professional qualifications through a program of summer course work and directed independent study and/or distance learning courses during the regular academic year. The Master of Arts in Teaching, a non-thesis degree, is offered with a program in Latin and is intended for students preparing to teach in community colleges or high schools.

Computer and Information Science and Engineering Department

College of Liberal Arts and Sciences
Chair: Paul Cader
Graduate Coordinator: Jih-Kwon Peir.
Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, Engineer, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems**: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background. All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The nonthesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performanced credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B, to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A maximum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: [http://www.cise.ufl.edu](http://www.cise.ufl.edu)

Sociology and Criminology & Law Department

Chair: Barbara Zsembik
Graduate Coordinator: Barbara Zsembik
Complete faculty listing by department: Follow this link.

The Department of Sociology and Criminology & Law offers several programs of graduate study leading to the Ph.D. in Sociology, the Ph.D. in Criminology, Law and Society, the MA in Sociology, the MA in Criminology, Law and Society, and a Joint MA in Criminology/JD degree. The department also partners with the School of Natural Resources and Environment Department to offer the Ph.D. or MA in Interdisciplinary Ecology. Advanced undergraduate majors may complete a combined BA/MA degree in Sociology or a combined BA/MA degree in Criminology, Law and Society.
English Department

Chair: K. Kidd
Graduate Coordinator: S. I. Dobrin

Complete faculty listing by department: Follow this link.

The Department of English offers the Master of Arts degree (thesis and nonthesis options) and the Doctor of Philosophy degree in English, along with the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog. For more information about our programs, please follow the hyperlinks below or visit our website: http://www.english.ufl.edu/programs.html.

Geography Department

Chair: M. W. Binford
Graduate Coordinator: C. J. Matyas

Complete faculty listing by department: Follow this link.

The Department of Geography offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The focus of the Department is in human-environment interactions, with "environment" interpreted very broadly. The Department provides four main areas of specialization for graduate research: economic and cultural geography; resource management and land use and land cover change; medical geography; and physical geography. Economic and cultural geography concerns such topics as spatial economic theory; housing and care of the elderly. Resource management and land-use and land-cover change focus on agricultural change and resource conservation and development in the tropics and subtropics, and rural and urban land use and land cover change in tropical and temperate regions. Africa and Latin America are the primary areas of regional emphasis outside of the U.S. Physical geography in the Department concentrates on climatology, fluvial geomorphology, and hydrology. Medical geography studies the geographic aspects of human health including disease ecology and transmission and healthcare issues. The Department's extensive geographic information system, remote sensing, and computer cartography teaching and research facilities contribute to and support all of the areas of research. Faculty from the Department are also major participants in the Emerging Pathogens Institute, Florida Climate Institute, Land Use and Environmental Change Institute (L.U.E.C.I.), and the Water Institute. Prospective students should examine the research interests of the Graduate Faculty to obtain a more detailed sense of the Department's specialties (see the departmental website: www.geog.ufl.edu).

To ensure the incorporation of relevant interdisciplinary perspectives in each student's program, the Department maintains close ties with other departments in Liberal Arts and Sciences, and with programs in African studies, Latin American studies, the School of Natural Resources and Environment, the Institute on Aging, urban and regional planning, tropical agriculture, tropical ecology, water resources, the Warrington College of Business Administration, the College of Agricultural and Life Sciences, College of Public Health and Health Professions, and the Hydrological Sciences Academic Cluster. Certificates in certain of these fields may be obtained in addition to graduate degrees in geography. Geography administers the Graduate Certificate in Applied Atmospheric Sciences.

A graduate student should preferably have an undergraduate major in geography, but applicants with degrees in one of the social or physical sciences are accepted into the Department's graduate program. Deficiencies in undergraduate work in geography must be corrected concurrently with registration in graduate level courses. All students in the graduate program are required to take courses in contemporary geographic thought and geographic research skills.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Geological Sciences Department

Chair: P. A. Mueller
Graduate Coordinator: J. M. Jaeger

Complete faculty listing Follow this link.

The Department of Geological Sciences is composed of a group of internationally recognized faculty, graduate students, and dedicated support staff. Faculty and students in the Department of Geological Sciences are involved in exciting and groundbreaking research projects throughout the world and in Florida. The Department houses world-class analytical and computing facilities for research and teaching. The Department has identified six primary areas of emphasis in its research and teaching programs: environmental geology and hydrology, palaeoclimatology, tectonophysics, geochemistry and mineralogy/petrology, marine and coastal geology, and palaeomagnetism. For more detailed information on current departmental activities, faculty, and research centers, see http://web.geology.ufl.edu. The Department has collaborative, interdisciplinary programs of study and research with the Florida Museum of Natural History, the Center for Wetlands Research, the Land Use and Environmental Change Institute (L.U.E.C.I.), and the hydrological sciences cluster.

History Department

College of Liberal Arts and Sciences

Chair: Sean P. Adams
Graduate Coordinator: Elizabeth Dale

The Department of History offers the following graduate degrees: Master of Arts with fields of specialization in African, Asian, European, Latin American, and United States history, and the Doctor of Philosophy with fields of specialization in African, European, Latin American, and United States history. In addition to materials required by the Graduate School for admission, applicants must send directly to the History Department the following evidence of aptitude and interest: Three recommendations, from persons competent to evaluate your potential for graduate work; A 3- to 5-page essay identifying your career goals and particular areas of interest; a sample of your written work in history. Interested students should consult the department web page for more information.

Department of Languages, Literatures and Cultures
Graduate Coordinator: J. A. Larson
Chair: D. Cenzer
Complete faculty listing: Follow this link.

The Department of Mathematics offers the degrees of Doctor of Philosophy, Master of Science and Master of Arts, and the Master of Arts in Teaching and Master of Science in Teaching, each with a major in mathematics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

Interdisciplinary Programs — The Department offers a co-major program in conjunction with the Statistics Department leading to the Doctor of Philosophy degree in mathematics and statistics. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Statistics, Industrial and Systems Engineering, and Finance, Insurance, and Real Estate Departments.

Combined Program — The Department has an accelerated bachelor’s/master’s program designed for superior undergraduate students who have the ability to pursue such a plan of study leading to the Master of Science or Master of Arts degree. The main feature of the program is that up to 12 semester hours of approved graduate level mathematics courses may be used as dual credit for both the undergraduate and the graduate degree. All other requirements for both the bachelor’s degree and the master’s degree must be met. For admission requirements for this program, see the undergraduate coordinator.

There are opportunities for concentrated study in a number of specific areas of pure and applied mathematics at both the master’s and doctoral levels. The faculty directs studies and research in algebra, number theory, analysis, geometry, topology, logic, differential equations, dynamical systems, probability theory, numerical analysis, numerical optimization, approximation theory, combinatorial analysis, graph theory, computer applications, biomathematics, mathematical physics, inverse problems, and medical imaging. In addition to the requirements of the Graduate School, the minimum prerequisite for admission to the program of graduate studies in mathematics is the completion, with an average grade of B or better, of at least 24 credits of undergraduate mathematics, including a full year of calculus and three semesters of appropriate work beyond the calculus. The most appropriate courses for this purpose are advanced calculus, linear algebra and abstract algebra. Students lacking part of the requirements will be required to make up the deficiency early in their graduate work. Prerequisites to individual courses should be determined before registration by consultation with the instructor concerned. Some of the courses listed are offered only as needed. Since times of offering courses are estimated a year in advance, certain changes may be made if needs are known by the Department. The courses MAA 5228, MAA 5229, MAS 5311, and MAS 5312 are required for all advanced degree programs in mathematics. The requirements for the master’s degree nonthesis option include a minimum of 32 semester hours of course work. Students pursuing the master’s degree in mathematics must pass two comprehensive written examinations, one in algebra and one in analysis. Students pursuing the master’s degree with a specialization in applied mathematics have two options: the examination option requires passage of the algebra and analysis examinations; the thesis option requires instead the preparation and oral defense of a thesis on original research conducted under the supervision of a faculty advisor. Students pursuing the Master of Arts in Teaching or the Master of Science in Teaching must prepare a teaching portfolio and pass an oral examination. Each of these programs normally requires two years for completion. The requirements for a doctoral degree include 36 hours of 6000-level course work in mathematics; no hours of teaching, colloquium, dissertation, or individual work will count toward this requirement. To become a candidate for the doctoral degree, the student must pass a comprehensive preliminary examination with written and oral components administered by the Department. The doctoral student must also pass a reading knowledge examination in one of the following foreign languages: French, German, or Russian. The dissertation is an important requirement for the doctoral degree in mathematics. The topic for the dissertation may be chosen from a number of areas of current research in pure and applied mathematics. Every graduate student is expected to attend the regular colloquium. Details concerning all requirements for graduate degrees in mathematics may be obtained by writing the Mathematics Department Graduate Selection Committee or consulting the Department website, http://www.math.ufl.edu.

Philosophy Department

Chair: G. Witmer
Graduate Coordinator: C. Liu.

Complete faculty listing by department: Follow this link.

Latin American Studies Department

Director: C. D. Deere.
Graduate Coordinator: R. F. Brown.
Complete faculty listing by department: Follow this link.
The Center for Latin American Studies offers the following graduate programs:

- Latin American Studies
- Sustainable Development Practice

Linguistics Department

Chair: F. McLaughlin
Graduate Coordinator: E. Potsdam
Complete faculty listing by department: Follow this link.
The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in:

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

Requirements for these degrees are given in the Graduate Degrees section of this catalog. For detailed information on the program, please visit the link below. For further information on the program, including financial aid, please visit http://lin.ufl.edu.

Mathematics Department

Chair: D. Cenzer
Graduate Coordinator: J. A. Larson
Complete faculty listing: Follow this link.

The Center for Latin American Studies offers the following graduate programs:

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

Requirements for these degrees are given in the Graduate Degrees section of this catalog. For detailed information on the program, please visit the link below. For further information on the program, including financial aid, please visit http://lin.ufl.edu.

Mathematics Department

Chair: D. Cenzer
Graduate Coordinator: J. A. Larson
Complete faculty listing: Follow this link.

The Department of Mathematics offers the degrees of Doctor of Philosophy, Master of Science and Master of Arts, and the Master of Arts in Teaching and Master of Science in Teaching, each with a major in mathematics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

Interdisciplinary Programs — The Department offers a co-major program in conjunction with the Statistics Department leading to the Doctor of Philosophy degree in mathematics and statistics. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Statistics, Industrial and Systems Engineering, and Finance, Insurance, and Real Estate Departments.

Combined Program — The Department has an accelerated bachelor’s/master’s program designed for superior undergraduate students who have the ability to pursue such a plan of study leading to the Master of Science or Master of Arts degree. The main feature of the program is that up to 12 semester hours of approved graduate level mathematics courses may be used as dual credit for both the undergraduate and the graduate degree. All other requirements for both the bachelor’s degree and the master’s degree must be met. For admission requirements for this program, see the undergraduate coordinator.

There are opportunities for concentrated study in a number of specific areas of pure and applied mathematics at both the master’s and doctoral levels. The faculty directs studies and research in algebra, number theory, analysis, geometry, topology, logic, differential equations, dynamical systems, probability theory, numerical analysis, numerical optimization, approximation theory, combinatorial analysis, graph theory, computer applications, biomathematics, mathematical physics, inverse problems, and medical imaging. In addition to the requirements of the Graduate School, the minimum prerequisite for admission to the program of graduate studies in mathematics is the completion, with an average grade of B or better, of at least 24 credits of undergraduate mathematics, including a full year of calculus and three semesters of appropriate work beyond the calculus. The most appropriate courses for this purpose are advanced calculus, linear algebra and abstract algebra. Students lacking part of the requirements will be required to make up the deficiency early in their graduate work. Prerequisites to individual courses should be determined before registration by consultation with the instructor concerned. Some of the courses listed are offered only as needed. Since times of offering courses are estimated a year in advance, certain changes may be made if needs are known by the Department. The courses MAA 5228, MAA 5229, MAS 5311, and MAS 5312 are required for all advanced degree programs in mathematics. The requirements for the master’s degree nonthesis option include a minimum of 32 semester hours of course work. Students pursuing the master’s degree in mathematics must pass two comprehensive written examinations, one in algebra and one in analysis. Students pursuing the master’s degree with a specialization in applied mathematics have two options: the examination option requires passage of the algebra and analysis examinations; the thesis option requires instead the preparation and oral defense of a thesis on original research conducted under the supervision of a faculty advisor. Students pursuing the Master of Arts in Teaching or the Master of Science in Teaching must prepare a teaching portfolio and pass an oral examination. Each of these programs normally requires two years for completion. The requirements for a doctoral degree include 36 hours of 6000-level course work in mathematics; no hours of teaching, colloquium, dissertation, or individual work will count toward this requirement. To become a candidate for the doctoral degree, the student must pass a comprehensive preliminary examination with written and oral components administered by the Department. The doctoral student must also pass a reading knowledge examination in one of the following foreign languages: French, German, or Russian. The dissertation is an important requirement for the doctoral degree in mathematics. The topic for the dissertation may be chosen from a number of areas of current research in pure and applied mathematics. Every graduate student is expected to attend the regular colloquium. Details concerning all requirements for graduate degrees in mathematics may be obtained by writing the Mathematics Department Graduate Selection Committee or consulting the Department website, http://www.math.ufl.edu.

Philosophy Department

Chair: G. Witmer
Graduate Coordinator: C. Liu.

Complete faculty listing by department: Follow this link.
The Department offers the Master of Arts and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog.

Admission to the program requires a bachelor’s degree in philosophy or sufficient course work in philosophy, as determined by the department. Applicants are evaluated on the basis of academic achievement, GRE scores, three letters of recommendation, a statement of purpose, and a sample essay in philosophy. Students may be admitted as a terminal M.A. degree or for the Ph.D. Program.

The M.A. degree requires two years (36 hours) of course work. All graduate students take foundational courses in their first four semesters: the graduate Proseminar (PHI 5935), Graduate Logic (PHI 5135), a course in Ancient Philosophy (PHP 5005 or PHP 5015), a course in Modern Philosophy (PHI 5805 or PHI 5905), and other Foundations of Analytic Philosophy (PHP 5785) or Epistemology (PHI 5365).

The Ph.D. requires 90 credit hours, which may include 36 used as credit for the M.A. In addition to the foundational courses required for the M.A., the Ph.D. requires Ethical Theory (PHI 5665) and both of PHP 5785 and PHI 5365. It also requires six courses at the advanced 6000-level, 3 proposal research hours and 12 doctoral research hours, and of course the successful completion and defense of a dissertation.

Further information about the department’s programs and admissions can be obtained on the department’s website web.phil.ufl.edu or by contacting the Graduate Coordinator, 330 Griffin-Floyd Hall, (352)392-2064 or gradcoord@phil.ufl.edu.

**Physics Department**

**College of Liberal Arts and Sciences**

**Chair:** Kevin Ingersent  
**Graduate Coordinator:** Guido Mueller  
Complete faculty listings: [Follow this link](#).

The Department of Physics offers the Master of Science (thesis or nonthesis) and the Doctor of Philosophy degrees. The nonthesis Master of Science in Teaching is also offered. Requirements for these degrees are described in the [Graduate Degrees](#) section of this catalog.

Areas of specialization for graduate research include astrophysics and cosmology, atomic and molecular physics, biological physics, chemical physics, condensed matter physics (theory and experiment), nuclear physics, particle physics (theory and experiment), statistical physics, and low temperature physics.

Special interdisciplinary research programs include the Institute for Fundamental Theory (carried out jointly with the Department of Mathematics), the Institute for Theoretical and Computational Studies in Molecular and Materials Science (carried out jointly with the Department of Chemistry), the Institute of High Energy and Particle Astrophysics, and Microfabritech (jointly with the College of Engineering). A curriculum is offered by the Center for Chemical Physics for students interested in research related to chemistry or chemical engineering. The Center for Condensed Matter Sciences provides opportunities for investigations in a diverse range of subjects and fields, including the Microkelvin Research Laboratory. The University of Florida operates the National High Magnetic Field Laboratory jointly with Florida State University and Los Alamos National Laboratory.

The core curriculum is designed to provide a thorough foundation for all physics graduate students. It consists of PHY 6246, PHY 6346, PHY 6347, PHY 6536, PHY 6645, and PHY 6646. Doctoral students must achieve a 3.00 GPA in the core curriculum. All students must pass a preliminary examination at the undergraduate level. All degree candidates are required, as part of their graduate education, to participate continuously in the research and/or teaching programs of the Department.

For more information, please see the program page below, and visit our website: [http://www.phys.ufl.edu](http://www.phys.ufl.edu).

**Plant Molecular and Cellular Biology Department**

**College of Agrcultural and Life Sciences**  
**College of Liberal Arts and Sciences**  
**College of Medicine**

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology within the colleges of Agriculture and Life Sciences, Medicine and Liberal Arts and Sciences.

**Political Science Department**

**Chair:** Ido Oren  
**Graduate Coordinator:** Daniel Smith  
Complete faculty listing: [Follow this link](#).

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science--international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the [Graduate Degrees](#) section of this catalog. For further information, please contact the [Political Science Department](#) or follow the hyperlinks below to more information about the specific programs offered.

**Psychology Department**

**College of Liberal Arts and Sciences**

**Chair:** Lisa Abrams  
**Graduate Coordinator:** Julia A. Gruber  
Complete faculty listing by department: [Follow this link](#).

The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the [Graduate Degrees](#) section of this catalog. Students are not accepted for a terminal master's degree.

For more information, please see the program page below and our website: [http://www.psych.ufl.edu](http://www.psych.ufl.edu).
Religion Department

Chair: Manuel A. Vasquez.
Graduate Coordinator: David G. Hackett

Complete faculty listing by department: [Follow this link](http://religion.ufl.edu/graduate-studies/)

The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asia
- Religion and nature.

Minimum requirements for these degrees are given in the General Information section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religions and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at [http://religion.ufl.edu/graduate-studies/](http://religion.ufl.edu/graduate-studies/) under "Graduate Program." In special instances, and with the agreement of the supervisory committee and two sponsoring faculty members, master's degree students may choose an area outside the three specialty fields.

In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest:

- Three references from persons competent to evaluate the applicant's potential for graduate work
- An essay of 3 to 5 double-spaced, typewritten pages identifying the applicant's goals and particular interests pertinent to the three available specialty fields (this essay is extremely important and applicants should attend to it carefully)
- A writing sample.

Beyond these requirements, applicants need to show clear evidence of solid preparation before admission. This usually includes formal study of the primary language in the specialty field. Acceptable scores on the GRE General Test are required. In addition to evidence of preparation and academic promise, the Department gives careful consideration to the fit between an applicant's central scholarly interests and the resources the Department and University have to offer.

Master of Arts: The M.A. degree provides a broad background in the study of religions and religious experiences, both in the discipline and the initial concentration in one of the three specialty fields. Course work culminates in the thesis. The student may also elect to complete an oral examination.

Total credits: Thirty credit hours are required. These include Method and Theory I and II, the core course(s) of the major field (or equivalent for those not in one of the three specialty fields), and 6 hours of thesis research credits. The additional hours shall consist of further courses in the specialty field, other graduate seminars, and up to 6 hours of research language study.

Language study: All M.A. students are required to demonstrate competency in a scholarly language other than English before beginning the thesis. Most languages are acceptable, though students should consult the individual field requirements. The chosen language must be approved by the student's mentor and the graduate coordinator.

Thesis: Each student, guided by a supervisory committee, will prepare a Master of Arts thesis, acceptable to the Department of Religion and the Graduate School, and undergo an oral examination.

Promotion to doctoral status: The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish that status to be changed.

Doctor of Philosophy: The Ph.D. program trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religion master's degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master's degree with additional religion course work. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

Course requirements: The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours credited toward the Ph.D. is at the discretion of department faculty. A minimum of 45 hours is devoted to course work at the doctoral level. The specific distribution of course work depends on the specialization but will include intensive work in the major area of specialization, 6 hours of method and theory (If not taken at the M.A. level) and 15 hours devoted to dissertation writing and research.

Language requirements: All doctoral students must demonstrate proficiency in at least one and in many cases two languages other than English. The chosen language(s) as well as how and when the student's competence will be judged must be approved by the student's supervisory committee chair. Frequently language competence is documented by 1) taking an appropriate course or courses in the language with a grade of "B" or better, or 2) passing a translation exam (usually administered by a department member or a language department at the University). Basic course work for scholarly languages will not count toward the required 90 credit hours. However, students studying a scholarly language connected to their research needs (above and beyond basic competence) can receive 6 (or more) credit hours for such advanced courses toward the required 90 total credit hours, with approval of the student's supervisory committee chair.

Qualifying examinations: Qualifying examinations form a bridge between course work and dissertation research. Normally, students will take qualifying examinations during their third year in residence. The precise areas of questioning and the reading list are decided by the supervisory committee in consultation with the student, well in advance of the examinations, but no later than the beginning of the term in which the student intends to take the qualifying examinations.

Dissertation proposal: Each doctoral candidate submits a formal dissertation proposal to the candidate's supervisory committee chair at least 3 weeks before the end of the semester after the qualifying examination.

Admission to candidacy: On successfully completing the qualifying examination and the dissertation proposal, and all other course and language requirements, and with the approval of the supervisory committee, students make formal application to the Department and Graduate School for admission to Ph.D. candidacy.

Dissertation and its defense: The final years of the program are devoted to dissertation research and writing. The student is expected to present the completed dissertation and defend it at a public oral defense conducted by the supervisory committee.

Mentoring: Each student is assigned a faculty mentor on admission to the program, based on expressions of faculty interest and the student's intended area of concentration. The mentor and graduate coordinator answer questions and provide support for the student in choosing courses and planning a program. By the end of the second semester, all master's degree students must designate their supervisory committee chair and one additional department committee member. By the end of the second semester, all doctoral students must designate their committee chair.

By no later than the end of the fourth semester, all doctoral students must designate a four-member supervisory committee including the chair and one member from outside the department. For details about the programs listed above, visit [http://religion.ufl.edu/graduate-studies/](http://religion.ufl.edu/graduate-studies/).

Spanish and Portuguese Studies Department

Chair: G. Lord
Graduate Coordinator: L. Alvarez Castro
Complete faculty listing by department: Follow this link.

The Department of Spanish and Portuguese Studies offers a Master of Arts degree (M.A.) in Spanish (thesis and non-thesis options) and a Doctor of Philosophy degree (Ph.D.) in Romance Languages and Literatures, with a concentration in Spanish. Descriptions of the minimum requirements for both degrees are provided in the General Information section of this catalog. For specific information about the program, please visit the graduate section of the departmental webpage:

http://web.wst.ufl.edu/spanish/graduate.html

Candidates for graduate degrees (both M.A. and Ph.D.) in Spanish can choose between two specializations—literature/culture or linguistics. In conjunction with their master’s or doctoral work, students may also earn a Certificate in Latin American Studies. Though a graduate degree is not offered in Portuguese, extensive course offerings at the graduate level permit students to develop a strong specialization in Portuguese language and Luso-Brazilian literature, film and culture.

The main prerequisite for admission to the M.A. program is an undergraduate major in Spanish, ideally including advanced courses in the proposed area of specialization. Applicants for the Ph.D. should hold an M.A. or equivalent degree in Spanish. At the discretion of the Graduate Studies Committee, candidates from related fields of study (History, Sociology ...) may be offered a conditional admission into the Ph.D. program pending the passing of the M.A. Comprehensive Examination within the first year of study.

All M.A. and Ph.D. students in Spanish who are appointed as teaching assistants must take Romance Language Teaching Methods (FOL/FOL 6945). Besides, all M.A. and Ph.D. students specializing in literature and culture must take Introduction to Graduate Study and Research (SPW 6006). Other requirements vary with degree and specialization. For details, consult the graduate section of the departmental webpage (see above).

The Department is able to offer most students a teaching assistantship that provides a maintenance stipend and includes a tuition waiver. Contingent on positive performance in teaching and graduate work, M.A. students are guaranteed four semesters of support, and Ph.D. students are guaranteed eight semesters of support beyond the M.A. In addition, there are several fellowships, supplements and stipends for which students may apply, and summer teaching may be available.

Prospective students are encouraged to review the departmental webpage in order to familiarize themselves with the program and the application process. Only those applications including all required materials and submitted by the advertised deadlines will be considered. For any questions about the program or how to apply, please contact the graduate coordinator:

lacastro@ufl.edu

Highly qualified UF undergraduate students majoring in Spanish may apply for a combined B.A./M.A. program in Spanish that allows up to 12 graduate credits to be counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details.

Statistics Department

Chair: M. J. Daniels
Graduate Coordinator: J. P. Hobert
Complete faculty listing: Follow this link.

Graduate programs are available leading to Master of Science in Statistics, Master of Statistics, and Doctor of Philosophy degrees. Minimum requirements for these degrees are described in the General Information section of this catalog.

Both master's programs usually require 2 years of course work including material covered in STA 6326, 6327, STA 6329, STA 6466, STA 6467, STA 7249, and STA 7346. In addition to earning a "Ph.D. pass" on the first-year evaluation, requirements for the Ph.D. degree include STA 6466, 6467, STA 7249, and STA 7346.

Interdisciplinary programs: The Department offers a co-major program in conjunction with the Fisher School of Accounting leading to the Doctor of Philosophy degree in statistics and business administration accounting. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Departments of Mathematics; Industrial and Systems Engineering and Finance; Insurance, and Real Estate. For information on these programs, consult the departmental graduate coordinator.

Combined program: The Department offers a bachelor's/master's degree program. Contact the graduate coordinator for information.

Women's Studies Department

Director: Bonnie Monadi
Graduate Coordinator: Kendal Brock
Complete faculty listing: Follow this link.

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as two certificates. These options give students the opportunity to take advantage of scholarship in this dynamic field, and to become acquainted with different research perspectives and methodologies. Students become well grounded in theories of gender in cultural systems and in ways that gender intersects with other categories of difference such as race, ethnicity, religion, class, sexuality, nation, physical and mental ability, age, and economic and civil status. Faculty and students employ feminist and other appropriate theoretical approaches and methodologies.

The Center offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring. The Center in Ustler Hall houses archives, a small library, offices, and meeting space.

For more information about our programs, please see the program page below or our website: http://web.wst.ufl.edu.

College of Medicine

Dear: M.L. Good

Complete faculty listing: Follow this link.

The College of Medicine offers training opportunities leading to either the Doctor of Philosophy or Master of Science degree in medical sciences. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog. For more information, please see our website: http://med.ufl.edu.

The interdisciplinary program (IDP) in biomedical sciences is the major focus leading to the Doctor of Philosophy degree. Other graduate courses and programs are listed under departmental headings. For further information, visit http://idp.med.ufl.edu.

Departments and Programs within the College of Medicine
Biochemistry and Molecular Biology Department

Chair: James B. Flanegan.
Graduate Coordinator: Kevin Brown

Complete faculty listing by department: Follow this link.

Biochemistry and Molecular Biology Department faculty mentor Ph.D. students in the College of Medicine interdisciplinary program (IDP) in medical sciences. Students interested in pursuing a doctoral degree can view specific features of the biochemistry and molecular biology concentration at [http://biochem.med.ufl.edu/](http://biochem.med.ufl.edu/) and [http://idp.med.ufl.edu](http://idp.med.ufl.edu). For admission information, visit the IDP website. Department faculty also mentor Ph.D. students in other college programs and participate actively in the research and teaching functions of various centers such as the Center for Epigenetics and the Center for Structural Biology. The Department offers a wide variety of courses for graduate students studying in the life sciences. The research expertise of the faculty spans the areas from cell biology, metabolism, and molecular biology to physical biochemistry/structural biology. Current research interests include viral protease inhibitors, viral RNA replication, bioenergetics and proton translocation, X-chromosome structure and function, cytoskeletal assembly and dynamics, enzyme mechanism and control, chromatin structure, gene expression and regulation, mitochondrial biogenesis and evolution, the genetics of inherited disease, nutrient membrane transporters, protein site-directed mutagenesis, ribosome structure and function, signal transduction, structural biology and dynamics of macromolecules, protein-nucleic acid interactions, transgenic animal models, and virus crystal structure. Prospective graduate students should have adequate training in chemistry and biology. Minor deficiencies may be made up immediately after entering graduate school. Previous undergraduate experience in a research laboratory is highly recommended. Doctoral students are required to take a core IDP course in fall term of their first year; and beginning in spring term, students take advanced classes in areas of interest. Specific advanced-level courses may be recommended by the student’s supervisory chair and committee. The following courses are open to all graduate students and advanced undergraduates. Additional courses are listed in the Advanced Concentration in Biochemistry and Molecular Biology section under Medical Sciences.

Biostatistics Department

College of Public Health and Health Professions
College of Medicine

Chair: P. Qiu
Graduate Coordinator: Babette Branham

Complete faculty listing by department: Follow this link.

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The Biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of a cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/](http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/).

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/](http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/).

Epidemiology Department

College of Public Health and Health Professions
College of Medicine

Chair: Linda Cottler
Ph.D. Program Director: Cindy Prins
M.S. Program Director: Catherine Woodstock Striley

Complete faculty listing by department: Follow this link.

The Department of Epidemiology — jointly governed by both the College of Public Health and Health Professions and the College of Medicine — offers the Doctor of Philosophy degree in...
epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: [http://epidemiology.phhp.ufl.edu](http://epidemiology.phhp.ufl.edu).

# Health Outcomes and Policy Department

**College of Medicine**

Chair: Betsy Shenkman  
Graduate Coordinator: Jill Herndon  
Complete faculty listings by department: [Follow this link](#).

Students can pursue either a Master of Science degree or a Graduate Certificate.

There is increasing emphasis on assessing health outcomes throughout the lifespan in a variety of health care and community settings. Nationally, the National Institute of Health and other federal and state agencies focus on the development of evidence-based programs to promote health, improve health care delivery, and enhance health outcomes.

Outcomes research generates evidence that informs health care program design in clinical and community settings, the promotion of effective clinical and community interventions, quality of care, cost-effective and clinically appropriate choices for patients in allocation of health care resources (clinical effectiveness), and incorporation of best practice models into health-related programs and policies. Outcomes research also provides mechanisms to understand how to translate research into practice and policy, how to improve the quality and efficiency of health programs, and how to achieve equitable and appropriate delivery of health programs and clinical care, particularly for underserved and vulnerable populations.

Our graduate programs are designed to train professionals in the health care and health research fields about the science that supports the development and evaluation of evidence-based clinical and community-based programs focused on improving health outcomes. Further, our programs emphasize methods for translating research into practice and policy. The unique combination of courses offered through these graduate programs will give trainees the tools needed to examine health outcomes and policies in a variety of settings across different age spans and to examine the individual, social, health system, and health policy factors that influence health outcomes.

In addition to traditional graduate students, both programs are available to medical students, post-doctoral students, fellows, residents, Ph.D. students, and junior faculty.

# Molecular Genetics and Microbiology Department

Chair: H. V. Baker  
Graduate Coordinator: A. S. Lowin  
Complete faculty listing by department: [Follow this link](#).

The Graduate Faculty of the Department of Molecular Genetics and Microbiology participate in the interdisciplinatory program (IDP) in medical sciences, leading to the Doctor of Philosophy degree, with specialization in one of the six advanced concentration areas of the IDP (see Medical Sciences). Departmental areas of research associated with the IDP focus on topical problems in molecular genetics, viral genetics, and viral and bacterial pathogenesis. Faculty in the Department of Molecular Genetics and Microbiology also participate in the M.S. programs (see Medical Sciences). In addition to courses associated with the IDP, the Department of Molecular Genetics and Microbiology maintains the courses listed below.

**Biotechnology:** This Master of Science program is for students seeking careers in the biomedical industry as research or managerial associates; students seeking careers as teachers or educators at any level, but primarily high school or junior college; or students seeking an in-depth understanding of modern biology and scientific research as an end in itself or in preparation for further graduate study. The foundation of the M.S. program is a basic understanding of molecular and cell biology and the performance of a high-quality research project, culminating in a thesis, under the direction of a skilled mentor, with supervision by a committee composed of members of the Graduate Faculty. Specialization may be in any of the fields of research being pursued at the College of Medicine including but not limited to molecular genetics, gene therapy, bacterial or viral pathogenesis, protein structure, toxicology, mammalian genetics, wound healing, and congenital eye diseases.

For more information contact the Master's Program Coordinator, Molecular Genetics and Microbiology, P.O. Box 100266, College of Medicine, Gainesville, FL 32610, Telephone (352)392-3314.

# College of Nursing

Dear: A.M. McDaniel  
Complete faculty listings: [Follow this link](#).

The nationally ranked College of Nursing offers the graduate degrees of Master of Science in Nursing, Doctor of Nursing Practice, and Doctor of Philosophy in nursing sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog. Students may request special review by the College of Nursing Admissions Committee if they believe they are strong candidates for graduate study but do not fully meet all criteria.

The College offers the master's degree and post-master's certification for nurse midwifery and the following nurse practitioner roles: adult acute care, adult, family, pediatric, and neonatal. Additional offerings include

- Psychiatric/Mental health clinical nurse specialists/nurse practitioners  
- Clinical Nurse Leader

For additional information about the Nursing programs, visit [http://www.nursing.ufl.edu](http://www.nursing.ufl.edu) or call (352) 273-6331.

*College of Nursing Courses*

# College of Pharmacy

Dear: J. Johnson  
Complete faculty listings: [Follow this link](#).

The College of Pharmacy offers the Doctor of Philosophy and the Master of Science in Pharmacy degrees in the pharmaceutical sciences, with concentrations in medicinal chemistry, pharmaceutical economics, pharmacokinetics and policy, and pharmacy which includes pharmaceutics. There are two additional concentrations in the Master of Science in Pharmacy program in pharmaceutical sciences: forensic drug chemistry, and forensic toxicology and DNA. Both offered in a distance-learning nonthesis format. Complete descriptions of the minimum
requirements for the M.S.P. and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

The Graduate Faculty and courses offered are listed under department headings in this catalog. The courses listed below consist of seminar, supervised teaching and research, and research for thesis or doctoral dissertation. These courses are offered in each of the departments.

Students who wish to pursue graduate studies in the College of Pharmacy must have an undergraduate degree in pharmacy, chemistry, biology, or related sciences.

Satisfactory completion of a thesis or dissertation based on research is a requirement for a graduate degree in the pharmaceutical sciences.

Inquiries regarding applications and general information about the graduate programs are processed through the
Office of Research and Graduate Studies,
College of Pharmacy,
P.O. Box 100484,
Health Science Center.

For more information, please see our website: 

Departments and Programs within the College of Pharmacy

Medicinal Chemistry Department

Chair: M. O. James.
Graduate Coordinator: H. Luesch.

Complete faculty listing by department: Follow this link.

The College of Pharmacy offers the Doctor of Philosophy degree in pharmaceutical sciences with a concentration in medicinal chemistry. Medicinal chemistry is a unique blend of the physical and biological sciences. The scope of the field is sufficiently broad to give students with many different science backgrounds a rewarding and challenging program of study. Areas of active research include organic synthesis of medicinal agents, metal chelate design, prodrugs and topical drug delivery, drug metabolism, molecular toxicology, molecular biology, combinatorial chemistry, neurochemistry, analytical chemistry, molecular modeling, natural products, and drug discovery.

The applicant should have an undergraduate degree in pharmacy, chemistry, biology, or premedical sciences. A background in calculus and physical and organic chemistry is required. In addition to graduate medicinal chemistry courses in the College of Pharmacy, graduate courses in chemistry and biochemistry are required for the program.

The College also offers the Master of Science in Pharmacy degree in pharmaceutical sciences (nonthesis option) with concentrations in both forensic drug chemistry and forensic serology and DNA in a distance learning format. Minimum requirements for the M.S.P. and Ph.D. degrees are described in the General Information section of this catalog.

The Department participates in the interdisciplinary concentration in toxicology. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

Pharmaceutics Department

Chair: H. C. Derendorf.
Graduate Coordinator: A. Palmieri III.

Complete faculty listing by department: Follow this link.

The Department of Pharmaceutics offers the Doctor of Philosophy in pharmaceutical sciences. Pharmaceutics is the scientific endeavor concerned with the design, formulation, evaluation, and use of drug delivery systems. A foundation in physical chemistry, chemistry, mathematics, and in the life sciences, is necessary. Its domain extends from studies of the physiochemical properties of drugs and related molecules to investigations of the mechanisms of physiological processes affecting drug delivery and therapeutic effectiveness. The Department's general focus involves studying the design and evaluation of traditional and novel dosage forms for delivering drug molecules and macromolecules. The design involves physical chemical studies and development of analytical techniques involving spectroscopy and chromatography. Evaluation includes development of sensitive analytical techniques for the drug in biological fluids and subsequent biopharmaceutical and clinical pharmacokinetic studies.

Pharmacodynamics Department

Chair: M. Keller-Wood.
Interim Graduate Coordinator: Joanna Peris.

Complete faculty listing by department: Follow this link.

The Department of Pharmacodynamics offers the Doctor of Philosophy in pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the interdisciplinary toxicology concentration (see Interdisciplinary Graduate Studies in this catalog). Pharmacodynamics is an integrated field of study involving pharmacology, physiology, and toxicology in a holistic approach to drug action in living systems. The Department focuses on neuroendocrinology, cardiovascular pharmacology, and neuropharmacology with diverse research interests in aging, hypertension, reproduction, glaucoma, neurotoxicity, and environmental physiology.

An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.

Pharmaceutical Outcomes and Policy Department

Chair: R. Segal.
Graduate Coordinator: A. Winterstein.

Complete faculty listing by department: Follow this link.
The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree. Complete descriptions of the requirements for these degrees are provided in the Graduate Degrees section of this catalog.

Pharmacotherapy and Translational Research Department

For a full list of faculty, please follow this link.

College of Public Health and Health Professions

Dear, Michael G. Perri
Executive Associate Dean: Stephanie L. Hanson
Complete faculty listings: Follow this link.

The University of Florida College of Public Health and Health Professions has established a new educational model that focuses on the integration of public health problem-solving and individual patient care. The college's mission is to preserve, promote and improve the health and well-being of populations, communities and individuals. To fulfill this mission, we foster collaborations among public health and the health professions in education, research and service.

For more information, please see our website: http://phhp.ufl.edu

Behavioral Science and Community Health Department

Chair: B. Curbow
Complete faculty listing by department: Follow this link.

The Department of Behavioral Science & Community Health (BSCH) is one of nine academic departments housed in the School of Public Health and Health Professions at the University of Florida. This department offers a Doctor of Philosophy (PhD) degree (SBS track). For more information about the program, please visit the link below.

Biostatistics Department

College of Public Health and Health Professions
College of Medicine

Interim Chair: Samuel Wu
Graduate Coordinator: Babette Brumback
Complete faculty listing by department: Follow this link.

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website http://biostat.ufl.edu/education/phd-in-biostatistics/.

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website http://biostat.ufl.edu/education/ms-in-biostatistics/.
Clinical and Health Psychology Department

College of Public Health and Health Professions

Department Chair: William W. Latimer.
Graduate Coordinator: S.R. Boggs.

Complete faculty listing: Follow this link.

The Department of Clinical and Health Psychology is a unit of the College of Public Health and Health Professions. The department's programs are its doctoral clinical psychology studies leading to the Ph.D. degree in psychology; an American Psychological Association accredited doctoral internship program; and postdoctoral studies and research. Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

The clinical psychology doctoral curriculum adheres to the scientist-practitioner model of education and training. Program strengths include research, education, and professional training in health care psychology, with organized areas of concentration in clinical health psychology, clinical child/pediatric psychology, neuropsychology, neuorhabilitation and clinical neuroscience, and emotion neuroscience/psychopharmacology. Education and training experiences are also available in rural psychology. Interested students can apply for acceptance into the Public Health Program and obtain dual M.P.H./Ph.D. degrees.

Progress in the program is determined by departmental policies which are consistent with American Psychological Association accreditation standards. The curriculum has been continuously accredited by the American Psychological Association since 1953.

Admission to the Department is through appropriate application to the Department's admission committee. A bachelors degree is generally adequate preparation for graduate admission. It should include undergraduate courses in both experimental psychology and statistics, along with at least three courses from the following psychology areas: developmental, learning, perception, personality, physiological, and social.

For more information, please see the program page below and our website: http://chp.phhp.ufl.edu.

Environmental and Global Health Department

Chair: G. C. Gray
Graduate Studies Program Assistant: N. Burke

Faculty listing: Follow this link.

The Department of Environmental and Global Health focuses upon environmental factors that impact human health. Department faculty, scientists, and students employ numerous disciplines in studying these environmental factors: virology, bacteriology, parasitology, entomology, toxicology, epidemiology, water science, veterinary health, environmental engineering, aerosol biology, wildlife health, etc. Research work often involves international travel and collaboration. A central theme for the department is the interdisciplinary thinking called One Health which reflects the collaborations necessary to tackle public health's most difficult problems. Faculty, students and staff often perform research in the laboratories in the Emerging Pathogens Institute, the Center for Environmental and Human Toxicology, or the Aquatic Pathobiology Laboratory.

The Department of Environmental and Global Health offers graduate work leading to the degrees of Doctor of Philosophy, Master of Health Science, and Master of Public Health.

Epidemiology Department

College of Public Health and Health Professions
College of Medicine

Chair: Linda Cottler
Ph.D. Program Director: Cindy Prins
M.S. Program Director: Catherine Woodstock Striley

Complete faculty listing by department: Follow this link.

The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Masters of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and the department website: http://epidemiology.phhp.ufl.edu.

Health Services Research, Management, and Policy Department

Chair: Arch G. Mainous, III
Graduate Coordinator: Patricia Van Wert

Complete faculty listing: Follow this link.

The Department of Health Services Research, Management, and Policy offers degree programs at both the masters' and doctoral level. The Master of Health Administration (M.H.A.) prepares individuals for management positions in the health care field. The Department also participates in the Master of Public Health (M.P.H.) degree by offering a concentration in Public Health Management and Policy (more information available here).

At the doctoral level, the Department offers the Ph.D. degree in Health Services Research. This full-time program prepares graduates to investigate and evaluate the complexities of health care systems in the U.S. and elsewhere. Health services research is a multidisciplinary field that examines the delivery, organization, financing, and outcomes of health care services.

Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below and our website: http://hsmrp.phhp.ufl.edu.

Occupational Therapy Department
The Department of Occupational Therapy offers graduate programs in occupational therapy leading to the Master of Health Science (M.H.S.) degree (on-campus nonthesis and thesis options and distance learning nonthesis option) and the entry-level Master of Occupational Therapy (M.O.T.) degree. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

**Master of Health Science:** This program is designed for students who have earned an undergraduate degree in Occupational therapy. The thesis option requires four semesters of course work and a formal research thesis, while the nonthesis option requires three semesters of course work and a research project. The program emphasizes research and advanced theories related to occupational therapy practice. Preparation for teaching, administrative, and other occupational therapy roles is supplemented through elective courses. A coherent series of elective courses related to occupational therapy must be approved by the supervisory committee chairperson before the second semester of work.

In addition to the requirements of the Graduate School, admission requires the candidate to have completed a curriculum in occupational therapy accredited by the American Occupational Therapy Association or by the World Federation of Occupational Therapists.

The distance learning degree option for the Master of Health Science is specifically intended to meet the needs of the working professional. The nonthesis program is designed to improve the knowledge and skills of working occupational therapists for practice in a complex and challenging health care system. It provides preparation for new practice areas, leadership roles, and independent practice and is delivered through the Internet. In addition to the departmental requirements listed above, applicants to the distance learning program must have basic personal computer competency and access to a computer that meets minimal configuration requirements.

Additional information about the Master of Health Science is available at [http://otdlm.phhp.ufl.edu/](http://otdlm.phhp.ufl.edu/) or by telephone at (352)273-6817. For distance learning, see [http://otdlm.phhp.ufl.edu/](http://otdlm.phhp.ufl.edu/) or call toll free (866)878-3297.

**Master of Occupational Therapy:** This entry-level degree program is designed for students who do not have an undergraduate degree in occupational therapy. The program provides students with a holistic perspective, including an understanding of the philosophical and theoretical bases for practice in the current health care environment. The M.O.T. program provides a strong background in theory, assessment, and therapeutic interventions. Before their professional preparation in the M.O.T. program, students receive a liberal education in their pre-professional baccalaureate studies, including several courses specifically focused for students planning to enter the M.O.T. program. Students may enroll in courses in the Bachelor of Health Science degree program at the bachelor's level, or they may complete these courses on a postbaccalaureate level before starting the M.O.T. program. Students are only admitted into the M.O.T. program in summer term and graduate at the end of the fall term after 1.33 years of full-time study (5 semesters) and 58 credits.

Admission requirements include completion of an undergraduate degree and the prerequisite course work. Three letters of reference and a letter of application are required by the Department. Additional information is available at [http://www.phhp.ufl.edu/](http://www.phhp.ufl.edu/) and [http://otdlm.phhp.ufl.edu/](http://otdlm.phhp.ufl.edu/) or by telephone at (352)273-6817.

This program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association. The address for ACOTE is 4720 Montgomery Lane, Box 31220, Bethesda, MD, 20814-1220. The phone number is (301) 652-2632. Graduates of the program are eligible to sit for the national certification exam administered by the National Board for Certification in Occupational Therapy (NBCOT). The website address of NBCOT is [www.nbcot.org](http://www.nbcot.org).

### Speech, Language and Hearing Sciences Department

**Chair:** Scott K. Griffiths  
**Graduate Coordinators:** Kenneth J. Logan and Alice Holmes

Complete faculty listing by department: [Follow this link](http://gradschool.rgp.ufl.edu/)

Graduate programs in the Department lead to Master of Arts and Doctor of Philosophy degrees in Communication Sciences and Disorders and to the Doctor of Audiology degree. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate specializations and programs in speech-language pathology and audiology are accredited by the Council on Academic Accreditation/American Speech-Language-Hearing Association.

**The Doctor of Audiology (Au.D.) Program** in the Department of Speech, Language, and Hearing Sciences is a four-year graduate degree. Graduate students take course work in theoretical and applied audiological sciences and research. There are no specific undergraduate courses required for admission to the Au.D. program, although applicants with a strong science background are encouraged to apply. Graduates of this program are eligible for the Certificate of Clinical Competence in Audiology (CCC-A) administered by the American Speech-Language-Hearing Association, Board Certification in Audiology administered by the American Academy of Audiology, and for state licensure in audiology. For more information, contact Alice Holmes, Ph.D. (aholmes@ufl.edu).

The Ph.D. Program in Communication Sciences and Disorders provides a state-of-the-art education in research practices in speech-language pathology and audiology with a strong interdisciplinary focus. The goal is to prepare the next generation of researchers who are specialized in basic and/or applied science that relates to a range of speech, language, hearing, and swallowing functions. The program is designed to develop researchers who are skilled at independently designing and conducting original research that adds to the body of knowledge in the field. Students are individually mentored and pursue individually designed programs of study tailored to their interests and needs, which incorporate training in appropriate adjunct fields such as engineering, dentistry, gerontology, linguistics, psychology, medicine and special education. For more information, contact Lori Altmann, Ph.D. (laltmann@ufl.edu).

The Master of Arts (MA) Program offers comprehensive academic training and clinical experience for students who are interested in a career in speech-language pathology. The five-semester program culminates in the completion of either a clinical externship or a Master's thesis, and it provides graduates with a solid foundation for obtaining employment in a variety of work settings. Students have the opportunity to complete clinical practice at sites within the University of Florida's Health Science Center and at other medical, rehabilitative, and educational facilities or on or near the campus. These sites allow students to gain experience with providing clinical services to a range of patient populations.

Applicants to the Master's program must demonstrate successful completion of pre-requisite coursework in both normal bases of communication and introductory concepts in communication disorders. Additional information about these pre-requisites is available on the Department web site. Graduates of the program are eligible for the Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP) from the American Speech-Language-Hearing Association as well as state licensure in speech-language pathology. For more information, contact Kenneth J. Logan, Ph.D. (klogan@ufl.edu).

The Department of Speech, Language, and Hearing Sciences is committed to providing its students with a high-quality educational experience that will prepare them for rewarding employment in the areas of speech-language pathology and audiology, as well as an eagerness for lifelong learning and professional development. The department strives to enroll a diverse group of students who possess both high ethical standards and strong academic skills. The application deadlines are January 15 for fall admission to the Ph.D. program, and February 1 for fall admission to the Master's and Au.D. programs.

For more information, please see the program pages below and our website: [http://slhs.phhp.ufl.edu/](http://slhs.phhp.ufl.edu/)

### College of Veterinary Medicine

Dear: G. F. Hoffiss
Complete faculty listings: Follow this link.

The UF College of Veterinary Medicine is the state's only veterinary college. UF's College of Veterinary Medicine offers comprehensive services to the public through teaching, research, extension and state-of-the-art patient care.

For more information, please see our website: http://www.vetmed.ufl.edu

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link.

For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/.

Course Descriptions - All (unsorted)

Return to Courses by Discipline

ABE 5015: Empirical Models of Crop Growth and Yield Response
ABE 5038: Recent Developments and Applications in Biosensors
ABE 5152: Electro-Hydraulic Circuits and Controls
ABE 5332: Advanced Agricultural Structures
ABE 5442: Advanced Agricultural Process Engineering
ABE 5643C: Biological Systems Modeling
ABE 5646: Biological and Agricultural Systems Simulation
ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials
ABE 5663: Advanced Applied Microbial Biotechnology
ABE 5707C: Agricultural Waste Management
ABE 5815C: Food and Bioprocess Engineering Design
ABE 6005: Applied Control for Automation and Robots
ABE 6031: Instrumentation in Agricultural Engineering Research
ABE 6035: Advanced Remote Sensing: Science and Sensors
ABE 6037C: Remote Sensing in Hydrology
ABE 6252: Advanced Soil and Water Management Engineering
ABE 6254: Simulation of Agricultural Watershed Systems
ABE 6265: Vadose Zone Modeling
ABE 6266: Nanotechnology in Water Research
ABE 6615: Advanced Heat and Mass Transfer in Biological Systems
ABE 6644: Agricultural Decision Systems
ABE 6816: Food and Bioprocess Sterilization
ABE 6905: Individual Work in Agricultural and Biological Engineering
ABE 6910: Supervised Research

ABE 6931: Seminar

ABE 6933: Special Topics in Agricultural and Biological Engineering

ABE 6940: Supervised Teaching

ABE 6971: Research for Master’s Thesis

ABE 6972: Research for Engineer’s Thesis

ABE 6974: Nonthesis Project

ABE 6986: Applied Mathematics in Agricultural and Biological Engineering

ABE 7979: Advanced Research

ABE 7980: Research for Doctoral Dissertation

ACG 5005: Financial Accounting

ACG 5065: Financial and Managerial Accounting

ACG 5075: Managerial Accounting

ACG 5226: Advanced Accounting

ACG 5505: Governmental Accounting

ACG 5637: Auditing I

ACG 5647: Auditing II

ACG 5815: Accounting Regulation

ACG 6136: Accounting Theory

ACG 6175: Financial Reporting and Analysis

ACG 6207: Accounting for Risk

ACG 6265: International Accounting and Taxation

ACG 6635: Issues in Audit Practice

ACG 6685: Forensic Accounting

ACG 6691: International Auditing

ACG 6697: Information Systems Assurance

ACG 6905: Individual Work in Accounting

ACG 6935: Special Topics in Accounting

ACG 6940: Supervised Teaching

ACG 7885: Accounting Research I

ACG 7886: Accounting Research II

ACG 7887: Research Analysis in Accounting

ACG 7939: Theoretical Constructs in Accounting
ACG 7979: Advanced Research
ACG 7980: Research for Doctoral Dissertation
ADV 5005: Advertising Planning
ADV 6006: Theories of Advertising
ADV 6305: Advanced Media Planning
ADV 6325: Advertising and Social Media
ADV 6405: International Advertising
ADV 6503: Advertising Creative Strategy and Research
ADV 6505: Advertising Research Methods
ADV 6602: Advertising Management
AEB 5167: Economic Analysis in Small Farm Livelihood Systems
AEB 5188: Economics of Agribusiness Decisions
AEB 5326: Agribusiness Financial Management
AEB 5516: Quantitative Methods in Agribusiness Decisions
AEB 5757: Strategic Agribusiness Human Resource Management
AEB 6106: Microeconomic Principles and Analysis
AEB 6139: Strategic Agribusiness Management
AEB 6145: Agricultural Finance
AEB 6183: Agribusiness Risk Management
AEB 6225: Public Policy and the Agribusiness Firm
AEB 6301: Food Wholesale and Retail Marketing
AEB 6363: Agricultural Marketing
AEB 6385: Management Strategies for Agribusiness Firms
AEB 6533: Static and Dynamic Optimization Models in Agriculture
AEB 6553: Elements of Econometrics
AEB 6592: Mathematical Programming for Economic Analysis
AEB 6675: International Agribusiness Marketing
AEB 6815: Science and Research Methodology
AEB 6817: Survey Research Methods for Economists
AEB 6905: Problems in Food and Resource Economics
AEB 6910: Supervised Research
AEB 6921: Workshop in Food and Resource Economics I
AEB 6933: Special Topics
AEB 6934: Workshop in Food and Resource Economics II
AEB 6942: Advanced Applications in Agribusiness Experience
AEB 6971: Research for Master's Thesis
AEB 7108: Microeconomic Theory II
AEB 7174: Economic Coordination and Organizational Behavior in Agribusiness
AEB 7182: Agricultural Risk Analysis and Decision Making
AEB 7184: Production Economics
AEB 7240: Macroeconomic Theory in Open Economies II
AEB 7373: Consumer Demand and Applied Analysis
AEB 7453: Natural Resource and Environmental Economics
AEB 7483: Seminar in Natural Resource and Environmental Economics
AEB 7571: Econometric Methods I
AEB 7572: Econometric Methods II
AEB 7645: Economic Development and Agriculture
AEB 7979: Advanced Research
AEB 7980: Research for Doctoral Dissertation
AEC 5032: Agricultural Media Writing
AEC 5037: Agricultural Media Production
AEC 5060: Public Opinion and Agricultural and Natural Resource Issues
AEC 5074: Agriculture, Resources, People, and the Environment: A Global Perspective
AEC 5201: Teaching in Colleges of Agricultural and Life Sciences
AEC 5203: Advanced Teaching in Colleges of Agricultural and Life Sciences
AEC 5206: Teaching Methods in Agricultural Education
AEC 5227: Teaching in Agricultural Education Laboratory Facilities
AEC 5302: Professional Skill Development in Agriscience Education I
AEC 5324: Philosophy and Development of Agricultural Education
AEC 5454: Leadership Development for Extension and Community Nonprofit Organizations
AEC 5501: Professional Skill Development in Agriscience Education II
AEC 5541: Communication and Instructional Technologies in Agricultural and Life Sciences
AEC 5544: Curriculum Development and Assessment Techniques in Emerging Agricultural Technologies
AEC 5545: Special Methods in Teaching Agriculture
AEC 5546: Program Planning in Agricultural Education
AEC 6205: Advanced Curriculum and Teaching Methods
AEC 6210: Designing Educational Programs in Agricultural Settings
AEC 6211: Delivering Educational Programs in Agricultural Settings
AEC 6212: Teacher Education in Agriculture
AEC 6229: Laboratory Instruction: Theory and Practice
AEC 6300: Methodology of Planned Change
AEC 6316: From America to Zimbabwe: An Overview of International Extension Systems
AEC 6321: The Land Grant University and University Governance
AEC 6325: History and Philosophy of Agricultural Education
AEC 6419: Communication and Competencies for Global Leadership
AEC 6426: Development of a Volunteer Leadership Program
AEC 6512: Program Development in Extension Education
AEC 6540: Agricultural and Natural Resources Communications Theory and Strategies
AEC 6543: Teaching and Learning Theory: Applications in Agricultural Education
AEC 6552: Evaluating Programs in Extension Education
AEC 6611: Agricultural and Extension Adult Education
AEC 6704: Extension Administration and Supervision
AEC 6767: Research Strategies in Agricultural Education and Communication
AEC 6905: Problems in Agricultural and Extension Education
AEC 6910: Supervised Research
AEC 6912: Nonthesis Research in Agricultural and Extension Education
AEC 6933: Seminar in Agricultural Education and Communication
AEC 6940: Supervised Teaching
AEC 6945: Practicum in Agricultural Education and Communication
AEC 6947: Experiential Learning in Agricultural Education
AEC 6971: Research for Master's Thesis
AEC 7979: Advanced Research
AEC 7980: Research for Doctoral Dissertation
AFH 5297: History of African Agriculture
AFH 5348: History of West Africa
AFH 5458: Southern Africa
AFH 5934: Topics in African History
AFH 6259: Seminar in Modern Africa
AFH 6805: Theories and Methods of African History
AFH 6934: Africa
AFH 6936: Readings in African History
AFS 5061: Africana Bibliography
AFS 6060: Research Problems in African Studies
AFS 6305: Development Theory and Practice Intro
AFS 6307: Foundations of Economics for Sustainable Development
AFS 6357: Anthropology of Humanitarian Intervention
AFS 6905: Individual Work in African Studies
AGG 5504: Critical and Creative Thinking in Problem Solving and Decision Making
AGR 5215C: Integrated Field Crop Science
AGR 5230C: Florida Grassland Agroecosystems
AGR 5266C: Field Plot Techniques
AGR 5277C: Tropical Crop Production
AGR 5307: Molecular Genetics for Crop Improvement
AGR 5321C: Genetic Improvement of Plants
AGR 5444: Ecophysiology of Crop Production
AGR 5511: Crop Ecology
AGR 6233: Tropical Grassland Agroecosystems
AGR 6237C: Research Techniques in Forage Evaluation
AGR 6311: Population Genetics
AGR 6322: Advanced Plant Breeding
AGR 6325L: Plant Breeding Techniques
AGR 6353: Cytogenetics
AGR 6422C: Environmental Crop Nutrition
AGR 6442C: Physiology of Agronomic Plants
AGR 6905: Agronomic Problems
AGR 6910: Supervised Research
AGR 6932: Topics in Agronomy
AGR 6933: Graduate Agronomy Seminar
AGR 6940: Supervised Teaching
AGR 6971: Research for Master's Thesis
AGR 7979: Advanced Research
AGR 7980: Research for Doctoral Dissertation

ALS 5027: Reusable Learning Objects

ALS 5106: Food and the Environment

ALS 5155: Global Agroecosystems

ALS 5156: Agricultural Ecology Principles and Applications

ALS 5364C: Molecular Techniques Laboratory

ALS 5905: Individual Study

ALS 5932: Special Topics

ALS 5934: Graduate Professional Development Seminar

ALS 6046: Grant Writing

ALS 6166: Exotic Species and Biosecurity Issues

ALS 6921: Colloquium on Plant Pests of Regulatory Significance

ALS 6925: Integrated Plant Medicine

ALS 6930: Graduate Seminar

ALS 6931: Plant Medicine Program Seminar

ALS 6935: Topics in Biological Invasions

ALS 6942: Principles of Plant Pest Risk Assessment and Management

ALS 6943: Internship in Plant Pest Risk Assessment and Management

AMH 5405: The South to 1860

AMH 5905: Special Studies

AMH 5930: Topics in United States History

AMH 6198: Early American Society

AMH 6199: Nineteenth Century America

AMH 6290: Modern America

AMH 6356: Research in U.S. History

AMH 6406: Readings in Southern History, 1607-1865

AMH 6465: Seminar in U.S. Urban History

AMH 6506: Seminar in American Labor History

AMH 6516: Seminar in American Foreign Relations and Expansion

AMH 6557: Seminar in Constitutional or Legal History of the United States

AML 6017: Studies in American Literature Before 1900

AML 6027: Studies in 20th-Century American Literature

ANG 5012: Fantastic Anthropology and Fringe Science
ANG 5085: Collection and Analysis of Visual Data in Anthropology
ANG 5126: Zooarcheology
ANG 5158: Florida Archeology
ANG 5162: Maya Archeoastronomy and Ethnoastronomy
ANG 5164: The Inca and Their Ancestors
ANG 5172: Historical Archeology
ANG 5194: Principles of Archeology
ANG 5255: Rural Peoples in the Modern World
ANG 5265: Methods in Ethnoecology
ANG 5266: Economic Anthropology
ANG 5303: Women and Development
ANG 5310: The North American Indian
ANG 5323: Peoples of Mexico and Central America
ANG 5327: Maya and Aztec Civilizations
ANG 5330: The Tribal Peoples of Lowland South America
ANG 5331: Peoples of the Andes
ANG 5336: The Peoples of Brazil
ANG 5341: Anthropology of the Caribbean
ANG 5352: Peoples of Africa
ANG 5354: Anthropology of Modern Africa
ANG 5395: Visual Anthropology
ANG 5420: Social Network Analysis in Cultural Anthropology
ANG 5426: Kinship and Social Organization
ANG 5464: Culture and Aging
ANG 5485: Research Design in Anthropology
ANG 5486: Computing for Anthropologists
ANG 5488: Geospatial Analysis in Cultural Anthropology
ANG 5525: Human Osteology and Osteometry
ANG 5531: Culture and Nutrition
ANG 5546: Seminar: Human Biology and Behavior
ANG 5620: Language and Culture
ANG 5621: Proseminar in Cultural and Linguistic Anthropology
ANG 5700: Applied Anthropology

ANG 5702: Anthropology and Development

ANG 5711: Culture and International Business

ANG 5743: Human Rights Missions in Forensic Anthropology

ANG 5744: International Forensic Fieldwork in Human Rights

ANG 5824L: Field Sessions in Archeology

ANG 6034: Seminar in Anthropological History and Theory

ANG 6086: Historical Ecology

ANG 6091: Research Strategies in Anthropology

ANG 6110: Archaeological Theory

ANG 6112: Critical Archaeology of Time

ANG 6113: Ideology and Symbolic Approaches in Archaeology

ANG 6120C: Environmental Archaeology

ANG 6122C: Archaeological Ceramics

ANG 6128: Lithic Technology

ANG 6146: Archaeology of Maritime Adaptations

ANG 6155: Southeastern U.S. Prehistory

ANG 6161: Problems in Caribbean Prehistory

ANG 6165: Problems in South American Archaeology

ANG 6183: Laboratory Training in Archeology

ANG 6185: Ethnoarchaeology

ANG 6186: Seminar in Archeology

ANG 6187: Experimental Archaeology

ANG 6190: Seminar in Contemporary Methods

ANG 6191: Archaeology of Death

ANG 6224: Painted Books of Ancient Mexico: Codices of Aztecs, Mixtecs, and Mayas

ANG 6241: Special Topics in Ecology of Religion

ANG 6267: Anthropology, Geographic Information System, and Human Ecosystems

ANG 6273: Legal Anthropology

ANG 6274: Principles of Political Anthropology

ANG 6286: Seminar in Contemporary Theory

ANG 6304: Seminar in Gender and International Development

ANG 6314: Peoples of the Arctic
ANG 6351: Peoples and Culture in Southern Africa
ANG 6360: Ethnicity in China
ANG 6366: Family, Gender, and Population in China
ANG 6407: Sickness and Power
ANG 6421: Landscape, Place, Dwelling
ANG 6452: Race and Racism in Anthropological Theory
ANG 6453: Human Rights in Cross-Cultural Perspective
ANG 6478: Evolution of Culture
ANG 6481: Research Methods in Cognitive Anthropology
ANG 6483L: Anthropology of Science
ANG 6511: Seminar in Physical Anthropology
ANG 6514: Human Origins
ANG 6524: Skeletal Mechanics in Biological Anthropology
ANG 6532: Molecular Genetics of Disease
ANG 6547: Human Adaptation
ANG 6552: Primate Behavior
ANG 6553: Primate Cognition
ANG 6555: Issues in Evolutionary Anthropology
ANG 6583: Primate Functional Morphology
ANG 6591L: Advanced Molecular Anthropology Laboratory
ANG 6592: Seminar in Molecular Anthropology
ANG 6593L: Biological Anthropology Laboratory
ANG 6701: Seminar on Applied Anthropology
ANG 6737: Medical Anthropology
ANG 6740: Advanced Techniques in Forensic Anthropology
ANG 6801: Ethnographic Field Methods
ANG 6905: Individual Work
ANG 6910: Supervised Research
ANG 6915: Research Projects in Social, Cultural, and Applied Anthropology
ANG 6917: Professions of Anthropology
ANG 6930: Special Topics in Anthropology
ANG 6940: Supervised Teaching
ANG 6945: Internship in Anthropology
ANG 6971: Research for Master's Thesis
ANG 7979: Advanced Research
ANG 7980: Research for Doctoral Dissertation
ANS 5312C: Applied Ruminant Reproductive Management
ANS 5446: Animal Nutrition
ANS 5935: Reproductive Biology Seminar and Research Studies
ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
ANS 6313: Current Concepts in Reproductive Biology
ANS 6314: Experimental Embryology
ANS 6447: Ruminant Nutrition
ANS 6449: Vitamins
ANS 6452: Principles of Forage Quality Evaluation
ANS 6458: Advanced Methods in Nutrition Technology
ANS 6636: Meat Technology
ANS 6666L: Molecular and Cellular Research Methods
ANS 6702: Lactation Physiology of Farm Animals
ANS 6704: Mammalian Endocrinology
ANS 6705: Muscle Physiology
ANS 6707: Growth Physiology in Farm Animals
ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
ANS 6715: Gastrointestinal and Feed Microbiology
ANS 6716: Physiology in Farm Animals
ANS 6718: Nutritional Physiology of Domestic Animals
ANS 6723: Mineral Nutrition and Metabolism
ANS 6745: Introduction to Statistical Genetics
ANS 6750: Reproductive Physiology in Farm Animals
ANS 6751: Physiology of Reproduction
ANS 6767: Molecular Endocrinology
ANS 6775: Essentials of Livestock Immunology
ANS 6905: Problems in Animal Science
ANS 6910: Supervised Research
ANS 6932: Special Topics in Animal Science
ANS 6933: Graduate Seminar in Animal Science
ANS 6936: Graduate Seminar in Animal Molecular and Cell Biology
ANS 6939: Animal Molecular and Cellular Biology Journal Colloquy
ANS 6940: Supervised Teaching
ANS 6971: Research for Master's Thesis
ANS 7979: Advanced Research
ANS 7980: Research for Doctoral Dissertation
AOM 5334C: Agricultural Chemical Application Technology
AOM 5431: GIS and Remote Sensing in Agriculture and Natural Resources
AOM 5435: Advanced Precision Agriculture
AOM 6905: Individual Work in Agricultural Operations Management
AOM 6932: Special Topics in Agricultural Operations Management
APK 5127: Assessment in Exercise Science
APK 5404: Sport Psychology
APK 6111L: Practicum in Exercise Physiology
APK 6116C: Physiological Bases of Exercise and Sport Sciences
APK 6118: Neuromuscular Adaptation to Exercise
APK 6126: Cardiopulmonary Pathologies
APK 6128: EKG Interpretation
APK 6205C: Nature and Bases of Motor Performance
APK 6206: Planning Motor Actions
APK 6210: Controlling Motor Actions
APK 6225: Biomechanical Instrumentation
APK 6226C: Biomechanics of Human Motion
APK 6406: Exercise Psychology
APK 6408: Performance Enhancement
APK 6410: Seminar in Exercise Psychology
APK 6415: Seminar in Sport Psychology: Current Topics
APK 6900: Directed Independent Study
APK 6940: Advanced Practicum in Exercise and Sport Science
APK 7107: Cardiovascular Exercise Physiology
APK 7108: Environmental Stress Exercise Physiology
APK 7117: Exercise Metabolism
APK 7124: Free Radicals in Aging, Exercise and Disease
APK 7129: Pulmonary Function during Exercise
ARC 5791: Topics in Architectural History
ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
ARC 5810: Techniques of Architectural Documentation
ARC 6116: Drawing toward Architecture
ARC 6176: Advanced Computer-Aided Design
ARC 6212: Topics in Phenomena and Architecture
ARC 6226: Intercultural Perspectives in Architecture
ARC 6228: Film and Architecture
ARC 6241: Advanced Studio I
ARC 6242: Research Methods
ARC 6280: Advanced Topics in Architectural Practice
ARC 6281: Professional Practice
ARC 6311C: Building Information Modeling
ARC 6355: Advanced Studio II
ARC 6356: Advanced Studio III
ARC 6357: Advanced Topics in Architectural Design
ARC 6383: St. Augustine Interdisciplinary Design Studio
ARC 6391: Architecture, Energy, and Ecology
ARC 6393: Advanced Architectural Connections
ARC 6399: Advanced Topics in Urban Design
ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
ARC 6512: Structural Modeling
ARC 6576: Architectural Structures
ARC 6611: Advanced Topics in Architectural Technology
ARC 6621: Graduate Environmental Technology 2
ARC 6642: Architectural Acoustic Design Laboratory
ARC 6643: Architectural Acoustics
ARC 6670: Lighting Design Seminar
ARC 6685: Life Safety, Sanitation, and Plumbing Systems
ARC 6705: Graduate Architectural History 3

ARC 6711: Architecture of the Ancient World

ARC 6750: Architectural History: America

ARC 6773: Strains of Modernism

ARC 6793: Advanced Topics in Regional Architecture

ARC 6805: Architectural Conservation

ARC 6821: Preservation Problems and Processes

ARC 6822: Preservation Programming and Design

ARC 6851: Technology of Preservation: Materials and Methods I

ARC 6852: Technology of Preservation: Materials and Methods II

ARC 6883: Vernacular Architecture & Sustainability

ARC 6911: Architectural Research

ARC 6912: Architectural Research II

ARC 6913: Architectural Research III

ARC 6932: Advanced Topics in Architectural Methods

ARC 6933: Sustainable Site Design

ARC 6934: European Approach to Sustainable Design

ARC 6935: Seminar in Sustainable Design

ARC 6940: Supervised Teaching

ARC 6971: Research for Master's Thesis

ARC 6979: Master's Research Project

ARE 6049: History of Teaching Art

ARE 6148: Curriculum in Teaching Art

ARE 6246C: Principles of Teaching Art

ARE 6247C: Teaching Art: The Study of Practice

ARE 6386: Teaching Art in Higher Education

ARE 6641: Issues in Art Education

ARE 6746: Methods of Research in Art Education

ARE 6905: Individual Study

ARE 6910: Capstone Project

ARE 6933: Special Topics in Art Education

ARE 6944: Internship in Teaching Art
ARE 6971: Research for Master's Thesis

ARE 6973: Individual Project

ARH 5357: French Art of the Ancien Regime: 1680-1780

ARH 5420: Art in the Age of Revolution

ARH 5440: Beginnings of Modernism

ARH 5527: Arts of Central Africa

ARH 5528: Art of West Africa

ARH 5529: Clothing and Textiles in Africa

ARH 5655: Indigenous American Art

ARH 5667: Colonial Andean Art

ARH 5816: Methods of Research and Bibliography

ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900

ARH 5905: Individual Study

ARH 6141: Greek Art Seminar

ARH 6292: Medieval Art Seminar

ARH 6394: Renaissance Art Seminar

ARH 6422: Beginnings of Modernism. Realism to Post-Impressionism 1848-1890

ARH 6477: Eighteenth-Century European Art Seminar

ARH 6481: Contemporary Art Seminar

ARH 6496: Modern Art Seminar

ARH 6596: Chinese Art Seminar

ARH 6597: African Art Seminar

ARH 6654: Pre-Columbian Art Seminar

ARH 6666: Colonial Latin American Art Seminar

ARH 6694: Nineteenth-Century Art—Seminar

ARH 6696: American Art Seminar

ARH 6797: Museum Education

ARH 6836: Exhibitions Seminar

ARH 6895: Collections Management Seminar

ARH 6900: Independent Study in Museology

ARH 6910: Supervised Research

ARH 6911: Advanced Study

ARH 6914: Independent Study in Ancient Art History
ARH 6915: Independent Study in Medieval Art History
ARH 6916: Independent Study in Renaissance and Baroque Art History
ARH 6917: Independent Study in Modern Art History
ARH 6918: Independent Study in Non-Western Art History
ARH 6930: Special Topics in Museology
ARH 6938: Seminar in Museum Studies
ARH 6941: Supervised Internship
ARH 6946: Museum Practicum
ARH 6948: Gallery Practicum
ARH 6971: Research for Master's Thesis
ARH 7979: Advanced Research
ARH 7980: Research for Doctoral Dissertation
ART 5674C: Digital Fabrication
ART 5905C: Directed Study
ART 5930C: Special Topics
ART 6410C: Printmaking Seminar: Mastering Process and Content
ART 6411C: Printmaking Seminar: Transformation and Change
ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
ART 6413C: Printmaking Seminar: Interdisciplinary Studio
ART 6671C: Advanced Experiments in Digital Art
ART 6672: Hypermedia
ART 6673C: Video Art
ART 6675C: Digital Art and Animation
ART 6691: Digital Art Studio
ART 6794C: Vessel Aesthetic 1
ART 6795C: Vessel Aesthetic 2
ART 6797C: Ceramic Sculpture 2
ART 6835C: Research in Methods and Materials of the Artist
ART 6849C: Reactive Environments
ART 6897: Professional Practices for the Visual Artist
ART 6910C: Supervised Research
ART 6925C: Art + Technology Workshop
ART 6926C: Advanced Study I
ART 6927C: Advanced Study II
ART 6928C: Advanced Study III
ART 6929C: Advanced Study IV
ART 6933: Area Methods: Rotating Topics
ART 6971: Research for Master's Thesis
ART 6973C: Individual Project
ASH 5388: Topics in East Asian History
ASL 5406: Manual Communication with the Hearing Impaired
AST 5113: Solar System Astrophysics I
AST 5114: Solar System Astrophysics II
AST 6112: Solar System Astrophysics
AST 6215: Stellar Structure and Function
AST 6245: Stellar Atmospheres and Radiative Processes
AST 6309: Galactic and Extragalactic Astronomy
AST 6336: Interstellar Matter
AST 6415: Observational Cosmology
AST 6416: Physical Cosmology
AST 6506: Celestial Mechanics
AST 6725C: Observational Techniques
AST 6905: Individual Work
AST 6910: Supervised Research
AST 6925: Departmental Colloquium
AST 6935: Frontiers in Astronomy
AST 6936: Astronomy Journal Club
AST 6971: Research for Master's Thesis
AST 7939: Special Topics
AST 7979: Advanced Research
AST 7980: Research for Doctoral Dissertation
ATR 6124: Clinical Anatomy for the Exercise Sciences
ATR 6145: Human Pathophysiology for the Exercise Sciences
ATR 6215: Evidence-Based Orthopedic Exam I: Upper-Extremity
ATR 6216: Evidence-Based Orthopedic Exam II: Lower-Extremity
ATR 6304: Rehabilitation and Modalities of Athletic Injuries
ATR 6624: Athletic Training Research and Technology I
ATR 6625: Athletic Training Research and Technology II
ATR 6934: Seminar in Athletic Training

BCH 5045: Graduate Survey of Biochemistry
BCH 5413: Mammalian Molecular Biology and Genetics
BCH 6040: Research Discussion in Biochemistry and Molecular Biology
BCH 6107: Biophysical Techniques in Proteomics and Protein Science
BCH 6206: Advanced Metabolism
BCH 6207: Advanced Metabolism: Role of Membranes in Signal Transduction and Metabolic Control
BCH 6208: Advanced Metabolism: Regulation of Key Reactions in Carbohydrate and Lipid Metabolism
BCH 6209: Advanced Metabolism: Regulation of Key Reactions in Amino Acid and Nucleotide Metabolism
BCH 6415: Advanced Molecular and Cell Biology
BCH 6740: Physical Biochemistry/Structural Biology
BCH 6741C: Magnetic Resonance Imaging and Spectroscopy in Living Systems
BCH 6744: Molecular Structure Determination by X-ray Crystallography
BCH 6744L: Molecular Structure Determination by X-Ray Crystallography Laboratory
BCH 6745: Molecular Structure and Dynamics of NMR Spectroscopy
BCH 6745L: Molecular Structure and Dynamics by NMR Spectroscopy Laboratory
BCH 6746: Structural Biology: Macromolecular Structure Determination
BCH 6747: Structural Biology/Advanced Physical Biochemistry: Spectroscopy and Hydrodynamics
BCH 6749C: Numerical Methods in Structural Biology
BCH 6875: Crystallography and Cryo-Electron Microscopy
BCH 6876: Recent Advances in Membrane Biology
BCH 6877: Recent Advances in Structural Biology
BCH 6878: Recent Advances in Cytoskeletal Processes
BCH 6905: Independent Studies in Biochemistry and Molecular Biology
BCH 6910: Supervised Research
BCH 6936: Biochemistry Seminar
BCH 6971: Research for Master's Thesis
BCH 7410: Advanced Gene Regulation
BCH 7412: Epigenetics of Human Disease and Development
BCH 7414: Advanced Chromatin Structure
BCH 7515: Structural Biology/Advanced Physical Biochemistry: Kinetics and Thermodynamics
BCH 7979: Advanced Research
BCH 7980: BioChem Doctoral Research
BCN 5470: Construction Methods Improvements
BCN 5618C: Comprehensive Estimating
BCN 5625: Construction Cost Analysis
BCN 5705C: Project Management for Construction
BCN 5715: Advanced Construction Labor Problems
BCN 5722: Advanced Construction Planning and Control
BCN 5729: Design-Build Delivery Methods
BCN 5737: Advanced Issues in Construction Safety and Health
BCN 5754C: Site Development
BCN 5776: International Construction Business Management
BCN 5778: Facilities Operation and Maintenance
BCN 5789C: Construction Project Delivery
BCN 5874: Equipment and Methods for Heavy Construction
BCN 5885: Methods and Management for Heavy Construction
BCN 5905: Special Studies in Construction
BCN 5949: Graduate Construction Management Internship
BCN 5957: Advanced International Studies in Construction
BCN 6036: Research Methods in Construction
BCN 6580: High-Performance Green Building Delivery Systems
BCN 6585: Sustainable Construction
BCN 6586: Construction Ecology and Metabolism
BCN 6621: Bidding Strategy
BCN 6641: Construction Value Engineering
BCN 6748: Construction Law
BCN 6755: Construction Financial Management
BCN 6756: Housing Economics and Policy
BCN 6777: Construction Management Processes
BCN 6785: Construction Information Systems
BCN 6905: Directed Independent Study in Construction
BCN 6910: Supervised Research
BCN 6933: Advanced Construction Management
BCN 6934: Construction Research
BCN 6940: Supervised Teaching
BCN 6971: Research for Master's Thesis
BME 5052L: Biomedical Engineering Laboratory
BME 5085: Patents, Product Development, and Technology Transfer
BME 5401: Biomedical Engineering and Physiology I
BME 5407: Molecular Biomedical Engineering
BME 5500: Biomedical Instrumentation
BME 5580: Introduction to Microfluidics and BioMEMS
BME 5703: Statistical Methods for Biomedical Engineering
BME 5704: Advanced Computational Methods for Biomedical Engineering
BME 5937: Special Topics
BME 6010: Clinical Preceptorship
BME 6221: Biomolecular Cell Mechanics
BME 6322: Dynamics of Cellular Processes
BME 6324: Stem Cell Engineering
BME 6330: Cell and Tissue Engineering
BME 6360: Neural Engineering
BME 6502: Introduction to Medical Imaging
BME 6505: Advanced Diagnostic Radiological Physics
BME 6522: Biomedical Multivariate Signal Processing
BME 6533: Radiologic Anatomy
BME 6534: Advanced Therapeutic Radiological Physics
BME 6535: Radiological Physics, Measurements and Dosimetry
BME 6590: Medical Physics
BME 6591: Therapeutic Radiological Physics I
BME 6592: Therapeutic Radiological Physics II
BME 6593: Therapeutic Radiological Physics III
BME 6644: Pharmacokinetics
BME 6705: Mathematical Modeling of Biological and Physiological Systems
BME 6905: Individual Work in Biomedical Engineering

BME 6907: BME Project

BME 6910: Supervised Research

BME 6936: Biomedical Engineering Seminar

BME 6938: Special Topics in Biomedical Engineering

BME 6940: Supervised Teaching

BME 6971: Research for Master's Thesis

BME 7979: Advanced Research

BME 7980: Research for Doctoral Dissertation

BOT 5225C: Plant Anatomy

BOT 5305: Paleobotany

BOT 5505C: Intermediate Plant Physiology

BOT 5625: Plant Geography

BOT 5655C: Physiological Plant Ecology

BOT 5685C: Tropical Botany

BOT 5695C: Ecosystems of Florida

BOT 5725C: Taxonomy of Vascular Plants

BOT 6508C: Proteomics Theory and Practice

BOT 6516: Plant Metabolism

BOT 6566: Plant Growth and Development

BOT 6716C: Advanced Taxonomy

BOT 6726C: Principles of Systematic Biology

BOT 6905: Individual Studies in Botany

BOT 6910: Supervised Research

BOT 6927: Advances in Botany

BOT 6935: Special Topics

BOT 6936: Graduate Student Seminar

BOT 6940: Supervised Teaching

BOT 6943: Internship in College Teaching

BOT 6971: Research for Master's Thesis

BOT 7979: Advanced Research

BOT 7980: Research for Doctoral Dissertation
BUL 5445: Ethical Role of the Manager
BUL 5810: Legal Environment of Business
BUL 5811: Managers and Legal Environment of Business
BUL 5831: Commercial Law
BUL 5832: Commercial Law for Accountants
BUL 6440: Business Ethics and Corporation Social Responsibility
BUL 6441: Business Ethics and Corporate Social Responsibility
BUL 6516: Law of Real Estate Transactions
BUL 6652: Law and Ethics of Corporate Governance
BUL 6656: Law for Entrepreneurs
BUL 6821: Cyberlaw and Ethics
BUL 6841: Employment Law
BUL 6851: International Business Law
BUL 6852: International Business Law
BUL 6891: Legal Aspects of Technology Management
BUL 6905: Individual Work
BUL 6930: Special Topics
CAP 5100: Human-Computer Interaction
CAP 5416: Computer Vision
CAP 5510: Bioinformatics
CAP 5515: Computational Molecular Biology
CAP 5635: Artificial Intelligence Concepts
CAP 5705: Computer Graphics
CAP 5805: Computer Simulation Concepts
CAP 6137: Malware Reverse Engineering
CAP 6402: Aesthetic Computing
CAP 6516: Medical Image Analysis
CAP 6610: Machine Learning
CAP 6615: Neural Networks for Computing
CAP 6617: Advanced Machine Learning
CAP 6685: Expert Systems
CAP 6701: Advanced Computer Graphics
CBH 6056: Comparative Psychology
CCE 5035: Construction Planning and Scheduling
CCE 5405: Construction Equipment and Procedures
CCE 6037: Civil Engineering Operations I
CCE 6038: Innovative Construction Techniques
CCE 6505: Computer Applications in Construction Engineering
CCE 6507: Computer Applications in Construction Engineering II
CCE 6516: Topics in Airborne Laser Mapping Technology
CCJ 5934: Contemporary Issues in Criminology and Law
CCJ 6063: Communities and Crime
CCJ 6285: Criminal Justice Process
CCJ 6619: Crime and the Life Course
CCJ 6643: White Collar Crime
CCJ 6658: Drugs, Crime, and Policy
CCJ 6705: Research Methods in Crime, Law, and Justice
CCJ 6708: Research Issues in Crime and Deviance
CCJ 6712: Evaluation Research
CCJ 6905: Independent Study
CCJ 6910: Supervised Research
CCJ 6920: Seminar in Criminological Theory
CCJ 6936: Proseminar in Crime, Law, and Justice
CCJ 6971: Research for Master’s Thesis
CCJ 7742: Research Methods in Crime, Law, and Justice II
CCJ 7921: Professional Development in Criminology, Law, and Society
CCJ 7979: Advanced Research
CCJ 7980: Research for Doctoral Dissertation
CDA 5155: Computer Architecture Principles
CDA 5636: Embedded Systems
CDA 6156: High Performance Computer Architecture
CEG 5105: Geotechnical Engineering
CEG 5114: Advanced Geotechnical Aspects of Landfill Design
CEG 5115: Foundation Design
CEG 5205C: In Situ Measurement of Soil Properties
CEG 5206: Geosensing I
CEG 5805: Ground Modification Design
CEG 6015: Advanced Soil Mechanics
CEG 6116: Advanced Shallow Foundation Design
CEG 6117: Advanced Deep Foundation Design
CEG 6201: Experimental Determination of Soil Properties
CEG 6207: Geosensing II
CEG 6405: Seepage in Soils
CEG 6505: Numerical Methods of Geomechanics
CEG 6515: Earth Retaining Systems and Slope Stability
CEN 5035: Software Engineering
CEN 6070: Software Testing and Verification
CEN 6075: Software Specification
CES 5010: Probabilistic and Stochastic Methods in Civil Engineering
CES 5116: Finite Elements in Civil Engineering
CES 5325: Design of Highway Bridges
CES 5606: Topics in Steel Design
CES 5607: Behavior of Steel Structures
CES 5715: Prestressed Concrete
CES 5726: Design of Concrete Systems
CES 5801: Design and Construction in Timber
CES 5835: Design of Reinforced Masonry Structures
CES 6106: Advanced Structural Analysis
CES 6108: Structural Dynamics
CES 6165: Computer Methods in Structural Engineering
CES 6551: Design of Folded Plates and Shells
CES 6571: Design of Temporary Structures
CES 6585: Wind Engineering
CES 6588: Protective Structures
CES 6590: Impact Engineering
CES 6591: Applied Protective Structures
CES 6592: Retrofit Protective Structures
CES 6593: Advanced Protective Structures
CES 6706: Advanced Reinforced Concrete
CES 6855: Condition Assessment of Structures
CGN 5125: Legal Aspects of Civil Engineering
CGN 5315: Civil Engineering Systems
CGN 5605: Public Works Planning
CGN 5606: Public Works Management
CGN 5715: Experimentation and Instrumentation in Civil Engineering Materials Research
CGN 6150: Engineering Project Management
CGN 6155: Civil Engineering Practice I
CGN 6156: Construction Engineering II
CGN 6505: Properties, Design and Control of Concrete
CGN 6506: Bituminous Materials
CGN 6525: Sustainable Materials
CGN 6905: Special Problems in Civil Engineering
CGN 6910: Supervised Research
CGN 6936: Civil Engineering Graduate Seminar
CGN 6940: Supervised Teaching
CGN 6971: Research for Master's Thesis
CGN 6972: Research for Engineer's Thesis
CGN 6974: Master of Engineering or Engineer Degree Report
CGN 7979: Advanced Research
CGN 7980: Research for Doctoral Dissertation
CHM 5224: Basic Principles for Organic Chemistry
CHM 5235: Organic Spectroscopy
CHM 5275: The Organic Chemistry of Polymers
CHM 5305: Chemistry of Biological Molecules
CHM 5413L: Advanced Physical Chemistry Laboratory
CHM 5511: Physical Chemistry of Polymers
CHM 6036: Chemical Biology
CHM 6037: Chemical Biology and Biochemistry Seminar
CHM 6153: Electrochemical Processes
CHM 6154: Chemical Separations
CHM 6155: Spectrochemical Methods
CHM 6158C: Electronics and Instrumentation
CHM 6159: Mass Spectrometric Methods
CHM 6165: Chemometrics
CHM 6180: Special Topics in Analytical Chemistry
CHM 6190: Analytical Chemistry Seminar
CHM 6225: Advanced Principles of Organic Chemistry
CHM 6226: Advanced Synthetic Organic Chemistry
CHM 6227: Topics in Synthetic Organic Chemistry
CHM 6251: Organometallic Compounds
CHM 6271: The Chemistry of High Polymers
CHM 6301: Enzyme Mechanisms
CHM 6302: Chemistry and Biology of Nucleic Acids
CHM 6303: Methods in Computational Biochemistry and Structural Biology
CHM 6306: Special Topics in Biological Chemistry Mechanisms
CHM 6381: Special Topics in Organic Chemistry
CHM 6390: Organic Chemistry Seminar Presentation
CHM 6391: Organic Chemistry Seminar Discussion
CHM 6430: Chemical Thermodynamics
CHM 6461: Statistical Thermodynamics
CHM 6470: Chemical Bonding and Spectra I
CHM 6471: Chemical Bonding and Spectra II
CHM 6480: Elements of Quantum Chemistry
CHM 6490: Theory of Molecular Spectroscopy
CHM 6520: Chemical Physics
CHM 6580: Special Topics in Physical Chemistry
CHM 6586: Computational Chemistry
CHM 6590: Physical Chemistry Seminar
CHM 6620: Advanced Inorganic Chemistry I
CHM 6621: Advanced Inorganic Chemistry II
CHM 6626: Applications of Physical Methods in Inorganic Chemistry
CHM 6628: Chemistry of Solid Materials
CHM 6670: Inorganic Biochemistry
CHM 6680: Special Topics in Inorganic Chemistry
CHM 6690: Inorganic Chemistry Seminar
CHM 6720: Chemical Dynamics
CHM 6905: Individual Problems, Advanced
CHM 6910: Supervised Research
CHM 6934: Advanced Topics in Chemistry
CHM 6935: Chemistry Colloquium
CHM 6943: Internship in College Teaching
CHM 6971: Research for Master's Thesis
CHM 7485: Special Topics in Theory of Atomic and Molecular Structure
CHM 7979: Advanced Research
CHM 7980: Research for Doctoral Dissertation
CHS 5110L: Radiochemistry Laboratory
CIS 6905: Individual Study
CIS 6910: Supervised Research
CIS 6930: Special Topics in CIS
CIS 6935: Graduate Seminar
CIS 6940: Supervised Teaching
CIS 6971: Research for Master's Thesis
CIS 7979: Advanced Research
CIS 7980: Research for Doctoral Dissertation
CJC 6120: Corrections and Public Policy
CJL 6039: Law and Society
CJL 6089: Humanitarian Law
CJL 6090: Law and Social Science
CJL 6091: Anthropology of Law
CJL 6095: Human Rights in Cultural Context
CLA 6125: Augustan Age
CLA 6515: Roman Dynasty: Nero and the Julio-Claudians
CLA 6795: Greek and Roman Archeology
CLA 6805: The Classical Research Tradition
CLA 6885: Roman Law and Society
CLA 6895: Athenian Law and Society
CLA 6905: Individual Work
CLA 6930: Greece and the Near East
CLP 5316: Health Psychology
CLP 5426: Introduction to Neuropsychology
CLP 6169: Seminar: Psychology and Deviant Behavior
CLP 6304: Psychological Foundations of Clinical Psychology I
CLP 6307: Human Higher Cortical Functioning
CLP 6308: Psychological Foundations of Clinical Psychology II
CLP 6309: Psychological Foundations of Clinical Psychology III
CLP 6344C: Lifespan Foundations of Behavioral Health and Illness I
CLP 6345: Lifespan Foundations of Behavioral Health and Illness II
CLP 6375: Introduction to Clinical Psychology
CLP 6407: Psychological Treatment I
CLP 6417: Psychological Treatment II
CLP 6425: Seminar in Clinical Neuropsychology
CLP 6430: Clinical Psychological Assessment
CLP 6434C: Clinical Psychology Assessment I
CLP 6435C: Clinical Psychology Assessment II
CLP 6446C: Psychological Assessment of Children
CLP 6447C: Psychological Assessment of Adults
CLP 6476: Lifespan Psychopathology
CLP 6497: Psychopathological Disturbances
CLP 6527C: Measurement, Research Design, and Statistical Analysis in Clinical Psychology I
CLP 6528C: Measurement, Research Design, and Statistical Analysis in Clinical Psychology II
CLP 6529: Applied Multivariate Methods in Psychology
CLP 6905: Individual Work
CLP 6910: Supervised Research
CLP 6940: Supervised Teaching
CLP 6943: Core Practicum in Clinical Psychology
CLP 6945: Advanced Practicum in Neuropsychology
CLP 6946: Advanced Practicum in Applied Medical Psychology

CLP 6947: Practicum in Intervention

CLP 6948: Advanced Practicum in Clinical Child Psychology

CLP 6971: Research for Master's Thesis

CLP 7317: Advanced Health Psychology and Behavior Medicine

CLP 7404C: Special Issues, Methods, and Techniques in Psychological Treatment

CLP 7427C: Neuropsychological Assessment of Children

CLP 7428C: Neuropsychological Assessment of Adults

CLP 7525: Best Methods for Studying Psychological Change

CLP 7934: Special Topics In Clinical Psychology

CLP 7949: Internship

CLP 7979: Advanced Research

CLP 7980: Research for Doctoral Dissertation

CLT 6295: Greek Drama in Translation

CNT 5106C: Computer Networks

CNT 5410: Computer and Network Security

CNT 5412: Network and System Security

CNT 5517: Mobile Computing

CNT 6107: Advanced Computer Networks

CNT 6805: Network Science and Applications

CNT 6885: Distributed Multimedia Systems

COM 6315: Advanced Research Methods

COM 6338: Advanced Web Topics I: Advanced Design

COM 6940: Supervised Teaching

COP 5536: Advanced Data Structures

COP 5555: Programming Language Principles

COP 5615: Distributed Operating System Principles

COP 5618: Concurrent Programming

COP 5625: Programming Language Translators

COP 5725: Database Management Systems

COP 6726: Database System Implementation

COP 6755: Distributed Database Systems

COT 5405: Analysis of Algorithms
COT 5442: Approximation Algorithms
COT 5519: Sparse Matrix Algorithms
COT 5520: Computational Geometry
COT 5615: Mathematics for Intelligent Systems
COT 6315: Formal Languages and Computation Theory
CPO 5935: Advanced Topics in Comparative Politics
CPO 6046: Politics in Advanced Industrial Societies
CPO 6059: Democracy and Its Competitors
CPO 6077: Social Movements in Comparative Perspective
CPO 6091: Introduction to Comparative Political Analysis
CPO 6206: Seminar in African Politics
CPO 6307: Latin American Politics I
CPO 6732: Democratization and Regime Transition
CPO 6736: Post-Communist politics
CPO 6756: Comparative Elections and Party Systems
CPO 6757: The European Union In Comparative Perspective
CPO 6786: Peasant Politics and Society
CPO 6795: Environmental Politics
CPO 6796: Water Politics
CRW 6130: Fiction Writing
CRW 6166: Studies in Literary Form
CRW 6331: Verse Writing
CRW 6906: Individual Work
CWR 5125: Groundwater Flow I
CWR 5127: Evaluation of Groundwater Quality
CWR 5235: Open Channel Hydraulics
CWR 6115: Surface Hydrology
CWR 6116: Advanced Surface Hydrology
CWR 6126: Variable-Density Groundwater Flow
CWR 6236: Sediment Transport I
CWR 6240: Mixing and Transport in Turbulent Flow
CWR 6252: Environmental Biochemistry of Trace Metals
CWR 6255: Diffusive and Dispersive Transport
CWR 6525: Groundwater Flow II
CWR 6536: Stochastic Subsurface Hydrology
CWR 6537: Contaminant Subsurface Hydrology
DAA 6757: Pilates Technique for the Dancer
DAA 6905: Graduate Dance Project
DAN 6436: Laban Movement Analysis
DAN 6949: Dance Clinical Practice
DCP 6205: Ecological Issues in Sustainability and the Built Environment
DCP 6211: Preservation Topics, Issues, and Practice
DCP 6710: History and Theory of Historic Preservation
DCP 6711: History of the Built Environment for Preservation Practice
DCP 6712: Preservation Technology: Conserving Modern Buildings
DCP 6713: Historic Preservation: Principles, Practice, and Engineering
DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
DCP 6715: Preservation Building Technology
DCP 6716: Cultural Resource Management
DCP 6730: Preservation Policy
DCP 6905: Independent Study
DCP 6931: Special Topics in Design, Construction, and Planning
DCP 6943: Practicum in Historic Preservation
DCP 6971: Research for Master’s Thesis
DCP 7790: Doctoral Core I
DCP 7792: Doctoral Core II
DCP 7794: Doctoral Seminar
DCP 7911: Advanced Design, Construction, and Planning Research I
DCP 7940: Supervised Teaching
DCP 7949: Professional Internship
DCP 7979: Advanced Research
DCP 7980: Research for Doctoral Dissertation
DEN 6602: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 1: Class I Treatment
DEN 6603: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 2: Class II Treatment
DEN 6604: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 3: Class II Treatment and Overbite Treatments
DEN 6605: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 4: Class II Treatment and Overbite
Treatments

DEN 6606: Orthodontic Treatment--Appliance Management and Effect of Treatment Part 5: Class III and Crossbite Treatments and Soft Tissue Considerations

DEN 6607: Orthodontic Treatment--Appliance Management and Effect of Treatment Part 6: Impactions, Transplantations and Stability

DEN 6608: Analysis, Diagnosis, and Treatment Planning: Part I

DEN 6609: Analysis, Diagnosis, and Treatment Planning: Part II

DEN 6610: Biology of Tooth Movement: Part I

DEN 6612: Orthodontic Biomechanics: Part I

DEN 6613: Orthodontic Biomechanics: Part II

DEN 6614: Ortho-Perio Relationships: Part I

DEN 6615: Ortho-Perio Relationships: Part II

DEN 6616: Orthognathic Surgery: Part I

DEN 6617: Orthognathic Surgery: Part II

DEN 6618: Postnatal Growth and Development

DEN 6622: Principles of Occlusion

DEN 6623: Maxillofacial Prosthetics

DEN 6624: Dental Implant Restoration

DEN 6625: Fixed Prosthodontic Ceramics

DEN 6626: Advanced Removable Partial Dentures

DEN 6627: Treatment Planning Seminar

DEN 6642: Introduction to Advanced Endodontics

DEN 6643: Treatment Planning/Cases Presentation

DEN 6644: Nonsurgical Endodontic Care I

DEN 6645: Nonsurgical Endodontic Care II

DEN 6646: Surgical Endodontics I

DEN 6647: Surgical Endodontics II

DEN 6652: Review of Periodontics Literature I

DEN 6653: Review of Periodontics Literature II

DEN 6654: Review of Periodontics Literature III

DEN 6655: Review of Periodontics Literature IV

DEN 6656: Introduction to Advanced Periodontology

DEN 6657: Periodontal Histology and Histopathology

DEN 6658: Treatment Planning in Periodontal Therapy
DEN 6670: Craniofacial Anomalies
DEN 6671: Prenatal Growth and Development
DEN 6672: Materials in Orthodontics
DEN 6674: Advanced Oral Pathology
DEN 6675: Craniofacial Pain
DEN 6678: Advanced Oral Medicine and Drug Interactions in Dentistry
DEN 6679: Advanced Radiology and Interpretation
DEN 6680: Principles and Craniofacial Biology and Emerging Therapies
DEN 6681: Craniofacial Pathobiology
DEN 6905: Individual Study
DEN 6910: Supervised Research
DEN 6934: Special Topics in Dentistry
DEN 6935: Special Topics in Dentistry
DEN 6936: Practice Management
DEN 6940: Supervised Teaching
DEN 6941: Clinical Teaching in Dentistry
DEN 6942: Grand Rounds
DEN 6971: Research for Master's Thesis
DEN 6973: Project in Lieu of Thesis
DEP 6057: Advanced Developmental Psychology I
DEP 6058: Advanced Developmental Psychology II
DEP 6059: Seminar: Special Topics in Developmental Psychology
DEP 6099: Survey of Developmental Psychology
DEP 6216: Psychological Disturbances of Children
DEP 6406: Advanced Adulthood and Aging
DEP 6409: Seminar: Adult Development and Aging
DEP 6799: Current Research Methods in Developmental Psychology
DEP 6936: Current Research in Developmental Psychology
DEP 7608: Theories of Developmental Psychology
DIE 6241: Advanced Medical Nutrition Therapy
DIE 6242: Advanced Medical Nutrition Therapy II
DIE 6516: Professional Development in Dietetics
DIE 6905: Problems in Dietetics
DIE 6938: Advanced Dietetic Seminar
DIE 6942: Dietetic Internship I
DIE 6944: Dietetic Internship II
DIE 6949: Dietetic Internship in Sports Nutrition
DIG 5555C: Digital Media Projection Design I
DIG 5931C: Special Topics
DIG 6027C: Interactive Storytelling
DIG 6028: Roots of Digital Culture
DIG 6050C: Entertainment Technology
DIG 6125C: Digital Design & Visualization
DIG 6126C: Interaction Design
DIG 6256C: Audio Design For Digital Production
DIG 6288: Music and Sound Design for Digital Media
DIG 6358C: APPLIED 3D MODELING
DIG 6556C: Digital Media Projection Design II
DIG 6589C: Digital Portfolio
DIG 6719: Videogame Theory and Analysis
DIG 6744C: Movement, Media and Machines
DIG 6746C: Graduate Seminar in Sensors and Electronics
DIG 6751C: Protocols for Multimedia Interfaces
DIG 6788C: Digital Production & Game Design
DIG 6840C: Interdisciplinary Research Seminar in Digital Arts & Sciences
DIG 6850C: Digital Arts & Sciences Convergence
DIG 6906: Independent Study - Graduate Level
DIG 6950C: Digital Performance Production
DIG 6971: Research for Master’s Thesis
DIG 6973: Capstone Project in Lieu of Thesis
EAB 5436: Behavioral Pharmacology
EAB 6099: Survey of Behavior Analysis
EAB 6118: Theoretical Foundations of Behavior Analysis
EAB 6707: Applied Behavior I
EAB 6712: Experimental Psychopathology
EAB 6716: Behavior Analysis in Developmental Disabilities
EAB 6719: Seminar: Strategies and Tactics of Human Behavioral Research
EAB 6750: Quantitative Methods
EAB 6780: Ethics and Professional Issues
EAB 6937C: Seminar: Special Topics in Experimental Analysis of Behavior
EAB 6939: Seminar: Special Topics in Applied Behavior Analysis
EAB 7089: Advanced Seminar: Experimental Analysis of Behavior
EAB 7090: Verbal Behavior
EAP 5835: Academic Spoken English I
EAP 5836: Academic Spoken English II
EAP 5837: Academic Spoken English Tutorial
EAP 5845: Academic Writing
EAP 5846: Research and Technical Writing
EAP 5937: Special Topics in Academic Spoken English
EAS 5938: Special Topics in Aerospace Engineering
EAS 6135: Molecular Theory of Fluid Flows
EAS 6138: Gasdynamics
EAS 6242: Advanced Structural Composites
EAS 6415: Guidance and Control of Aerospace Vehicles
EAS 6905: Aerospace Research
EAS 6910: Supervised Research
EAS 6935: Graduate Seminar
EAS 6939: Special Topics in Aerospace Engineering
EAS 6971: Research for Master's Thesis
EAS 7979: Advanced Research
EAS 7980: Research for Doctoral Dissertation
ECH 5708: Disinfection, Sterilization, and Preservation
ECH 5938: Topics in Colloid Science
ECH 6126: Thermodynamics of Reaction and Phase Equilibria
ECH 6270: Continuum Basis of Chemical Engineering
ECH 6272: Molecular Basis of Chemical Engineering
ECH 6285: Transport Phenomena
ECH 6326: Computer Control of Processes
ECH 6506: Chemical Engineering Kinetics
ECH 6526: Reactor Design and Optimization
ECH 6709: Electrochemical Engineering Fundamentals and Design
ECH 6726: Interfacial Phenomena I
ECH 6727: Interfacial Phenomena II
ECH 6843: Experimental Basis of Chemical Engineering
ECH 6847: Mathematical Basis of Chemical Engineering
ECH 6851: Impedance Spectroscopy
ECH 6905: Individual Work
ECH 6910: Supervised Research
ECH 6926: Graduate Seminar
ECH 6937: Topics in Chemical Engineering I
ECH 6939: Topics in Chemical Engineering III
ECH 6940: Supervised Teaching
ECH 6971: Research for Master's Thesis
ECH 7938: Advanced Special Chemical Engineering Topics for Doctoral Candidates
ECH 7979: Advanced Research
ECH 7980: Research for Doctoral Dissertation
ECO 5715: Open Economy Macroeconomics
ECO 6075: Economics/Consumer Education
ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
ECO 6409: Game Theory Applied to Business Decisions
ECO 6716: International Macroeconomics
ECO 6906: Individual Work in Economics
ECO 6910: Supervised Research
ECO 6936: Special Topics
ECO 6940: Supervised Teaching
ECO 6957: International Studies in Economics
ECO 6971: Research for Master's Thesis
ECO 7113: Information Economics
ECO 7115: Microeconomic Theory
ECO 7118: Markets and Institutions
ECO 7119: Information, Incentives, and Agency Theory
ECO 7120: General Equilibrium and Welfare Economics
ECO 7206: Macroeconomic Theory I
ECO 7272: Economic Growth I
ECO 7404: Game Theory for Economists
ECO 7405: Mathematical Economics: Game Theory
ECO 7406: Dynamic Economics: Theory and Applications
ECO 7408: Mathematical Methods and Applications to Economics
ECO 7415: Statistical Methods in Economics
ECO 7424: Econometric Models and Methods
ECO 7426: Econometric Methods I
ECO 7427: Econometric Methods II
ECO 7452: Best Empirical Practices in Economics
ECO 7516: Tax Theory and Public Policy
ECO 7525: Welfare Economics and The Second Best
ECO 7534: Empirical Public Economics I
ECO 7535: Empirical Public Economics II
ECO 7536: Theoretical Public Economics
ECO 7706: Theory of International Trade
ECO 7707: International Economic Relations
ECO 7925: Research Skills Workshop
ECO 7938: Advanced Economics Seminar
ECO 7979: Advanced Research
ECO 7980: Research for Doctoral Dissertation
ECP 5415: Antitrust Policy and Managerial Decisions
ECP 5702: Managerial Economics
ECP 5705: Economics of Business Decisions
ECP 6407: Economics for Managing Information for Electronic Commerce
ECP 6417: Public Policy and Social Control
ECP 6701: Competitive Strategies in Expanding Markets
ECP 6708: Cases in Competitive Strategy
ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
ECP 7408: Empirical Industrial Organization
ECP 7418: Economics of Regulation
ECP 7419: Current Research in Regulation
EDA 5938: Special Topics
EDA 6061: Educational Organization and Administration
EDA 6107: Leading Change in Educational Organizations
EDA 6192: Educational Leadership: The Individual
EDA 6193: Educational Leadership: Instruction
EDA 6195: Educational Policy Development
EDA 6215: Communications in Educational Leadership
EDA 6222: Administration of School Personnel
EDA 6225: Labor Relations in Public Education
EDA 6232: Public School Law
EDA 6242: Public School Finance
EDA 6271: Technology Leadership for Educational Administrators
EDA 6423: Data-Driven Decision Making in Educational Organizations
EDA 6503: The Principalship
EDA 6905: Individual Work
EDA 6931: Special Topics
EDA 6935: Problems in School Administration and Supervision
EDA 6948: Supervised Practice in School Administration
EDA 6971: Research for Master's Thesis
EDA 7206: Organizational Leadership in Education
EDA 7945: Practicum in Supervision and Administration
EDA 7979: Advanced Research
EDA 7980: Research for Doctoral Dissertation
EDA 7985: Research Design in Educational Administration
EDE 5940: Integrated Teaching and Learning
EDE 6225: Practices in Childhood Education
EDE 6266: Teaching and Learning in Elementary Classrooms
EDE 6325: Teacher Inquiry/Action Research
EDE 6905: Individual Work
EDE 6910: Supervised Research
EDE 6932: Special Topics
EDE 6948: Internship in Elementary Schools
EDE 7047: Issues in Teacher Education
EDE 7935: Seminar in Curriculum & Instruction
EDF 5441: Assessment in General and Exceptional Student Education
EDF 5552: Role of School in Democratic Society
EDF 6113: Educational Psychology: Human Development
EDF 6211: Educational Psychology: General
EDF 6215: Educational Psychology: Learning Theory
EDF 6232: Principles of Learning and Instructional Practice
EDF 6400: Quantitative Foundations of Education Research Overview
EDF 6401: Educational Statistics
EDF 6403: Quantitative Foundations of Educational Research
EDF 6434: Educational Measurement
EDF 6436: Theory of Measurement
EDF 6471: Survey Design and Analysis in Educational Research
EDF 6475: Qualitative Foundations of Educational Research
EDF 6481: Quantitative Research Methods in Education
EDF 6520: History of Education
EDF 6544: Philosophical Foundations of Education
EDF 6606: Socioeconomic Foundations of Education
EDF 6616: Education and American Culture
EDF 6630: Educational Sociology
EDF 6812: Comparative Education
EDF 6820: Education in Latin America
EDF 6905: Individual Study
EDF 6910: Supervised Research
EDF 6938: Special Topics
EDF 6940: Supervised Teaching
EDF 6941: Practicum in Educational Research
EDF 6971: Research for Master's Thesis
EDF 7117: Affective Development and Education
EDF 7405: Advanced Quantitative Foundations of Educational Research
EDF 7412: Structural Equation Models
EDF 7413: Advanced Topics in Structural Equation Modeling
EDF 7435: Rating Scale Design and Analysis in Educational Research
EDF 7439: Item Response Theory
EDF 7474: Multilevel Models
EDF 7479: Qualitative Data Analysis: Approaches and Techniques
EDF 7482: Quasi-experimental Design and Analysis in Educational Research
EDF 7483: Qualitative Data Collection: Approaches and Techniques
EDF 7486: Methods of Educational Research
EDF 7491: Evaluation of Educational Products and Systems
EDF 7555: Values and Ethics in Education
EDF 7639: Research in Educational Sociology
EDF 7931: Seminar in Educational Research
EDF 7932: Multivariate Analysis in Educational Research
EDF 7934: Seminar in Educational Foundations
EDF 7979: Advanced Research
EDF 7980: Research for Doctoral Dissertation
EDG 5666: Knowing and Learning in STEM
EDG 6017: Writing for Academic Purposes
EDG 6047: Teacher Leadership for Educational Change
EDG 6207: Transforming the Curriculum
EDG 6225: Global Studies Methods in K-12 Education
EDG 6226: Foundations of Research in Curriculum & Instruction
EDG 6250: The School Curriculum
EDG 6285: Evaluation in the School Program
EDG 6348: Instructional Coaching for Enhanced Student Learning
EDG 6356: Teaching, Learning and Assessment
EDG 6415: Culturally Responsive Classroom Management
EDG 6445: Meeting the Educational Needs of Students Living in Poverty
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6953: TLSI Online Portfolio Preparation
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7222: Curriculum: Theory and Research
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7359: Professional Development and Teacher Learning
EDG 7665: Bases of Curriculum and Instruction Theory
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EDG 7982: Practitioner Research: Theory & Practice
EDH 6040: Theory of College Student Development
EDH 6046: Diversity Issues in Higher Education
EDH 6049: Domestic and International College Student Services
EDH 6051: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community Junior College in America
EDH 6066: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6503: Resource Development in Higher Education
EDH 6632: Current Issues in Community College Leadership
EDH 6637: Crisis Management in Higher Education
EDH 6931: Special Topics in Higher Education
EDH 6935: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7505: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDM 6005: The Emergent Middle School
EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
EDP 6052: Cognitive Psychology Applied to Education
EDS 6140: Supervision of Instruction
EEC 6205: Early Childhood Curriculum
EEC 6304: Creativity in the Early Childhood Curriculum
EEC 6525: Issues in Child Care Administration
EEC 6615: Early Childhood Education: Background and Concepts
EEC 6905: Individual Work
EEC 6910: Supervised Research
EEC 6933: Special Topics
EEC 6940: Supervised Teaching
EEC 6946: Practicum in Early Childhood Education
EEC 7056: Early Childhood Policy and Advocacy
EEC 7617: Early Childhood Assessment & Evaluation
EEC 7666: Theory and Research in Early Childhood Studies
EEC 7979: Advanced Research
EEE 5317C: Introduction to Power Electronics
EEE 5320: Bipolar Analog IC Design
EEE 5322: VLSI Circuits and Technology
EEE 5354L: Semiconductor Device Fabrication Laboratory

EEE 5364: Fundamentals of Data Converters

EEE 5400: Future of Microelectronics Technology

EEE 5405: Microelectronic Fabrication Technologies

EEE 5426: Introduction to Nanodevices

EEE 5502: Foundations of Digital Signal Processing

EEE 5544: Noise in Linear Systems

EEE 5556: Electronic Countermeasures

EEE 6287: Brain Machine Interface Engineering

EEE 6321: MOS Analog IC Design

EEE 6323: Advanced VLSI Design

EEE 6325: Computer Simulation of Integrated Circuits and Devices

EEE 6328C: Microwave IC Design

EEE 6374: Radio Frequency (RF) Integrated Circuits and Technologies

EEE 6382: Semiconductor Physical Electronics

EEE 6390: VLSI Device Design

EEE 6397: Semiconductor Device Theory I

EEE 6402: Nonclassical Si-Based Nanoscale CMOS Devices

EEE 6428: Computational Nanoelectronics

EEE 6431: Carbon Nanotubes

EEE 6460: Advanced Microsystem Technology

EEE 6465: Design of MEMS Transducers

EEE 6503: Digital Filtering

EEE 6504: Adaptive Signal Processing

EEE 6512: Image Processing and Computer Vision

EEE 6586: Automatic Speech Processing

EEL 5182: State Variable Methods in Linear Systems

EEL 5225: Principles of Micro-Electro-Mechanical Transducers

EEL 5400: Airborne Sensors and Instrumentation

EEL 5401: Airborne Laser Scanning: Data Processing and Analysis

EEL 5441: Fundamentals of Photonics

EEL 5462: Advanced Antenna Systems

EEL 5490: Lightning
EEL 5666C: Intelligent Machines Design Laboratory
EEL 5718: Computer Communications
EEL 5721: Reconfigurable Computing
EEL 5737: Principles of Computer System Design
EEL 5764: Computer Architecture
EEL 5840: Elements of Machine Intelligence
EEL 5905: Individual Work
EEL 5934: Special Topics in Electrical Engineering
EEL 6065: Electrical & Computer Engineering Technical Writing
EEL 6264: Advanced Electric Energy Systems I
EEL 6265: Advanced Electric Energy Systems II
EEL 6443: Integrated and Fiber Optics
EEL 6486: Electromagnetic Field Theory and Applications I
EEL 6487: Electromagnetic Field Theory and Applications II
EEL 6507: Queuing Theory and Data Communications
EEL 6509: Wireless Communication
EEL 6528: Digital Communications with Software-defined Radios
EEL 6532: Information Theory
EEL 6533: Statistical Decision Theory
EEL 6535: Digital Communications
EEL 6537: Spectral Estimation
EEL 6550: Error Correction Coding
EEL 6555: Signal Processing for Active Sensing
EEL 6588: Wireless Ad Hoc Networks
EEL 6591: Wireless Networks
EEL 6614: Modern Control Theory
EEL 6617: Linear Multivariable Control
EEL 6619: Robust Control Systems
EEL 6686: Embedded Systems Seminar
EEL 6706: Fault-Tolerant Computer Architecture
EEL 6763: Parallel Computer Architecture
EEL 6769: Hardware-Software Interactions: Nonnumeric Processing
EEL 6814: Neural Networks for Signal Processing
EEL 6825: Pattern Recognition and Intelligent Systems
EEL 6841: Machine Intelligence and Synthesis
EEL 6871: Autonomic Computing
EEL 6892: Virtual Computers
EEL 6905: Individual Work
EEL 6910: Supervised Research
EEL 6933: Electrical and Computer Engineering Graduate Seminar
EEL 6935: Special Topics in Electrical Engineering
EEL 6940: Supervised Teaching
EEL 6971: Research for Master's Thesis
EEL 6972: Research for Engineer's Thesis
EEL 7979: Advanced Research
EEL 7980: Research for Doctoral Dissertation
EES 5105: Advanced Wastewater Microbiology
EES 5107: Ecological and Biological Systems
EES 5207: Environmental Chemistry
EES 5245: Water Quality Analysis
EES 5305C: Ecological and General Systems
EES 5306: Energy Analysis
EES 5307: Ecological Engineering
EES 5315: Ecology and the Environment
EES 5415: Environmental Health
EES 6007: Advanced Energy and Environment
EES 6009: Ecological Economics
EES 6026C: Environmental Systems Dynamics
EES 6028: Spatial Modeling Using Geographic Information Systems
EES 6051: Advanced Environmental Planning and Design
EES 6135: Aquatic Microbiology
EES 6136: Aquatic Autotrophs
EES 6137: Aquatic Heterotrophs
EES 6140: Biology of Exotic Species
EES 6208: Principles of Water Chemistry I
EES 6209: Principles of Water Chemistry II
EES 6225: Atmospheric Chemistry
EES 6246: Advanced Water Analysis
EES 6301: Comparative Approaches in Systems Ecology
EES 6308C: Wetland Ecology
EES 6309: Wetland Treatment Systems
EES 6318: Principles of Industrial Ecology
EES 6335: Springs Ecosystems
EES 6356: Estuarine Systems
EES 6371: Environmental Meteorology and Oceanography
EES 6405: Environmental Toxicology
EEX 5940: Supervised Student Teaching in Special Education
EEX 6053: Foundations of Special Education
EEX 6072: Accessing Academic and Social Communities for Students with Disabilities
EEX 6098: Students with Disabilities in Higher Education
EEX 6125: Interventions for Language and Learning Disabilities
EEX 6219: Reading Assessment and Intervention for Students with Disabilities
EEX 6222: Evaluation in Special Education
EEX 6233: Designing Instruction for Inclusive Classrooms
EEX 6234: Assessment, Curriculum, and Instruction for Students with Severe Disabilities
EEX 6249: Advanced Strategies for Teaching Students with Disabilities
EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
EEX 6296: Differentiated Instruction
EEX 6299: Understanding Assessment for Postsecondary Students with Disabilities
EEX 6661: Teaching and Managing Behavior for Student Learning
EEX 6750: Families and Transition for Students with Disabilities
EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
EEX 6785: Introduction to Education-Healthcare Transition
EEX 6786: Transdisciplinary and Transition Services in Special Education
EEX 6788: Methods for Integrating Education-Healthcare Transition
EEX 6789: Legal Aspects and Policy in Education-Healthcare Transition
EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
EEX 6835: Practicum in Special Education: Severe Disabilities
EEX 6841: Practicum in Special Education: Mild Disabilities
EEX 6863: Supervised Practice in Special Education
EEX 6905: Individual Work
EEX 6910: Supervised Research
EEX 6936: Special Topics
EEX 6940: Supervised Teaching
EEX 6971: Research for Master's Thesis
EEX 6973: Project in Lieu of Thesis
EEX 7303: Inquiry in Special Education: Analysis of the Literature
EEX 7304: Introduction to Field of Inquiry in Special Education
EEX 7428: Teacher Education in Special Education
EEX 7526: Grant Writing Seminar in Education
EEX 7709: Social-Emotional Learning & Play in Early Childhood
EEX 7787: School Improvement for All Students
EEX 7865: Internship: Special Education
EEX 7934: Seminar: Trends in Special Education
EEX 7979: Advanced Research
EEX 7980: Research for Doctoral Dissertation
EGI 6051: Education of the Gifted Child
EGI 6245: Program Development for the Gifted
EGM 5005: Laser Principles and Applications
EGM 5111L: Experimental Stress Analysis
EGM 5121C: Data Measurement and Analysis
EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
EGM 5584: Biomechanics of Soft Tissue
EGM 5816: Intermediate Fluid Dynamics
EGM 5933: Special Topics in Engineering Science and Mechanics
EGM 6006: Laser-Based Diagnostics
EGM 6321: Principles of Engineering Analysis I
EGM 6322: Principles of Engineering Analysis II
EGM 6323: Principles of Engineering Analysis III
EGM 6341: Numerical Methods of Engineering Analysis I
EGM 6342: Fundamentals of Computational Fluid Dynamics
EGM 6352: Advanced Finite Element Methods
EGM 6365: Structural Optimization
EGM 6570: Principles of Fracture Mechanics
EGM 6611: Continuum Mechanics
EGM 6671: Inelastic Materials
EGM 6812: Fluid Mechanics I
EGM 6813: Fluid Mechanics II
EGM 6855: Bio-Fluid Mechanics and Bio-Heat Transfer
EGM 6905: Individual Study
EGM 6910: Supervised Research
EGM 6934: Special Topics in Engineering Mechanics
EGM 6936: Graduate Seminar
EGM 6971: Research for Master's Thesis
EGM 7819: Computational Fluid Dynamics
EGM 7845: Turbulent Fluid Flow
EGM 7979: Advanced Research
EGM 7980: Research for Doctoral Dissertation
EGN 5010L: NRF Training Lab
EGN 5949: Practicum/Internship/Cooperative Work Experience
EGN 6039: Engineering Leadership
EGN 6640: Entrepreneurship for Engineers
EGN 6642: Engineering Innovation
EIN 6227: Advanced Quality Management and Engineering for Business Processes
EIN 6336: Advanced Production and Inventory Control
EIN 6357: Advanced Engineering Economy
EIN 6367: Facilities Layout and Location
EIN 6392: Manufacturing Management
EIN 6905: Special Problems
EIN 6910: Supervised Research
EIN 6918: Graduate Seminar
EIN 6940: Supervised Teaching
EIN 6971: Research for Master's Thesis
EIN 6972: Research for Engineer's Thesis
EIN 7933: Special Problems
EIN 7979: Advanced Research
EIN 7980: Research for Doctoral Dissertation
EMA 5008: Particle Science and Technology: Theory and Practice
EMA 5095: Critical Analysis of Research in Materials Science & Engineering
EMA 5108: Vacuum Science and Technology
EMA 5365: Biomimetic Synthesis
EMA 6001: Properties of Materials - A Survey
EMA 6005: Thin and Thick Films
EMA 6105: Fundamentals and Applications of Surface Science
EMA 6106: Advanced Phase Diagrams
EMA 6107: High Temperature Materials
EMA 6109: Physical Chemistry of High Temperature Materials
EMA 6110: Electron Theory of Solids for Materials Scientists I
EMA 6111: Electron Theory of Solids for Materials Scientists II
EMA 6114: Advanced Materials Principles 2
EMA 6128: Materials Microstructures
EMA 6136: Diffusion, Kinetics, and Transport Phenomena
EMA 6165: Polymer Physical Science
EMA 6166: Polymer Composites
EMA 6226: Synthesis and Properties of Metallic Nanostructures
EMA 6227: Advanced Mechanical Metallurgy II
EMA 6265: Mechanical Properties of Polymers
EMA 6313: Advanced Materials Principles I
EMA 6315: Colloidal Hydrodynamics
EMA 6316: Materials Thermodynamics
EMA 6319: Applied Colloid and Interfacial Chemistry for Engineers
EMA 6412: Synthesis and Characterization of Electronic Materials
EMA 6416: Organic Electronics
EMA 6445: Electroceramics
EMA 6446: Solid State Ionics

EMA 6448: Ceramic Processing

EMA 6461: Polymer Characterization

EMA 6507: Scanning Electron Microscopy and Microanalysis

EMA 6507L: Scanning Electron Microscopy and Microanalysis Lab

EMA 6510: Survey of Materials Analysis Techniques

EMA 6512C: X-ray Scattering for Thin Film Analysis

EMA 6518: Transmission Electron Microscopy

EMA 6518L: Transmission Electron Microscopy Laboratory

EMA 6519L: Specialized Research Techniques in Materials Science

EMA 6540: Fundamentals of Crystallography

EMA 6541: Applied Crystallography and Powder Diffraction

EMA 6580: Science of Biomaterials I

EMA 6581C: Polymeric Biomaterials

EMA 6589: Mechanical Behavior of Biomaterials

EMA 6590: Advances in Biomaterials and Tissue Engineering for Healthcare

EMA 6591: Clinical Applications of Biomaterials and Tissue Engineering

EMA 6616: Advanced Electronic Materials Processing

EMA 6625: Advanced Metals Processing

EMA 6667: Polymer Processing

EMA 6715: Fracture of Brittle Materials

EMA 6803: Classical Methods in Computational Materials Science

EMA 6804: Quantum Methods in Computational Materials Science

EMA 6805: Mathematical Methods in Materials Science I

EMA 6806: Mathematical Methods in Materials Science II

EMA 6808: Error Analysis and Optimization Methodologies in Materials Research

EMA 6905: Individual Work in Materials Science and Engineering

EMA 6910: Supervised Research

EMA 6936: Seminar in Materials Science and Engineering

EMA 6938: Special Topics in Materials Science and Engineering

EMA 6971: Research for Master's Thesis

EMA 7979: Advanced Research

EMA 7980: Research for Doctoral Dissertation
EME 5054: Foundations of Educational Technology
EME 5207: Designing Technology-Rich Curricula
EME 5315: Communicating with Technology
EME 5316: Educational Technology Management Issues
EME 5403: Instructional Computing I
EME 5404: Instructional Computing II
EME 5405: Internet in K-12 Instruction
EME 5431: Integrating Technology in the Mathematics Classroom
EME 5432: Integrating Technology into Social Science Classroom
EME 5433: Integrating Technology into Science Classroom
EME 6059: Blended Learning Environments
EME 6066: Issues and Trends in Educational Technology Research
EME 6076: Virtual School Philosophy and Pedagogy
EME 6156: Games and Simulations for Teaching and Learning
EME 6205: Digital Photography and Visual Literacy
EME 6208: Designing Integrated Media Environments I
EME 6209: Designing Integrated Media Environments II
EME 6235: Managing Educational Projects
EME 6236: Distance Education Leadership and Management
EME 6405: Educational Technology and Teaching
EME 6458: Distance Teaching and Learning
EME 6505: Educational Television Design and Production
EME 6602: Human-Computer Interactivity and the Learner
EME 6606: Advanced Instructional Design
EME 6609: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design
EML 5045: Computational Methods for Design and Manufacturing
EML 5104: Classical and Statistical Thermodynamics
EML 5124: Two-Phase Flow and Boiling Heat Transfer
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<td>EML 5131</td>
<td>Combustion</td>
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<tr>
<td>EML 5215</td>
<td>Analytical Dynamics I</td>
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<tr>
<td>EML 5223</td>
<td>Structural Dynamics</td>
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<td>EML 5224</td>
<td>Acoustics</td>
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<td>EML 5233</td>
<td>Failure of Materials in Mechanical Design</td>
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<td>EML 5311</td>
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<td>EML 5318</td>
<td>Computer Control of Machines and Processes</td>
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<td>EML 5455</td>
<td>Clean Combustion Technology</td>
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<td>EML 5465</td>
<td>Energy Management for Mechanical Engineers</td>
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<td>EML 5515</td>
<td>Gas Turbines and Jet Engines</td>
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<td>EML 5516</td>
<td>Design of Thermal Systems</td>
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<td>Finite Element Analysis and Application</td>
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<td>EML 5595</td>
<td>Mechanics of the Human Locomotor System</td>
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<td>EML 5598</td>
<td>Orthopedic Biomechanics</td>
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<td>Advanced Refrigeration</td>
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<td>Introduction to Compressible Flow</td>
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<td>Microscale Heat Transfer</td>
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<td>Multiphase Convection Heat Transfer</td>
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<td>Geometry of Mechanisms and Robots I</td>
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<td>EML 6352</td>
<td>Optimal Estimation</td>
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EML 6365: Robust Control Synthesis
EML 6417: Solar Energy Utilization
EML 6451: Energy Conversion
EML 6606: Advanced Air Conditioning
EML 6905: Individual Projects in Mechanical Engineering
EML 6934: Special Topics in Mechanical Engineering
EML 6936: Nonthesis Project
EML 6971: Research for Master's Thesis
EML 7979: Advanced Research
EML 7980: Research for Doctoral Dissertation
ENC 5236: Advanced Business Writing for Accounting
ENC 5319: Scholarly Writing for Publication
ENC 6428: Digital English
ENG 6016: Psychological Approaches to Literature
ENG 6075: Literary Theory: Issues
ENG 6076: Literary Theory: Theorists
ENG 6077: Literary Theory: Forms
ENG 6137: The Language of Film
ENG 6138: Studies in the Movies
ENG 6906: Individual Work
ENG 6910: Supervised Research
ENG 6932: Film and Video Production
ENG 6971: Research for Master's Thesis
ENG 7939: Seminar in Variable Topics
ENG 7979: Advanced Research
ENG 7980: Research for Doctoral Dissertation
ENL 6206: Studies in Old English
ENL 6216: Studies in Middle English
ENL 6226: Studies in Renaissance Literature
ENL 6236: Studies in Restoration and 18th-Century Literature
ENL 6246: Studies in Romantic Literature
ENL 6256: Studies in Victorian Literature
ENL 6276: Studies in 20th-Century British Literature
ENT 5275: Family Business Management

ENT 6006: Entrepreneurship

ENT 6008: Entrepreneurial Opportunity

ENT 6016: Venture Analysis

ENT 6116: Business Plan Formation

ENT 6416: Venture Finance

ENT 6506: Social Entrepreneurship

ENT 6616: Creativity in Entrepreneurship

ENT 6706: Global Entrepreneurship

ENT 6905: Individual Work in Entrepreneurship

ENT 6930: Special Topics

ENT 6933: Entrepreneurship Lecture Series

ENT 6946: Entrepreneurial Consulting Project

ENT 6950: Integrated Technology Ventures

ENT 6957: International Studies in Entrepreneurship

ENU 5142: Reliability and Risk Analysis for Nuclear Facilities

ENU 5176L: Principles of Nuclear Reactor Operations Laboratory

ENU 5186: Nuclear Fuel Cycles

ENU 5196: Nuclear Reactor Power Plant System Dynamics and Control

ENU 5516L: Nuclear Engineering Laboratory II

ENU 5615C: Nuclear Radiation Detection and Instrumentation

ENU 5615L: Nuclear Radiation Detection and Instrumentation Lab

ENU 5626: Radiation Biology

ENU 5658: Imaging System Analysis with Medical Physics Applications

ENU 5705: Advanced Concepts for Nuclear Energy

ENU 6051: Radiation Interaction Basics and Applications I

ENU 6052: Radiation Transport Basics and Applications

ENU 6053: Radiation Interaction Basics and Applications II

ENU 6061: Survey of Medical Radiological Physics

ENU 6106: Nuclear Reactor Analysis I

ENU 6107: Nuclear Reactor Analysis II

ENU 6126: Fundamentals of Reactor Kinetics
ENU 6135: Nuclear Thermal Hydraulics
ENU 6623: Radiation Dosimetry
ENU 6627: Therapeutic Radiological Physics
ENU 6636: Medical Radiation Shielding & Protection
ENU 6651: Clinical Rotation in Radiation Therapy
ENU 6652: Clinical Rotation in Diagnostic Radiology
ENU 6655: Advanced Diagnostic Radiological Physics
ENU 6657: Diagnostic Radiological Physics
ENU 6659: Nuclear Medicine Instrumentation and Procedure
ENU 6805: Introduction to Nuclear Reactor Materials
ENU 6835: Nuclear Fuels
ENU 6905: Individual Work
ENU 6910: Supervised Research
ENU 6935: Nuclear and Radiological Engineering Seminar
ENU 6936: Special Projects in Nuclear and Radiological Engineering Sciences
ENU 6937: Special Topics in Nuclear and Radiological Engineering Sciences
ENU 6971: Research for Master’s Thesis
ENU 6972: Research for Engineer's Thesis
ENU 7979: Advanced Research
ENU 7980: Research for Doctoral Dissertation
ENV 5072: Pollution Control and Prevention
ENV 5075: Environmental Policy
ENV 5105: Foundations of Air Pollution
ENV 5305: Advanced Solid Waste Treatment Design
ENV 5306: Municipal Refuse Disposal
ENV 5518: Field Methods in Environmental Hydrology
ENV 5520: Fluid Flow in Environmental Systems
ENV 5555: Wastewater Treatment
ENV 5565: Hydraulic Systems Design
ENV 6050: Advanced Pollutant Transport
ENV 6052: Immiscible Fluids in Porous Media
ENV 6116: Air Pollution Sampling and Analysis
ENV 6126: Air Pollution Control Design
ENV 6130: Aerosol Mechanics
ENV 6146: Atmospheric Dispersion Modeling
ENV 6215: Health Physics
ENV 6216: Radioactive Wastes
ENV 6301: Advanced Solid Waste Containment Design
ENV 6416: Advanced Stormwater Control Systems
ENV 6435: Advanced Water Treatment Process Design
ENV 6435C: Advanced Water Treatment Process Design
ENV 6435L: Water Treatment Process Design Laboratory
ENV 6437: Advanced Wastewater System Design
ENV 6438: Advanced Potable Water Systems Design
ENV 6439: Activated Carbon: Environmental Design and Application
ENV 6441: Water Resources Planning and Management
ENV 6508: Wetland Hydrology
ENV 6510: Groundwater Restoration
ENV 6511: Biological Wastewater Treatment
ENV 6556: Advanced Waste Treatment Operations
ENV 6617: Principles of Green Engineering Design and Sustainability
ENV 6905: Individual Work
ENV 6910: Supervised Research
ENV 6916: Nonthesis Project
ENV 6932: Special Problems in Environmental Engineering
ENV 6935: Graduate Environmental Engineering Seminar
ENV 6971: Research for Master's Thesis
ENV 7979: Advanced Research
ENV 7980: Research for Doctoral Dissertation
ENY 5006: Graduate Survey of Entomology
ENY 5006L: Graduate Survey of Entomology Laboratory
ENY 5031C: Insect Field Biology
ENY 5151C: Techniques in Insect Systematics
ENY 5160C: Survey of Science with Insects
ENY 5164: Graduate Survey of Invertebrate Field Biology
ENY 5212: Insects and Wildlife
ENY 5223C: Biology and Identification of Urban Pests
ENY 5226C: Principles of Urban Pest Management
ENY 5236: Insect Pest and Vector Management
ENY 5241: Biological Control
ENY 5245: Agricultural Acarology
ENY 5332: Graduate Survey of Urban Vertebrate Pest Management
ENY 5405: Insects as Vectors of Plant Pathogens
ENY 5516: Turf and Ornamental Entomology
ENY 5566: Tropical Entomology
ENY 5567: Tropical Entomology Field Laboratory
ENY 5572: Advanced Apiculture
ENY 5611: Immature Insects
ENY 5820: Insect Molecular Genetics
ENY 6166: Insect Classification
ENY 6203: Insect Ecology
ENY 6203L: Insect Ecology Laboratory
ENY 6248: Termite Biology and Control
ENY 6401: Insect Physiology
ENY 6401L: Insect Physiology Laboratory
ENY 6454: Behavioral Ecology and Systematics of Insects
ENY 6591C: Advanced Mosquito Identification
ENY 6593: Advanced Mosquito Biology
ENY 6651C: Insect Toxicology
ENY 6665: Advanced Medical and Veterinary Entomology I
ENY 6665L: Advanced Medical and Veterinary Entomology Laboratory
ENY 6706: Forensic Entomology
ENY 6706L: Forensic Entomology Laboratory
ENY 6821: Insect Microbiology
ENY 6822C: Molecular Biology Techniques with Invertebrates and Their Pathogens
ENY 6905: Problems in Entomology
ENY 6910: Supervised Research
ESI 6321: Applied Probability Methods in Engineering
ESI 6323: Models for Supply Chain Management
ESI 6341: Intro to Stochastic Optimization
ESI 6355: Decision Support Systems for Industrial and Systems Engineers
ESI 6417: Linear Programming and Network Optimization
ESI 6418: Linear Programming Extensions and Applications
ESI 6420: Fundamentals of Mathematical Programming
ESI 6429: Introduction to Nonlinear Optimization
ESI 6448: Discrete Optimization Theory
ESI 6449: Integer Programming
ESI 6470: Principles of Manufacturing Systems Engineering
ESI 6492: Global Optimization
ESI 6529: Digital Simulation Techniques
ESI 6533: Advanced Simulation Design and Analysis
ESI 6546: Stochastic Modeling and Analysis
ESI 6552: Systems Architecture
ESI 6553: Systems Design
ESI 6555: Systems Management
ESI 6912: Advanced Topics in ISE
EUH 5195: The Archaeology of the Middle Ages
EUH 5546: Topics in British History
EUH 5934: Topics in European History
EUH 6126: Readings in Medieval History
EUH 6174: Conversion in the Middle Ages
EUH 6175: Ethnicity in the Middle Ages
EUH 6176: Villages and Peasants in the Middle Ages
EUH 6177: Economy and Society in Late Antiquity and the Early Middle Ages
EUH 6213: Europe, 1500-1763
EUH 6289: Readings, Modern Europe
EUH 6469: Modern German History
EUH 6935: Readings, Early Modern Europe
EUH 6937: Readings in Mediterranean History
EVR 5322: Scientific Processes in Conservation and Development
EVR 5705: Natural Resources and Innovation Systems
EVR 6320: Sustainable Natural Resource Management
EVR 6933: Seminar
EVR 6934: Internship
EVR 6979: Nonthesis Master's Project
EXP 6099: Survey of Cognition and Sensory Processes
EXP 6609: Seminar: Cognition
EXP 6939: Seminar: Current Issues in Cognition and Sensory Processes
FAS 5203C: Biology of Fishes
FAS 5255C: Diseases of Warmwater Fish
FAS 5276C: Field Ecology of Aquatic Organisms
FAS 5335C: Applied Fisheries Statistics
FAS 5901: Scientific Thinking in Ecology
FAS 6154: Aquatic Invertebrate Ecological Physiology
FAS 6171: Applied Phycology
FAS 6256: Fish and Aquatic Invertebrate Histology
FAS 6272: Marine Ecological Processes
FAS 6337C: Fish Population Dynamics
FAS 6339C: Advanced Quantitative Fisheries Assessment
FAS 6355C: Fisheries Management
FAS 6905: Individual Study
FAS 6910: Supervised Research
FAS 6932: Special Topics in Fisheries and Aquatic Sciences
FAS 6933: Graduate Symposium
FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
FAS 6940: Supervised Teaching
FAS 6971: Research for Master's Thesis
FAS 7979: Advanced Research
FAS 7980: Research for Doctoral Dissertation
FES 6705: Communications in Emergency Management
FES 6724: Fire and Emergency Services Response Planning
FES 6726: Hazard Mitigation and Preparedness
FES 6735: International Emergency/Disaster Management
FES 6736: Homeland Security and Emergency Management
FES 6786: Research Methods in FES
FES 6806: Disaster Response and Recovery
FES 6826: Emergency Services - Disaster Planning
FES 6827: Business Continuity and Disaster Planning
FES 6836: Impacts of Natural and Man-made Disasters on Buildings
FES 6916: Research for Master's Report
FES 6940: Practicum in FES
FIL 6061: History of Documentary Film I
FIL 6062: History of Documentary Film II
FIL 6101: Advanced Radio, Television, and Film Writing
FIL 6315: Writing for Documentary I
FIL 6317: Producing and Writing the Documentary
FIL 6335: Business of Documentary
FIL 6340: Issues and Problems in Documentary
FIL 6365: Documentary Pre-Production Planning
FIL 6366: Documentary Procedures II
FIL 6377: Documentary Field Production
FIL 6378: Documentary Research Methods
FIL 6380: Advanced Post-Production Techniques
FIN 5405: Business Financial Management
FIN 5437: Finance I: Asset Valuation, Risk, and Return
FIN 5439: Finance II: Capital Structure and Risk Management Issues
FIN 6108: Personal Financial Management
FIN 6246: Money and Capital Markets
FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FOR 6156: Simulation Analysis of Forest Ecosystems
FOR 6164: Silviculture: Concepts and Application
FOR 6170: Tropical Forestry
FOR 6172C: Tropical Forestry Field Course
FOR 6215: Fire Paradigms
FOR 6310: Forest Genetics and Tree Improvement
FOR 6340: Physiology of Forest Trees
FOR 6345C: Plant Water Relations Techniques
FOR 6543: Natural Resource Economics and Valuation
FOR 6628: Community Forest Management
FOR 6665: Landscape Planning for Ecotourism
FOR 6905: Research Problems in Forest Resources and Conservation
FOR 6910: Supervised Research
FOR 6933: Seminar
FOR 6934: Topics in Forest Resources and Conservation
FOR 6940: Supervised Teaching
FOR 6971: Research for Master's Thesis
FOR 7979: Advanced Research
FOR 7980: Research for Doctoral Dissertation
FOS 5126C: Psychophysical Aspects of Foods
FOS 5205: Current Issues in Food Safety and Sanitation
FOS 5225C: Principles in Food Microbiology
FOS 5437C: Food Product Development
FOS 5561C: Citrus Processing Technology
FOS 5645: Functional Foods and Nutraceuticals
FOS 5732: Current Issues in Food Regulations
FOS 6125C: Sensory Evaluation of Food
FOS 6215: Principles of Food Safety
FOS 6216: Food Safety Systems
FOS 6217: Food Safety, Sanitation, and Microbiology
FOS 6226C: Advanced Food Microbiology
FOS 6315C: Advanced Food Chemistry
FOS 6317C: Flavor Chemistry and Technology
FOS 6355C: Instrumental Analysis and Separations
FOS 6428C: Advanced Food Processing
FOS 6455C: Industrial Food Fermentations
FOS 6736: Food Regulations
FOS 6905: Problems in Food Science
FOS 6910: Supervised Research
FOS 6915: Research Planning
FOS 6936: Topics in Food Science
FOS 6938: Food Science Seminar
FOS 6940: Supervised Teaching
FOS 6971: Research for Master's Thesis
FOS 7979: Advanced Research
FOS 7980: Research for Doctoral Dissertation
FOT 6940: Translation Studies Practicum
FOW 6930: Special Study in Romance Languages and Literatures
FRE 6060: Beginning French for Graduate Students I
FRE 6061: Beginning French for Graduate Students II
FRE 6466: Advanced Translation and Stylistics
FRE 6735: Special Studies in French Linguistics
FRE 6736: The French language in the Americas
FRE 6785: French Phonetics and Phonology
FRE 6827: Sociolinguistics of French
FRE 6845: History of the French Language
FRE 6855: Structure of French
FRE 6856: French in the 21st Century
FRE 6940: Supervised Teaching
FRE 6943: Romance Language Teaching Methods
FRE 6945: Practicum in Advanced College Teaching
FRE 6956: Overseas Studies in French
FRW 6217: Seventeenth-Century French Prose
FRW 6276: Readings in Eighteenth-Century Literature
FRW 6288: Twentieth-Century French Novel
FRW 6315: Seventeenth-Century French Drama
FRW 6328: Twentieth-Century French Theater
FRW 6346: French Poetry of the Renaissance
FRW 6355: Modern French Poetry
FRW 6396: French Cinema
FRW 6416: Later French Medieval Literature
FRW 6536: The Romantic Period
FRW 6556: French Realism and Naturalism
FRW 6715: The Philosophic Movement
FRW 6780: Studies in Francophone Literature and Culture (Excluding the Caribbean and Sub-Saharan Africa)
FRW 6805: Introduction to Graduate Study and Research
FRW 6825: French Critical Theory
FRW 6900: Special Study in French Literature
FRW 6905: Individual Work
FRW 6910: Supervised Research
FRW 6938: Seminar in French Literature
FRW 6971: Research for Master’s Thesis
FRW 7979: Advanced Research
FRW 7980: Research for Doctoral Dissertation
FYC 5008: Personal and Family Tax Planning
FYC 5009: Personal and Family Insurance Planning
FYC 5106: Personal and Family Retirement and Estate Planning
FYC 5935: Personal and Family Financial Planning Capstone
FYC 6020: Principles of Family, Youth, and Community Sciences
FYC 6111: Families and Violence
FYC 6117: Military Families in Community Context
FYC 6131: Ethics for FYCS Practitioners
FYC 6207: Adolescent Problematic Behavior
FYC 6221: Grant Proposals for Community-Based Organizations
FYC 6222: Parenting and Child Relationships
FYC 6223: Promoting Positive Youth Development
FYC 6224: Resilience and Positive Youth Development
FYC 6230: Theories of Youth and Family Development
FYC 6234: Theoretical Approaches to Youth Programming
FYC 6302: Sustainable Community Development
FYC 6320: Community Development and Civic Engagement
FYC 6330: Theories of Community Development
FYC 6331: Involving Youths in Community Issues
FYC 6412: Historical Foundations of Philanthropy
FYC 6421: Nonprofit Organizations
FYC 6422: Policy Issues and Case Studies in Nonprofit Organizations
FYC 6423: Non-Governmental Organizations
FYC 6424: Fund Raising for Community Nonprofit Organizations
FYC 6425: Risk Management in Nonprofit Organizations
FYC 6620: Program Planning and Evaluation for Human Service Delivery
FYC 6662: Public Policy and Human Resource Development
FYC 6800: Scientific Reasoning and Research Design
FYC 6802: Advanced Research Methods for Family, Youth, and Community Sciences
FYC 6901: Problems in Family, Youth, and Community Sciences
FYC 6912: Nonthesis Project in Family, Youth, and Community Sciences
FYC 6932: Topics, in Family, Youth, and Community Sciences
FYC 6933: Seminar in Human Resource Development
FYC 6934: Professional Internship/Practicum in Family, Youth, and Community Sciences
FYC 6971: Research for Master’s Thesis

GEA 6419: Seminar: South America
GEA 6466: Seminar on Geography of Amazonia
GEA 6468: Resource Utilization and Conservation in Latin America
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 5212: Professional Writing in Business
GEB 5215: Professional Communication in Business
GEB 5217: Executive Communication
GEB 5225: Advanced Business Writing
GEB 5929: Foundations Review
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6229: Professional Communication for Accountants
GEB 6365: International Business
GEB 6366: Fundamentals of International Business
GEB 6368: Globalization and the Business Environment
GEB 6905: Individual Work
GEB 6924: Entrepreneurship Professional Speaker Series
GEB 6928: Professional Development Module IV
GEB 6930: Special Topics
GEB 6941: Internship
GEB 6957: International Studies in Business
GEO 5305: Environmental Biogeography
GEO 5346: Natural Hazards
GEO 5556: Geography of Innovation and Technological Change
GEO 5605: Advanced Urban Geography
GEO 5809: Geography of World Agriculture
GEO 5905: Individual Study: Directed Reading
GEO 5920: Geography Colloquium
GEO 5945C: Field Course in Geography
GEO 6118: Contemporary Geographic Thought and Research
GEO 6119: Proposal Writing in Geography
GEO 6160: Introduction to Quantitative Methods for Geographers
GEO 6161: Intermediate Quantitative Methods for Geographers
GEO 6166: Advanced Quantitative Methods for Spatial Analysis
GEO 6255: Climatology
GEO 6282: Fluvial Morphology
GEO 6348: Floods Seminar
GEO 6375: Land Change Science Seminar
GEO 6429: Seminar: Cultural Geography
GEO 6435: Seminar in Population
GEO 6451: Medical Geography
GEO 6495: Environment and Behavior
GEO 6905: Individual Work
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<th>Course Code</th>
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<tr>
<td>GEO 6921</td>
<td>How to Survive and Thrive in Academia</td>
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<td>GEO 6931</td>
<td>Seminar in Cultural and Political Ecology</td>
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<tr>
<td>GEO 6938</td>
<td>Selected Topics in Geography</td>
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<td>GEO 6971</td>
<td>Research for Master's Thesis</td>
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<td>GEO 7979</td>
<td>Advanced Research</td>
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<td>GER 6060</td>
<td>Beginning German for Graduate Students I</td>
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<td>Beginning German for Graduate Students II</td>
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<td>GER 6505</td>
<td>German Culture</td>
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<td>GER 6940</td>
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<td>GET 6295</td>
<td>Weimar Cinema</td>
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<td>GET 6299</td>
<td>New German Cinema and its Legacy</td>
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<td>GEW 6205</td>
<td>Foundations of Literary Study</td>
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<tr>
<td>GEW 6266</td>
<td>History of the German Novel</td>
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<td>GEW 6305</td>
<td>Studies in German Drama and Theater</td>
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<td>GEW 6405</td>
<td>Medieval and Renaissance Literature</td>
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<td>GEW 6425</td>
<td>From Luther to Lessing: Early Modern German Literature</td>
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<td>GEW 6535</td>
<td>German Classical and Romantic Literature</td>
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<td>GEW 6558</td>
<td>Young Germany, Biedermeier, Realism, and Naturalism</td>
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<td>GEW 6725</td>
<td>Culture and Society in the Weimar Republic</td>
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<td>GEW 6735</td>
<td>Modern German Literature</td>
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<td>Contemporary German Literature</td>
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<td>GEW 6745</td>
<td>Literature and Culture in the Third Reich</td>
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<td>GEW 6826</td>
<td>German Literary Theory</td>
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<td>GEW 6900</td>
<td>Seminar in Germanic Languages and Literatures</td>
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<td>Special Study in Germanic Languages and Literatures</td>
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<td>GEY 5935</td>
<td>Topics in Gerontology</td>
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<td>GEY 6220</td>
<td>Overview of Geriatric Care Management</td>
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GLY 5786L: Topics in Field Geology

GLY 5827: Ground Water Geology

GLY 6075: Global Climate Change: Past, Present, and Future

GLY 6268C: Isotope Geology

GLY 6297: Topics in Geochemistry

GLY 6425: Tectonics

GLY 6519: Stratigraphy and Timescales

GLY 6620C: Micropaleontology

GLY 6695: Topics in Paleoclimatology

GLY 6826: Hydrogeologic Modeling

GLY 6862: Numerical Methods in Earth Sciences

GLY 6905: Individual Work

GLY 6931: Seminar

GLY 6932: Special Topics in Geology

GLY 6940: Supervised Teaching

GLY 6943: Internship in College Teaching

GLY 6971: Research for Master's Thesis

GLY 7979: Advanced Research

GLY 7980: Research for Doctoral Dissertation

GMS 5604: Medical Human Embryology

GMS 5605: Medical Anatomy

GMS 5606L: Medical Anatomy Lab

GMS 5613: Medical Human Anatomy by Diagnostic Imaging

GMS 5630: Medical Histology

GMS 5905: Special Topics in Biomedical Sciences

GMS 6001: Fundamentals of Biomedical Sciences I

GMS 6003: Fundamentals of Graduate Research and Professional Development

GMS 6004: IDP Practical Laboratory

GMS 6005: Fundamentals of Developmental Biology

GMS 6006: Fundamentals of Immunology and Microbiology

GMS 6007: Fundamentals of Neuroscience

GMS 6008: Fundamentals of Physiology and Functional Genomics

GMS 6009: Principles of Drug Action

GMS 6010: Yeast Genetics
GMS 6011: Mouse Genetics
GMS 6012: Human Genetics
GMS 6013: Developmental Genetics
GMS 6014: Applications of Bioinformatics to Genetics
GMS 6015: Human Genetics II
GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
GMS 6023: Principles of Neuroscience III – Molecular Neuropharmacology and its Clinical Application
GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
GMS 6029: Brain Journal Club
GMS 6031: Molecular Immunology
GMS 6032: Mechanisms of Host Defense
GMS 6033: Immunity in Health and Disease
GMS 6034: Advanced Virology I: Genetics and RNA
GMS 6035: Advanced Virology II: RNA Viruses
GMS 6036: Molecular Virology III: DNA Viruses
GMS 6038: Bacterial Genetics and Physiology
GMS 6039: Bacterial Pathogenesis
GMS 6040: Host-Pathogen Interactions
GMS 6051: Signal Transduction
GMS 6052: Ion Channels of Excitable Membranes
GMS 6053: Cancer Biology and Therapeutics
GMS 6059: Gene Therapy from Bench to Bedside
GMS 6061: Nuclear Structure and Dynamics
GMS 6062: Protein Trafficking
GMS 6063: Mechanisms of Aging
GMS 6064: Tumor Biology
GMS 6065: Fundamentals of Cancer Biology
GMS 6070: Sensory and Motor Systems
GMS 6072: Neuroendocrinology and Neuroimmunology
GMS 6073: Developmental Neurobiology
GMS 6074: Comparative and Evolutionary Neurobiology
GMS 6077: Neural Degeneration and Regeneration
GMS 6078: Synaptic Function and Plasticity
GMS 6079: Computers in Biology
GMS 6080: Basic Magnetic Resonance Imaging
GMS 6081: Biological Imaging Techniques
GMS 6090: Research in Medical Sciences
GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
GMS 6099: Foundations in Aging and Geriatric Research
GMS 6121: Infectious Diseases
GMS 6140: Principles of Immunology
GMS 6145: Immunology of Gene Transfer
GMS 6151: Genetic Analysis Using Model Systems
GMS 6153: Advanced Bacterial Genetics
GMS 6155: DNA Microarray Data Analysis
GMS 6160: Introduction to Oral Biology I
GMS 6161: Introduction to Oral Biology II
GMS 6169: Antimicrobial Strategies
GMS 6173: Stomatognathic System: Form and Function
GMS 6176: Biology of Tooth Supporting Structures I
GMS 6177: Biology of Tooth Supporting Structures II
GMS 6181: Special Topics in Microbiology
GMS 6190: Seminar
GMS 6191: HIV Journal Club
GMS 6193: Research Conference in Oral Biology
GMS 6195: Epigenetics Journal Club
GMS 6196: Virology Journal Club
GMS 6198: Bacterial Pathogenesis Journal Club
GMS 6221: Ethics in Genetics
GMS 6223: Drosophila Neurogenetics: from Development to Function
GMS 6231: Genomics and Bioinformatics
GMS 6232: Advanced Applications of Bioinformatics in Genetics
GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
GMS 6234: Introduction to phylodynamics: A practical approach to molecular phylogenetics of pathogens
GMS 6251: Molecular Therapy I – Vectors and Molecular Mechanisms
GMS 6252: Molecular Therapy II – Disease Targets and Applications
GMS 6253: Molecular Therapy III – Immunology of Gene Transfer
GMS 6290: Genetics/Genomics Program Graduate Seminar
GMS 6312: Clinical Chemistry and Toxicology
GMS 6313: Clinical Chemistry and Toxicology: A Rotation
GMS 6331: Stem Cell Biology
GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
GMS 6337: B Cell Development in Health and Disease
GMS 6338: Recent Advances in Cancer Metastasis
GMS 6381: Special Topics in Pathology
GMS 6382: Special Topics in Immunology
GMS 6383: Current Topics in Immunotherapy
GMS 6393: Seminar in Clinical Chemistry
GMS 6394: Seminar in Mammalian Genetics
GMS 6400C: Principles of Physiology
GMS 6403: Advanced Endocrinology
GMS 6405: Fundamentals of Endocrine Physiology
GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
GMS 6408: Fundamentals of Renal Physiology
GMS 6410: Physiology of the Circulation of Blood
GMS 6411: Fundamentals of Cardiovascular Physiology
GMS 6412: Human Physiology for Biomedical Engineering
GMS 6413: Advances in Hypertension Research
GMS 6414: Advanced Renal Physiology
GMS 6415: Fundamentals of Gastrointestinal Physiology
GMS 6416: Human Endocrinology and Anatomy of Reproduction
GMS 6417: Integrative Aging Physiology
GMS 6421: Cell Biology
GMS 6471: Fundamentals of Physiology and Functional Genomics I
GMS 6472: Fundamentals of Physiology and Functional Genomics II
GMS 6473: Fundamentals of Physiology and Functional Genomics III
GMS 6483: Theories of Aging
GMS 6484: Geriatric and Age Related Diseases
GMS 6485: Population Based Research on Aging
GMS 6486: Fundamentals of Biological Aging
GMS 6490C: Research Methods in Physiology
GMS 6491: Journal Club in Physiology
GMS 6495: Seminar in Physiology
GMS 6496: Recent Advances in Physiology
GMS 6497: Seminar on Vision
GMS 6500: Introduction to Pharmacology
GMS 6506: Biologic Drug Development
GMS 6563: Molecular Pharmacology
GMS 6590: Seminar in Pharmacology
GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
GMS 6607C: Musculoskeletal Systems
GMS 6609: Advanced Gross Anatomy
GMS 6621: Vision
GMS 6622: Mitochondrial Biology in Aging and Disease
GMS 6635: Organization of Cells and Tissues
GMS 6642: Morphogenesis: Organ Systems I
GMS 6643: Morphogenesis: Organ Systems II
GMS 6644: Apoptosis
GMS 6647: Transcriptional and Translational Control of Cell Growth and Proliferation
GMS 6683: Fundamentals of Vascular Physiology and Pathology
GMS 6690: Molecular Cell Biology Journal Club
GMS 6691: Special Topics in Cell Biology and Anatomy
GMS 6692: Research Conference in Anatomy and Cell Biology
GMS 6705: Functional Human Neuroanatomy
GMS 6709: Current Topics in Vision
GMS 6711: Neurobiology of Pain
GMS 6715: Lifestyle Interventions in Aging I: Behavioral Aspects & Clinical Outcomes
GMS 6717: Lifestyle Interventions in Aging II: Physiologic Aspects
GMS 6719: Fundamentals of Computational Neuroscience
GMS 6735: Neuropharmacology
GMS 6750: Molecular Pathobiology of Neural Disease
GMS 6760: Comparative Biology of Cell Signaling
GMS 6771: Clinical Neuroscience of Aging
GMS 6780: Addiction: Neuroscience and Trends
GMS 6791: Visual Neuroscience Journal Club
GMS 6792: Neuroscience Graduate Research Seminar
GMS 6800: Fundamentals of Epidemiology
GMS 6801: Epidemiology, Prevention, and Control of Infectious Diseases
GMS 6802: Examining Health Outcomes for Chronic Diseases in Clinical and Community-based Research
GMS 6803: Data Management for Clinical Research
GMS 6804: Medical Informatics
GMS 6810: Intermediate Epidemiology Methods
GMS 6811: Grant Writing Skills for Clinical Research
GMS 6812: Cancer Health Outcomes Assessment
GMS 6813: Clinical Trials
GMS 6814: Molecular and Genetic Epidemiology
GMS 6816: Pediatric Child Health Outcomes Assessment for Clinical and Community-Based Research
GMS 6818: Design and Conduct Clinical Trials I
GMS 6819: Design and Conduct Clinical Trials II
GMS 6820: Advanced Epidemiology Methods
GMS 6821: Measuring and Analyzing Health Outcomes I
GMS 6822: Measuring and Analyzing Health Outcomes II
GMS 6823: Methods for Evaluating Health Care Outcomes and Costs: Module 1
GMS 6824: Methods for Evaluating Health Care Outcomes and Costs: Module 2
GMS 6825: Methods for Evaluating Health Care Outcomes and Costs: Module 3
GMS 6826: Advanced Design and Methodology for Case-Control Studies in Clinical Research
GMS 6827: Advanced Clinical Trial Methods
GMS 6829: Longitudinal Research Design
GMS 6830: Health Outcomes Research and Policy Development
GMS 6832: Economic Methods for Evaluating Value in Health
GMS 6833: Health Care Policy and Vulnerable Populations
GMS 6834: Health Policy and Formulation of Payment Mechanisms for Health Care
GMS 6835: Health Policy Issues in Children's Health
GMS 6841: Design and Analysis of Translational Research in Biomedical Sciences
GMS 6842: Translational Research Methods
GMS 6844: Experimental and Quasi-Experimental Research Designs for Community Settings
GMS 6845: Clinical & Translational Research Practicum
GMS 6846: Meta-Analysis in Clinical, Health Services Research and Public Health
GMS 6851: Health Outcomes Research
GMS 6852: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
GMS 6853: Applied Topics in Dissemination and Implementation Science
GMS 6854: Applied Topics in Clinical Effectiveness Research
GMS 6861: Applied Biostatistics I
GMS 6862: Applied Biostatistics II
GMS 6863: Analysis and Study Design for High Dimension, Low Sample Size Data
GMS 6872: Science and Ethics of in Vitro Fertilization
GMS 6876: Law & Ethics of Aging
GMS 6881: Special Studies in Epidemiology and Health Policy Research
GMS 6882: Directed Readings in Epidemiology and Health Policy
GMS 6883: Practicum Experience in Epidemiology and Health Policy
GMS 6884: Research in Epidemiology and Health Policy
GMS 6885: Research Designs in Health Outcomes and Policy
GMS 6893: Clinical and Translational Science Seminar Series
GMS 6895: CTS Journal Club
GMS 6896: Health Outcomes and Policy Seminar
GMS 6901: Seminar in Biology of Disease
GMS 6903: Manuscript and Abstract Writing for Clinician/Scientists
GMS 6905: Independent Studies in Medical Sciences
GMS 6910: Supervised Research
GMS 6920: Genetics Journal Colloquy
GMS 6921: Immunology/Microbiology Journal Colloquy
GMS 6931: Ethical and Policy Issues in Clinical Research
GMS 6940: Supervised Teaching
GMS 6943: Master's Translational Biotechnology Internship
GMS 6970: Individual Study
GMS 6971: Research for Master's Thesis
GMS 7001: Fundamentals of Biomedical Science Education
GMS 7002: Practicum in Biomedical Science Education
GMS 7003: Responsible Conduct of Biomedical Research
GMS 7093: Introduction to Clinical and Translational Research
GMS 7179: Journal Colloquy
GMS 7191: Research Conference
GMS 7192: Journal Colloquy
GMS 7194: Biotechnology Seminar
GMS 7593: Topics in Pharmacology and Toxicology
GMS 7794: Neuroscience Seminar
GMS 7795: Special Topics in Neuroscience
GMS 7886: Health Outcomes and Policy PhD Seminar: Applied Research
GMS 7887: Health Outcomes & Policy PhD Research Seminar
GMS 7979: Advanced Research
GMS 7980: Research for Doctoral Dissertation
GRE 6425: Greek Prose Composition
GRE 6755: Epigraphy
GRK 6905: Individual Work in Modern Greek
GRW 6105: The Greek Tradition
GRW 6216: Greek Novel
GRW 6316: Greek Tragedy
GRW 6317: Ancient Greek Comedy
GRW 6345: Greek Lyric Poetry
GRW 6346: Pindar
GRW 6347: Homer
GRW 6366: Greek Historians
GRW 6506: Plato
GRW 6705: Attic Orators
GRW 6905: Individual Work
GRW 6930: Special Topics in Greek Literature
GRW 6931: Comparative Study of Greek and Latin Literature
GRW 6971: Research for Master’s Thesis
GRW 7979: Advanced Research
GRW 7980: Research for Doctoral Dissertation
HIS 5450: Slavery in the New World: Comparative Perspectives
HIS 5484: Science and the Enlightenment
HIS 5485: Special Studies in the History of Science
HIS 6060: Historical Method
HIS 6061: Introduction to Historiography
HIS 6416: Problems in Comparative Legal History
HIS 6445: Postcolonial Theories
HIS 6469: Topics in Historiography of History of Science
HIS 6478: Topics in the Scientific Revolution
HIS 6480: Pre-Newtonian Sciences
HIS 6488: Readings in the History of Science
HIS 6905: Individual Study
HIS 6910: Supervised Research
HIS 6940: Supervised Teaching
HIS 6943: Internship in College Teaching
HIS 6957: Nonthesis Project in History
HIS 6971: Research for Master's Thesis
HIS 7979: Advanced Research
HIS 7980: Research for Doctoral Dissertation
HLP 6515: Evaluation Procedures in Health and Human Performance
HLP 6535: Research Methods in Health and Human Performance
HLP 6911: Research Seminar
HLP 6935: Variable International Topics
HLP 7979: Advanced Research in Health and Human Performance
HLP 7980: Research for Doctoral Dissertation
HMG 6076: Introduction to Hospitality and Tourism
HMG 6608: Hospitality Law and Risk Management
HMG 6747: Marketing in Hospitality/Tourism
HOS 5085C: Principles of Postharvest Horticulture
HOS 5115C: Horticultural Plant Morphology and Identification
HOS 5242: Genetics & Breeding of Vegetable Crops
HOS 5306: Molecular Biology of Plant Hormones
HOS 5330: Postharvest Technologies for Horticultural Crops
HOS 5432: Advanced Nutritional Management of Ornamental Crops
HOS 5515C: Greenhouse and Nursery Operations
HOS 5516C: Advanced Production of Greenhouse and Nursery Crops
HOS 5555: Tropical Fruit Production and Research in Florida
HOS 5711: Phytochemicals in Food & Health
HOS 6201: Breeding Perennial Cultivars
HOS 6236: Molecular Marker Assisted Plant Breeding
HOS 6331: Postharvest Biology
HOS 6345: Environmental Physiology
HOS 6412: Nutrition of Horticultural Crops
HOS 6523: Research and Development in Turfgrass Science
HOS 6545: Advanced Citriculture I
HOS 6546: Advanced Citriculture II
HOS 6905: Problems in Horticultural Science
HOS 6910: Supervised Research
HOS 6931: Horticultural Science Seminar
HOS 6932: Special Topics
HOS 6934: Professional Seminar Preparation
HOS 6940: Supervised Teaching
HOS 6941: Practicum in Horticultural Science
HOS 6971: Research for Master's Thesis
HOS 7979: Advanced Research
HOS 7980: Research for Doctoral Dissertation
HSA 5103: Introduction to the U.S. Health Care System
HSA 5174: Fundamentals of Health Care Finance
HSA 6105: Professional Skills Seminar
HSA 6114: U.S. Health Care System
HSA 6115: Introduction to Management of Health Services Organizations
HSA 6126: U.S. Health Insurance System
HSA 6152: Overview of U.S. Health Policy
HSA 6175: Health Care Financial Management
HSA 6177: Advanced Health Care Finance
HSA 6179: Introduction to Health Care Finance
HSA 6188: Strategic Management in Health Administration
HSA 6196: Health Services Operations Management
HSA 6197: Information Management in Health Administration
HSA 6198: Information Management in Health Administration
HSA 6342: Human Resource Management for Health Services Managers
HSA 6385: Performance Management for Health Care Managers
HSA 6427: Legal and Ethical Issues in Health Administration
HSA 6436: Health Economics
HSA 6855: Internship in Health Administration
HSA 6858: Internship in Health Services Research
HSA 6878: Externship in Legal Aspects of Health Services Administration
HSA 6905: Individual Study in Health Administration
HSA 6910: Supervised Research
HSA 6911: Research Seminar in Health Services Research
HSA 6930: Special Topics in Health Services Administration
HSA 6935: Seminar in Health Administration
HSA 6939: Capstone Seminar in Health Administration
HSA 6940: Supervised Teaching
HSA 6946: Internship in Public Health Management and Policy
HSA 7106: Seminar in Health Care Access and Utilization
HSA 7116: Health Services Organizational Research
HSA 7157: Research Foundations of Health Policy
HSA 7414: Society, Health, and Medical Care
HSA 7437: Advanced Health Economics
HSA 7707: Health Services Research Methods I
HSA 7708: Health Services Research Methods II
HSA 7759: Quality and Outcomes in Health Services Research
HSA 7905: Advanced Individual Study in Health Services Research
HSA 7936: Seminar in Health Care Costs and Financing
HSA 7938: Advanced Seminar in Health Services Research
HSA 7979: Advanced Research
HSA 7980: Research for Doctoral Dissertation
HSC 5135: Emotional Health Education
HSC 5138: Human Sexuality
HSC 5142: Drug Education
HSC 5315C: Teaching Health in Elementary Schools
HSC 5536C: Medical Terminology for the Health Professions
HSC 5576: Nutrition Education for Special Populations
HSC 5606: Spirituality and Health
HSC 5618: Advanced Exercise Therapy, Adapted Physical Activity, & Health
HSC 5626: Minority Health Issues
HSC 5657: Health and End-of-Life Issues
HSC 5925: Seminar in Health Education
HSC 5938: Special Topics
HSC 5956: Writing for Professional Publications
HSC 6037: Philosophy and Principles of Health Education
HSC 6216: Environmental Health
HSC 6235: Patient Health Education
HSC 6318: Planning Health Education Programs
HSC 6506: Epidemiology
HSC 6567: Health Promotion and Programming in Gerontology
HSC 6571: Contemporary Issues in Health Promotion
HSC 6575: Women's Health Issues
HSC 6595: HIV/AIDS Education
HSC 6603: Theories of Health Behavior and Practice in Health Education
HSC 6605: Scientific Foundations of Holistic Health
HSC 6625: Trends in International Health
HSC 6629: Health Promotion for Priority Populations
HSC 6637: Social Marketing and Health
HSC 6646: Community Health Methods in Injury Prevention & Control
HSC 6665: Health Communication
HSC 6667: Health Communication Programs
HSC 6668: Interpersonal Communication and Health
HSC 6695: Worksite Health Promotion
HSC 6712: Evaluating Health Education Programs
HSC 6735: Research Methods in Health Education
HSC 6850: Internship in Health Education
HSC 6904: Readings in Health Education
HSC 6905: Independent Study
HSC 6910: Supervised Research
HSC 6935: Current Topics in Health Education
HSC 6939: Special Topics
HSC 6940: Supervised Teaching
HSC 6971: Research for Master's Thesis
HSC 6973: Project in Lieu of Thesis
HSC 7904: Advanced Readings in Health Education
HSC 7905: Advanced Independent Study in Health Education
HSC 7937: Advanced Seminar in Health Education
HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
HUM 5595: Arts in Medicine in Practice
HUM 6340: Arts Advocacy and Public Policy
HUM 6353: Arts in Medicine Professional Seminar
HUM 6354: Arts in Medicine Advanced Professional Seminar
HUM 6358: Arts in Medicine Capstone Proposal
HUM 6359: Arts in Medicine Capstone
HUM 6930: Special Topics in Fine Arts
HUM 6942: Arts in Medicine Graduate Practicum
HUM 6944: Arts in Action: Consulting Project in Performing Arts Management
HUN 5246: Current Issues in Dietary Supplements
HUN 5441: Metabolic Response to Enteral and Parenteral Nutrition
HUN 5447: Nutrition and Immunity
HUN 6245: Advanced Human Nutrition
HUN 6255: Clinical Nutrition
HUN 6301: Nutritional Aspects of Lipid Metabolism
HUN 6305: Nutritional Aspects of Carbohydrates
HUN 6321: Proteins and Amino Acids in Nutrition
HUN 6331: Vitamins in Human Nutrition
HUN 6356: Minerals in Nutrition
HUN 6812C: Analytical Techniques in Nutritional Biochemistry
HUN 6905: Problems in Nutritional Sciences
HUN 6910: Supervised Research
HUN 6936: Topics in Nutritional Sciences
HUN 6938: Nutritional Sciences Seminar
HUN 6939: Advanced Clinical Nutrition
HUN 6940: Supervised Teaching
HUN 6971: Research for Master's Thesis
HUN 7979: Advanced Research
HUN 7980: Research for Doctoral Dissertation
ICM 5905: Special Studies
ICM 6420: Commercial Management and Cost Control
ICM 6440: Construction Value Management
ICM 6680: Principles of International Sustainable Construction
ICM 6682: Construction Ecology and Metabolism
ICM 6684: High-Performance Green Building Delivery Systems
ICM 6710: Construction Human Resource Management
ICM 6750: Managing Construction Information Technology
ICM 6751: International Construction Management
ICM 6752: Construction Finance and Investment
ICM 6761: Advanced Planning, Scheduling, and Logistics
ICM 6762: Construction Risk Management
ICM 6770: Advanced Project Safety Management
ICM 6772: International Strategic Management
ICM 6905: Directed Independent Study in International Construction
ICM 6910: Supervised Research
ICM 6930: Construction Communication and Research
ICM 6934: International Construction Research
IDC 6505C: Programming for Artists
IND 5023: Introduction to Architectural Interiors
IND 5106: History of Interior Design I
IND 5136: History of Interior Design II
IND 5212C: Architectural Interiors I
IND 5213C: Introduction to Architectural Interiors Lab
IND 5227C: Advanced Architectural Interiors I
IND 5231C: Architectural Interiors II
IND 5232C: Advanced Architectural Interiors II
IND 5317C: Interior Design Communication Systems
IND 5326: Color Theory Planning and Practice
IND 5427C: Interior Design Construction Documents
IND 5428: Materials for Interior Design
IND 5434C: Interior Lighting
IND 5445C: Furniture Design
IND 5454C: Advanced Interior Design Detailing and Construction Documents
IND 5464C: Computer Applications in Three-Dimensional Design
IND 5466: Interior Environmental Technology
IND 5508: Business and Professional Practices for Interior Designers
IND 5638: Design Environments and Human Interaction
IND 5937: Current Topics in Interior Design
IND 6239: Advanced Topics in Interior Design Studio
IND 6639: Methods of Interior Design Research
IND 6906: Independent Studies and Readings
IND 6940: Supervised Teaching
IND 6941: Interior Design Internship
IND 6971: Research for Master's Thesis
INR 5935: Advanced Topics in International Relations
INR 6036: Globalization, Regionalism, and Governance
INR 6039: International Political Economy
INR 6208: Advanced International Relations Theory
INR 6213: Seminar: Politics of the European Union
INR 6249: Inter-American Relations
INR 6305: Politics of American Foreign Policy Making
INR 6337: Survey of International Security
INR 6352: International Environmental Relations
INR 6507: International Organization
INR 6607: International Relations Theory
INR 6936: Seminar in Transnational and Global Studies
INR 6938: Seminar in Culture and World Politics
IPM 5305: Principles of Pesticides
ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
ISM 6223: Business Telecom Strategy and Applications II
ISM 6224: Business Telecom Strategy and Applications III
ISM 6226: Business Telecom Strategy and Applications
ISM 6236: Business Objects I
ISM 6239: Business Objects II
ISM 6257: Intermediate Business Programming
ISM 6258: Advanced Business Programming
ISM 6259: Business Programming
ISM 6405: Business Intelligence
ISM 6423: Data Analysis for Decision Support
ISM 6485: Electronic Commerce and Logistics
ISM 6486: eCommerce Technologies
ISM 6487: Risks and Controls in eCommerce
ISM 6492: Electronic Commerce Practicum
ISM 7166: Advanced Business Systems Design and Development III
JOU 5007: History of Journalism
JOU 5705: Issues and the Press
JOU 6102: Reporting Workshop
JOU 6114: Journalist Bootcamp
JOU 6309: Seminar in Journalism as Literature
JOU 6344: Journalist Toolkit 1
JOU 6349: Journalist Toolkit 2
JOU 6502: Newsroom Management
LAA 5331: Site Design Methodologies
LAA 5366: Principles of Landscape Architecture
LAA 6231: Landscape Architecture Theory
LAA 6322: Project Management for Landscape Architects
LAA 6342: Landscape Architecture Criticism
LAA 6349C: Design Communications for Landscape Architects
LAA 6382: Ecological and Environmental Policy
LAA 6525L: Advanced Landscape Construction Design
LAA 6536: Landscape Management
LAA 6656C: Advanced Landscape Architectural Design
LAA 6713: Cultural Landscapes
LAA 6716: History of Landscape Architecture
LAA 6905: Directed Study
LAA 6931: Water Conservation through Site Design and Green Roofs
LAA 6931C: Special Topics
LAA 6933: Topics in European Design: Paris, France
LAA 6935: Gardens of the World
LAA 6941: Supervised Internship
LAA 6952C: European Landscape Architecture Studio
LAA 6971: Research for Master's Thesis
LAA 6979: Terminal Project
LAE 6298: Literacy & Language Instruction
LAE 6319: Language Arts in the Elementary School
LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
LAE 6348: Teaching Multiliteracies
LAE 6365: Language Arts: Language and Composition
LAE 6366: Language Arts: Literature
LAE 6407: Early Childhood Children's Literature
LAE 6446: Multicultural Literature for Children and Adolescents
LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
LAE 6455: International Children's Literature
LAE 6505: Applied Preschool Language Disorders: Diagnosis and Treatment
LAE 6616: Seminar in Children's Literature
LAE 6635: Teaching Adolescent Literature in the Secondary School
LAE 6714: Children's Literature in the Childhood Curriculum
LAE 6861: Technology and Media Literacy
LAE 6865: Teaching Media Literacy with the Internet
LAE 6869: Teaching Digital Storytelling
LAE 6939: Literacy, Family, and Culture
LAE 6940: Supervised Teaching
LAE 6945: Practicum and Assessment for Teachers of Secondary School English
LAE 6946: Children's Literature in Educational Settings
LAE 6947: Writing Theories & Practices
LAE 7006: Language Acquisition and Education
LAE 7519: Language and Inquiry
LAE 7715: Research in Children's Literature
LAE 7934: Seminar in Composition Theory and Practice
LAE 7936: Seminar in English Language Arts
LAH 5438: Modern Mexico
LAH 5475: Caribbean, Nineteenth and Twentieth Centuries
LAH 5476: Caribbean History to 1800: Slavery, Colonization, and International Conflict
LAH 5527: Andean Nations
LAH 5607: History of Amazonia
LAH 5637: Brazil Since 1750
LAH 5933: Topics in Caribbean History
LAH 5934: Topics in Latin American History
LAH 6934: Seminar in Colonial Spanish America
LAH 6936: Seminar in History of Brazil
LAH 6938: Seminar in Modern Spanish America
LAS 6008: Ecological Principles
LAS 6220: Issues and Perspectives in Latin American Studies
LAS 6290: Tropical Conservation and Development
LAS 6291: Conservation and Development Skills
LAS 6292: Tropical Conservation and Development Research Methods
LAS 6293: Design and Methods of Research in Latin American Studies
LAS 6295: Latin American Business Environment
LAS 6296: Latin American Business Topics
LAS 6905: Individual Work
LAS 6938: Seminar in Modern Latin American Studies
LAS 6940: Tropical Conservation and Development Practicum
LAS 6943: Development Theory and Practice in Latin America

LAS 6971: Research for Master's Thesis

LAT 6425: Latin Prose Composition

LAW 7493: LL.M. Research: Selected Topics in Environmental & Land Use Law

LAW 7602: Taxation of Property Transactions

LAW 7604: Timing Issues in Taxation

LAW 7611: Corporate Taxation I

LAW 7613: Corporate Taxation II

LAW 7614: U.S. International Tax I

LAW 7615: U.S. International Tax II

LAW 7617: Partnership Taxation

LAW 7623: Taxation of Gratuitous Transfers

LAW 7625: Income Taxation of Trusts and Estates

LAW 7626: Estate Planning

LAW 7632: Deferred Compensation

LAW 7633: Tax Exempt Organizations

LAW 7640: Civil Tax Procedure

LAW 7641: Procedures in Tax Fraud Cases

LAW 7650: State and Local Taxation

LAW 7660: Tax Policy

LAW 7680: Comparative Taxation

LAW 7682: Income Tax Treaties

LAW 7683: Transfer Pricing

LAW 7801: Introduction to the Legal System of the United States for LL.M. in Comparative Law, Part II

LAW 7805: Legal Writing and Research for LL.M. in Comparative Law

LAW 7905: Independent Study

LAW 7906: Directed Research for LL.M. in Comparative Law

LAW 7910: Supervised Research

LAW 7911: Federal Tax Research

LAW 7916: Research Methods and Environmental Land Use Law

LAW 7931: Current Federal Tax Problems

LAW 7932: Introduction to the Legal System of the United States for LLM in Comparative Law, Part I
LEI 5121: Outdoor Recreation and Park Management

LEI 5188: Trends in Leisure Studies

LEI 6108: Contemporary Theories of Recreation and Leisure

LEI 6325: Ecotourism

LEI 6326: Sport Tourism

LEI 6336: Tourism Planning and Development

LEI 6351: Heritage Tourism

LEI 6439: Campus Recreation Administration and Programming

LEI 6513: Administrative Procedures in Leisure Services

LEI 6514: Administrative Issues in Recreation, Parks, and Tourism

LEI 6557: Recreation Management/Development in the Coastal Zone

LEI 6562: Advanced Marketing for Recreation, Parks, and Tourism

LEI 6895: Tourism Theory and Concepts

LEI 6903: Readings in Recreation, Parks, and Tourism

LEI 6905: Directed Independent Study

LEI 6910: Supervised Research

LEI 6931: Special Topics in Recreation, Parks, and Tourism

LEI 6935: Seminar in Recreation, Parks, and Tourism

LEI 6940: Supervised Teaching

LEI 6944: Practicum in Leisure Studies

LEI 6971: Research for Master's Thesis

LEI 7170: Foundations of Leisure Behavior

LEI 7901: Recreation, Parks, and Tourism in Higher Education

LEI 7904: Advanced Readings in Recreation, Parks, and Tourism

LEI 7905: Advanced Independent Study in Recreation, Parks and Tourism

LEI 7910: Advanced Supervised Research

LEI 7933: Advanced Special Topics in Recreation, Parks, and Tourism

LEI 7936: Advanced Seminar in Recreation, Parks, and Tourism

LIN 5657: Gender and Language

LIN 5741: Applied English Grammar

LIN 6084: Introduction to Graduate Research

LIN 6165: Field Methods

LIN 6208: Phonetics for Linguists
LIN 6226: Advanced Phonetics
LIN 6323: Phonology
LIN 6341: Issues in Phonology
LIN 6402: Morphology
LIN 6410: Issues in Morphology
LIN 6501: Syntax
LIN 6520: Issues in Syntax
LIN 6571: Structure of Specific Language
LIN 6601: Sociolinguistics
LIN 6622: Bilingualism
LIN 6707: Psycholinguistics
LIN 6708C: Methods in Psycholinguistics
LIN 6720: Second Language Acquisition
LIN 6773: Topics in Computational Linguistics
LIN 6796: Cognitive Neuroscience of Language
LIN 6804: Semantics I
LIN 6826: Introduction to Formal Pragmatics
LIN 6856: Semantics II
LIN 6905: Individual Study
LIN 6910: Supervised Research
LIN 6932: Special Topics
LIN 6940: Supervised Teaching
LIN 6971: Research for Master's Thesis
LIN 7118: History of Linguistics
LIN 7641: Seminar in Language Variation
LIN 7725: Topics in Second Language Acquisition
LIN 7885: Discourse Analysis and Pragmatics
LIN 7979: Advanced Research
LIN 7980: Research for Doctoral Dissertation
LIT 5335: Approaches to Children's and Adolescent Literature
LIT 6037: Studies in Verse
LIT 6047: Studies in Drama
LIT 6236: Postcolonial Studies
LIT 6308: Studies in Comics and Animation
LIT 6309: Communications and Popular Culture
LIT 6327: Studies in Folklore
LIT 6357: African-Amer. or African Diaspora Lit./Cultures
LIT 6358: Theoretical Approaches to Black Cultural Studies
LIT 6855: Issues in Cultural Studies
LIT 6856: Cultural Studies: Interventions
LIT 6857: Cultural Studies: Movements
LIT 6934: Variable Topics

LNW 5325: Roman Elegiac Poetry
LNW 5655: Roman Poets: Horace
LNW 5665: Roman Poets: Vergil
LNW 5675: Roman Poets: Ovid
LNW 5931: Comparative Study of Latin and Greek Literature
LNW 6105: The Roman Tradition
LNW 6225: The Ancient Roman Novel
LNW 6335: Roman Oratory and Rhetoric
LNW 6365: Studies in Roman Satire
LNW 6385: Roman Historians
LNW 6495: Late Latin Literature
LNW 6905: Individual Work
LNW 6933: Special Topics in Latin Literature
LNW 6935: Proseminar in Classics
LNW 6940: Supervised Teaching
LNW 6971: Research for Master’s Thesis
LNW 7979: Advanced Research
LNW 7980: Research for Doctoral Dissertation

MAA 5104: Advanced Calculus for Engineers and Physical Scientists I
MAA 5105: Advanced Calculus for Engineers and Physical Scientists II
MAA 5228: Modern Analysis I
MAA 5229: Modern Analysis II
MAA 5404: Introduction to Complex Variables for Engineers and Physical Scientists

MAA 6236: Mathematical Analysis for Statisticians

MAA 6406: Complex Analysis I

MAA 6407: Complex Analysis II

MAA 6616: Analysis I

MAA 6617: Analysis II

MAA 7526: Advanced Topics in Functional Analysis I

MAA 7527: Advanced Topics in Functional Analysis II

MAD 6206: Combinatorial Theory I

MAD 6207: Combinatorial Theory II

MAD 6406: Numerical Linear Algebra

MAD 6407: Numerical Analysis

MAD 7396: Topics in Combinatorial Theory I

MAD 7397: Topics in Combinatorial Theory II

MAE 5327: Middle School Mathematics Methods

MAE 5332: Secondary School Mathematics Methods and Assessment

MAE 5347: Teaching K-8 Mathematics for Understanding

MAE 5395: Multicultural Mathematics Methods

MAE 5396: Using Formative Assessment to Improve Mathematical Learning

MAE 5945: Secondary School Mathematics Practicum

MAE 6313: Problem Solving in School Mathematics

MAE 6615: Individualizing Instruction in Mathematics

MAE 6641: Readings and Research in Mathematics Education

MAE 6916: Inquiry in Mathematics Teaching

MAE 6940: Supervised Teaching

MAE 6943: Internship in College Teaching

MAE 7899: Mathematics Education Seminar

MAN 5141: Leadership Skills

MAN 5245: Organizational Behavior

MAN 5246: Organizational Behavior

MAN 5265: Managing Groups and Teams

MAN 5501: Management

MAN 5502: Production and Operations Management
MAN 6107: Motivation in Organizational Setting
MAN 6128: Management Skills and Personal Development
MAN 6149: Developing Leadership Skills
MAN 6257: Power and Politics in Organizations
MAN 6266: Managing Groups and Teams in Organizations
MAN 6286: Managing Strategic Processes and Change in Organizations
MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management
MAN 6331: Compensation in Organizations
MAN 6351: Training and Development in Organizations
MAN 6365: Organizational Staffing
MAN 6366: Organizational Staffing
MAN 6385: Strategic Human Resource Management
MAN 6446: Negotiations
MAN 6447: Art and Science of Negotiation
MAN 6508: Management of Service Operations
MAN 6511: Production Management Problems
MAN 6528: Principles of Logistics/Transportation Systems
MAN 6537: Managing Technology in Organizations
MAN 6573: Purchasing and Materials Management
MAN 6575: Purchasing and Supplier Relationship Management
MAN 6581: Project Management
MAN 6586: Project Management
MAN 6598: Logistics and Distribution Management
MAN 6599: Tactical Logistics Planning
MAN 6617: International Operations/Logistics
MAN 6619: International Logistics
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation
MAP 5304: Intermediate Differential Equations for Engineers and Physical Scientists
MAP 5345: Introduction to Partial Differential Equations
MAP 5489: Modeling in Mathematical Biology
MAP 6208: Numerical Optimization
MAP 6327: Applied Differential Equations I
MAP 6356: Partial Differential Equations I
MAP 6357: Partial Differential Equations II
MAP 6375: Numerical Partial Differential Equations
MAP 6376: Finite Element Method
MAP 6467: Stochastic Differential Equations and Filtering Theory I
MAP 6468: Stochastic Differential Equations and Filtering Theory II
MAP 6472: Probability and Potential Theory I
MAP 6473: Probability and Potential Theory II
MAP 6487: Biomathematics Seminar I
MAP 6488: Biomathematics Seminar II
MAP 6505: Mathematical Methods of Physics and Engineering
MAP 6506: Mathematical Methods of Physics and Engineering II
MAP 6941: Internship in Applied Mathematics
MAP 7436: Seminar in Applied Mathematics I
MAP 7437: Seminar in Applied Mathematics II
MAR 5805: Problems and Methods in Marketing Management
MAR 5806: Problems and Methods in Marketing Management
MAR 6157: International Marketing
MAR 6158: International Marketing
MAR 6237: The Art and Science of Pricing
MAR 6256: Strategy and Tactics of Pricing
MAR 6335: Building and Managing Brand Equity
MAR 6456: Business-to-Business Marketing
MAR 6508: Customer Analysis
MAR 6646: Marketing Research for Managerial Decision Making
MAR 6648: Marketing Research for Managerial Decision Making
MAR 6722: Web-Based Marketing
MAR 6725: Introduction to Electronic Commerce
MAR 6816: Advanced Marketing Management (MBA)
MAR 6818: Advanced Marketing Management
MAR 6833: Product Development and Management
MAR 6834: Marketing of Science and Technology
MAR 6835: Marketing of Science and Technology
MAR 6837: Consumer-Centered Product Design
MAR 6861: Customer Relationship Management
MAR 6862: Customer Relationship Management
MAR 6905: Individual Work
MAR 6910: Supervised Research
MAR 6930: Special Topics in Marketing
MAR 6940: Supervised Teaching
MAR 6957: International Studies in Marketing
MAR 6971: Research for Master's Thesis
MAR 6973: Project in Lieu of Thesis
MAR 7507: Perspectives on Consumer Behavior
MAR 7588: Consumer Information Processing and Decision Making
MAR 7589: Judgment and Decision Making
MAR 7626: Multivariate Statistical Methods in Marketing
MAR 7636: Research Methods in Marketing
MAR 7666: Marketing Decision Models
MAR 7786: Marketing Literature
MAR 7925: Workshop in Marketing Research
MAR 7979: Advanced Research
MAR 7980: Research for Doctoral Dissertation
MAS 5311: Introductory Algebra I
MAS 5312: Introductory Algebra II
MAS 6331: Algebra I
MAS 6332: Algebra II
MAS 7215: Theory of Numbers I
MAS 7216: Theory of Numbers II
MAS 7396: Advanced Topics in Algebra I
MAS 7397: Topics in Algebra II
MAT 6905: Individual Work
MAT 6910: Supervised Research
MAT 6932: Special Topics in Mathematics
MAT 6971: Research for Master's Thesis
MAT 7979: Advanced Research
MAT 7980: Research for Doctoral Dissertation
MCB 5205: Microbiology of Human Pathogens
MCB 5252: Microbiology, Immunology, and Immunotherapeutics
MCB 5305L: Microbial Genetics and Biotechnology Laboratory
MCB 5408: Anaerobic Microbiology and Biotechnology
MCB 5458: Energy Transformation in Microorganisms

MCB 5505: General Virology

MCB 6317: Molecular Biology of Gene Expression

MCB 6318: Comparative Microbial Genomics

MCB 6355: Microbial/Host Defense

MCB 6409: Microbial Cell Structure and Function

MCB 6417: Microbial Metabolism and Energetics

MCB 6457: Metabolic Regulation

MCB 6465: Microbial Metabolic Engineering

MCB 6485: Advanced Techniques in Microbiology and Cell Science

MCB 6772: Advanced Topics in Cell Biology

MCB 6905: Experimental Microbiology

MCB 6910: Supervised Research

MCB 6930: Seminar

MCB 6937: Special Topics in Microbiology

MCB 6940: Supervised Teaching

MCB 6971: Research for Master's Thesis

MCB 7922: Journal Colloquy

MCB 7979: Advanced Research

MCB 7980: Research for Doctoral Dissertation

MET 5504: Weather and Forecasting

MET 6530: Hurricanes

MET 6565: Seminar in Atmospheric Teleconnections

MET 6752: Atmospheric Data Analysis

MHF 5107: Introduction to Set Theory

MHF 5207: Foundations of Mathematics

MHF 6306: Mathematical Logic I

MHF 6307: Mathematical Logic II

MHS 5005: Introduction to Counseling

MHS 6000: Assessment and Treatment of Family Violence

MHS 6020: Counseling in Community Settings

MHS 6061: Spiritual Issues in Multicultural Counseling
MHS 6071: Diagnosis and Treatment of Mental Disorders
MHS 6200: Assessment in Counseling
MHS 6340: Career Development
MHS 6401: Counseling Theories and Applications
MHS 6421: Play Counseling and Play Process with Children
MHS 6428: Multicultural Counseling
MHS 6430: Introduction to Family Counseling
MHS 6440: Marriage Counseling
MHS 6450: Substance Abuse Counseling
MHS 6464: Introduction to Disaster Mental Health Counseling
MHS 6466: Trauma and Crisis Intervention: Theory and Practice
MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
MHS 6468: Multicultural issues in disaster mental health counseling
MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
MHS 6471: Sexuality and Mental Health
MHS 6480: Developmental Counseling Over the Life Span
MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
MHS 6500: Group Counseling: Theories and Procedures
MHS 6602: Educational Mediation
MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
MHS 6720: Professional Identity and Ethics in Counseling
MHS 6831: Supervision for a Split Internship
MHS 6905: Individual Work
MHS 6910: Supervised Research
MHS 6940: Supervised Teaching
MHS 6971: Research for Master’s Thesis
MHS 7402: Brief Therapy
MHS 7407: Advanced Counseling Theories
MHS 7431: Advanced Family Counseling
MHS 7600: Consultation Procedures
MHS 7610: Practicum in Counseling Supervision
MHS 7730: Seminar in Counseling Research
MHS 7740: Research in Counseling
MHS 7800: Practicum in Counseling
MHS 7804: Group Supervision in Agency Counseling
MHS 7805: Practicum in Agency Counseling
MHS 7806: Practicum in Marriage and Family Counseling
MHS 7807: Group Supervision in Marriage and Family Counseling
MHS 7830: Internship in Counseling and Development-600 Hours
MHS 7840: Internship in Counselor Education
MHS 7946: Internship in Agency Program Management
MHS 7979: Advanced Research
MHS 7980: Research for Doctoral Dissertation
MMC 5005: Mass Communication History
MMC 5006: Introduction to Multimedia Communication
MMC 5015: Electronic Publishing
MMC 5206: Advanced Law of Mass Communication
MMC 5277: Web Design Principles
MMC 5306: International Communication
MMC 5315: Survey of Foreign Correspondence
MMC 5427: Research Methods in Digital Communication
MMC 5636: Introduction to Social Media
MMC 5708: Foundations of Intercultural Communication
MMC 6202: Legal Problems of Mass Communication
MMC 6278: Advanced Web Topics II
MMC 6307: Seminar in International Communication
MMC 6400: Mass Communication Theory
MMC 6402: Seminar in Mass Communication Theory
MMC 6405: Seminar in Mass Communication and Public Opinion
MMC 6409: Science/Health Communication
MMC 6417: Seminar in Mass Media and Health
MMC 6421: Research Methods in Mass Communication
MMC 6423: Content-Analysis Methods
MMC 6426: Seminar in Qualitative Research
MMC 6428: Collaborative Communication Research
MMC 6429: News and Numbers
MMC 6560: Seminar in History of Mass Communication
MMC 6612: New Media and a Democratic Society
MMC 6615: Race, Class, Gender, and Media
MMC 6618: Survey of Political Communication
MMC 6619: Seminar in Political Advertising
MMC 6660: Mass Communication and Society
MMC 6665: Seminar in First Amendment Theory
MMC 6666: Seminar in Research in Mass Communication Law
MMC 6667: Seminar in Advanced Topics in Mass Communication Law
MMC 6668: Seminar in Public Policy Toward Mass Media
MMC 6706: Covering the Arts
MMC 6725: Social Media and Society
MMC 6726: Social Media and Virtual Worlds
MMC 6727: Social Media Metrics
MMC 6728: Branding Using Social and Mobile Media
MMC 6730: Social Media Management
MMC 6905: Individual Work
MMC 6910: Supervised Research
MMC 6920: Communication Proseminar
MMC 6929: Communication Colloquium
MMC 6930: Seminar in Mass Communication Teaching
MMC 6936: Special Topics in Mass Communication
MMC 6949: Professional Internship
MMC 6951: Masters Project Seminar
MMC 6971: Research for Master's Thesis
MMC 6973: Project in Lieu of Thesis
MMC 7979: Advanced Research
MMC 7980: Research for Doctoral Dissertation
MTG 5316: Introduction to Topology I
MTG 5317: Introduction to Topology II
MTG 5411: Introduction to Fractal Geometry
MTG 5412: Introduction to Dynamical Systems and Chaos
MTG 6256: Differential Geometry I
MTG 6257: Differential Geometry II
MTG 6346: Topology I
MTG 6347: Topology II
MTG 6401: Ergodic Theory and Dynamical Systems I
MTG 6402: Ergodic Theory and Dynamical Systems II
MTG 7396: Advanced Topics in Topology I
MTG 7397: Advanced Topics in Topology II
MUC 5315: Introduction to Electroacoustic Music
MUC 6444: Composition of Electronic Music
MUC 6445: Electroacoustic Music Composition: Digital I
MUC 6446: Electroacoustic Music Composition--Digital II
MUC 6900: Secondary Graduate Composition
MUC 6930: Graduate Composition
MUC 6932: Composition Seminar
MUC 7447: Advanced Seminar in Electroacoustic Music
MUC 7931: Advanced Graduate Composition
MUC 7938: Seminar in Digital Sound Processing, Control, and Composition
MUE 6080: Historical and Philosophical Foundations of Music Education
MUE 6385: Music in Higher Education
MUE 6399: Creative Thinking in Music
MUE 6444: Materials and Methods of String Class Teaching
MUE 6497: Public School Orchestral Literature
MUE 6647: Trends in Teaching and Learning Music
MUE 6696: Technology Assisted Music Learning
MUE 6747: Assessing Music Learning
MUE 6785: Research in Music Education
MUE 6790: Capstone Project for Music Education
MUE 6931: Instructional Design in Music Education
MUE 7746: Measurement and Evaluation of Music
MUE 7938: Music Education Seminar
MUG 6105: Graduate Conducting
MUG 7106: Advanced Graduate Conducting
MUH 5219: Graduate Music History Review
MUH 5505: Introduction to Ethnomusicology
MUH 5684: Introduction to Historical Musicology
MUH 6526: American Vernacular Music
MUH 6545: The Guitar in Latin American Culture
MUH 6548: Seminar in Caribbean Music
MUH 6549: Seminar in Brazilian Music
MUH 6635: Seminar in American Music
MUH 6665: History of Opera
MUH 6671: Seminar in Renaissance Music
MUH 6672: Seminar in Baroque Music
MUH 6673: Seminar in Classical Music
MUH 6674: Seminar in Nineteenth-Century Music
MUH 6675: Seminar in Twentieth-Century Music
MUH 6931: Nationalism in Music
MUH 6935: Special Topics in Music History
MUH 7411: Medieval and Renaissance Notation
MUH 7938: Musicology Seminar
MUL 6435: String Literature
MUL 6486: Piano Literature
MUL 6495: Graduate Organ Literature
MUL 6555: Survey of Wind Literature
MUL 6565: Chamber Music Literature
MUL 6645: Choral Literature
MUN 6010: Graduate Ensemble
MUN 6125: Concert Band
MUN 6135: Symphonic Band
MUN 6145: Symphonic Wind Ensemble
MUN 6215: University Orchestra
MUN 6315: University Choir
MUN 6325: Women's Chorale
MUN 6335: Men's Glee Club
MUN 6445: Percussion Ensemble
MUN 6495: Steel Drum Ensemble
MUN 6496: World Music Ensemble
MUN 6497: New Music Ensemble
MUN 6715: Jazz Band
MUR 6206: Survey of Hymnody

MUR 6705: Sacred Music Literature

MUS 5911: Directed Study

MUS 6685: Psychology of Music

MUS 6716: Methods of Musical Research and Bibliography

MUS 6905: Projects and Problems

MUS 6910: Supervised Research

MUS 6940: Supervised Teaching

MUS 6971: Research for Master's Thesis

MUS 6973: Individual Project

MUS 7656: Teaching Music and the Creative Process

MUS 7905: Projects and Problems

MUS 7979: Advanced Research

MUS 7980: Research for Doctoral Dissertation

MUT 6051: Graduate Music Theory Review

MUT 6445: Advanced Counterpoint

MUT 6531: Figured Bass and Continuo Performance

MUT 6565: Late Nineteenth- and Twentieth-Century Styles

MUT 6576: Contemporary Styles

MUT 6617: Approaches to Theoretical Analysis in Music Education

MUT 6624: Seminar in Set Theory

MUT 6627: Seminar in Reductive Analysis

MUT 6629: Analytical Techniques

MUT 6751: Pedagogy of Music Theory

MUT 6936: Music Theory Seminar

MUT 7316: Advanced Orchestration

MUT 7585: Seminar in Musical Style

MUT 7760: History of Music Theory

MVK 5156: Improvisational Keyboard Skills and Related Technology

MVK 6605: Organ Pedagogy

MVK 6651: Piano Pedagogy

MVK 6661: Advanced Piano Pedagogy
MVO 6250: Secondary Music Performance
MVO 6460: Music Performance
MVO 7460: Music Performance
MVS 6651: String Pedagogy
MVW 6651: Vocal Pedagogy
NEM 5004C: Graduate Survey of Nematology
NEM 5707C: Plant Nematology
NEM 6101C: Nematode Morphology and Anatomy
NEM 6102: Nematode Systematics and Molecular Phylogeny
NEM 6102L: Nematode Systematics and Molecular Phylogeny Laboratory
NEM 6103: Insect Parasitic Nematodes
NEM 6104L: Insect Parasitic Nematodes Laboratory
NEM 6201: Nematode Ecology
NEM 6708: Field Plant Nematology
NEM 6905: Problems in Nematology
NEM 6931: Nematology Seminar
NEM 6932: Special Topics in Nematology
NEM 6934: Selected Studies in Nematology
NEM 6940: Supervised Teaching
NEM 6942: Nematode Diagnostics
NEM 6943: Nematode Internship
NEM 6944: Nematode Extension Internship
NEM 6971: Research for Master's Thesis
NEM 7979: Advanced Research
NEM 7980: Research for Doctoral Dissertation
NGR 5934: Cultural Influences on Health Care
NGR 6002C: Advanced Health Assessment
NGR 6006: Principles of Clinical Outcomes Management
NGR 6052C: Adult Nursing: Diagnostics and Procedures
NGR 6054C: Advanced Neonatal Health Assessment and Diagnostic Reasoning
NGR 6101: Theory and Research for Nursing
NGR 6140: Physiology and Pathophysiology for Advanced Nursing Practice
NGR 6172: Pharmacotherapeutics for Advanced Practice Nursing
NGR 6230C: Acute Care Nurse Practitioner: Diagnostics and Procedures for the Critically Ill
NGR 6240: Primary Care for Adults

NGR 6241: Adult Nursing: Common Health Problems

NGR 6241L: Adult Nurse Practitioner: Common Health Problems Laboratory

NGR 6243: Acute Care Nurse Practitioner: Critically Ill Adult

NGR 6243L: Acute Care Nurse Practitioner: Critically Ill Adult Laboratory

NGR 6244: Adult Nursing: Chronic Health Problems

NGR 6244L: Adult Nurse Practitioner: Chronic Health Problems Laboratory

NGR 6247: Complex High Prevalence Illnesses Of Adults

NGR 6247L: Complex High Prevalence Illnesses Of Adults

NGR 6248: Adult Acute Care Nurse Practitioner 3

NGR 6248L: Adult Acute Care Nurse Practitioner 3

NGR 6255: Advanced Nursing Care of Older Adult

NGR 6301: Advanced Child Health Nursing I

NGR 6301L: Advanced Child Health Nursing I

NGR 6302: Advanced Child Health Nursing II

NGR 6302L: Advanced Child Health Nursing II

NGR 6307: Advanced Child Health Nursing III

NGR 6307L: Advanced Child Health Nursing III

NGR 6320C: Neonatal Care I

NGR 6321C: Neonatal Care II

NGR 6323C: Neonatal Care III

NGR 6350: Family Nurse Practitioner: Women, Adolescents, And Children

NGR 6350L: Family Nurse Practitioner: Women, Adolescents, And Children

NGR 6360C: Nurse-Midwifery Care I

NGR 6361C: Nurse-Midwifery Care II

NGR 6364: Seminar: The Nurse Midwife

NGR 6371: Pharmacotherapeutics for Advanced Neonatal Nursing

NGR 6372C: Advanced Pediatric Procedures and Diagnostics

NGR 6500C: Individual and Family Therapy for Psychiatric-Mental Health Nursing

NGR 6501C: Group Therapy and Community Interventions for Psychiatric-Mental Health Nursing

NGR 6538: Psychopharmacology for Psychiatric Nursing

NGR 6612: Family Nurse Practitioner: Complex Family Health Care (Focus On Gerontology)

NGR 6612L: Family Nurse Practitioner: Complex Family Health Care (Focus On Gerontology)

NGR 6636: Wellness Promotion and Disease Prevention

NGR 6726: Management of the Care Environment II

NGR 6727: Management of the Care Environment I
NGR 6740: Role Transition: Issues in Advanced Practice Nursing
NGR 6770: Leadership/Role of Clinical Nurse Leader
NGR 6771: Clinical Nurse Leader Role Seminar
NGR 6773: Clinical Nurse Leader Residency/Internship
NGR 6815: Foundations of Qualitative Research in Nursing
NGR 6840: Applied Statistical Analysis I
NGR 6845: Applied Statistical Analysis II
NGR 6850: Research Methods and Utilization for Nursing
NGR 6892: Health Care Policy and Organizational Delivery
NGR 6905: Individual Study
NGR 6930: Special Topics in Nursing
NGR 6941: Practicum in Nursing
NGR 6944: Individual Clinical Practice
NGR 6970: Research for Master's Project
NGR 6971: Research for Master’s Thesis
NGR 7003: Advanced Diagnostic Reasoning
NGR 7115: Philosophy of Nursing Science
NGR 7124: Theory Development in Nursing
NGR 7176: Advanced Topics in Pharmacotherapeutics in Nursing
NGR 7700: Leadership and Role Development in Advanced Nursing Practice
NGR 7709: Nurse Scientist and Scholar I
NGR 7814: Field Methods for Health Related Research
NGR 7816: Quantitative Research Design and Measurement in Nursing
NGR 7827: Outcome Research and Evaluation
NGR 7831: Quality Indicators in Nursing Systems
NGR 7835: Nurse Scientist and Scholar II
NGR 7871: Nursing Informatics and Data
NGR 7882: Ethical Theories and Rational Decision Making in Health
NGR 7891: Health Policy and Finance in Advanced Nursing Practice
NGR 7940L: Residency in Advanced Nursing Practice
NGR 7970L: Advanced Nursing Project
NGR 7979: Advanced Research
NGR 7980: Research for Doctoral Dissertation
OCP 5293: Coastal Processes
OCP 6050: Physical Oceanography
OCP 6165: Ocean Waves I: Linear Theory
OCP 6165L: Ocean Waves Laboratory
OCP 6167: Ocean Waves II: Nonlinear Theory
OCP 6168: Data Analysis Techniques for Coastal and Ocean Engineers
OCP 6169: Random Sea Analysis
OCP 6295: Estuarine and Shelf Hydrodynamics I
OCP 6297: Coastal and Estuarine Sediment Transport
OCP 6298: Coastal Sediment Transport Processes
ORH 5026C: Advanced Annual and Perennial Gardening
ORH 5086: Advanced Golf and Sports Turf Management
ORH 5282: Orchid Biology and Culture
ORH 5322C: Palm Biology and Culture
ORH 5817C: Advanced Florida Native Landscaping
ORH 7941: Doctor of Plant Medicine: Internship in Environmental Horticulture
OTH 5002: Foundations of Occupational Therapy
OTH 5115C: Therapeutic Skills II: Areas of Occupation
OTH 5324: Psychosocial Intervention
OTH 5435: Therapeutic Skills I
OTH 5722: Professional Development in Occupational Therapy
OTH 5726C: Service Delivery and OT Management
OTH 5770C: Research for Occupational Therapy
OTH 5812: Practicum I
OTH 5816: Practicum II
OTH 5848: Internship I
OTH 5849: Internship II
OTH 6008: Neuroscience of Human Occupation
OTH 6106: Assistive Technology and Occupational Performance
OTH 6539: Occupational Therapy Theory
OTH 6635: Principles of Occupational Therapy Screening and Evaluation I
OTH 6636: Principles of Occupational Therapy Screening and Evaluation II
OTH 6641: Occupational Therapy Interventions I
OTH 6642: Occupational Therapy Interventions II
OTH 6707: OT Manager
OTH 6708: Issues in Occupational Therapy Practice I
OTH 6709: Issues in Occupational Therapy Practice II
OTH 6720: Trends and Issues in Health Care
OTH 6763: Evidence Based Practice
OTH 6861: Specialty Internship
OTH 6905: Individual Work
OTH 6907: Professional Development Project
OTH 6933: Special Topics in Occupational Therapy
OTH 6971: Research for Master's Thesis
PAD 5935: Advanced Topics in Public Administration
PAD 6108: Public Administration Theory
PAD 6227: Public Budgeting and Finance
PAD 6434: Leadership and Ethics in Public Agencies
PAD 6946: Internship in Government
PCB 5046C: Advanced Ecology
PCB 5065: Advanced Genetics
PCB 5136L: Techniques in Microbial and Cell Biology
PCB 5235: Immunology
PCB 5235L: Experiments in Immunology
PCB 5307C: Limnology
PCB 5338: Principles of Ecosystem Ecology
PCB 5356: Tropical Ecology
PCB 5415C: Behavioral Ecology
PCB 5530: Plant Molecular Biology and Genomics
PCB 5615: Molecular Evolution and Systematics
PCB 6049: Seminar in Ecology
PCB 6377C: Physiological Ecology of Vertebrates
PCB 6447C: Community Ecology
PCB 6528: Plant Cell and Developmental Biology
PCB 6555: Introduction to Quantitative Genetics
PCB 6675C: Evolutionary Biogeography
PCB 6695: Seminar in Evolutionary Biology
PCB 6816: Thermal Physiology
PCB 6910: Supervised Research
PCB 6937: Special Topics in Plant Molecular and Cellular Biology
PCB 6971: Research for Master's Thesis
PCB 7922: Journal Colloquy in Plant Molecular and Cellular Biology
PCB 7979: Advanced Research
PCB 7980: Research for Doctoral Dissertation
PCO 6057: Psychology of Counseling I
PCO 6058: Psychology of Counseling II
PCO 6059: Psychology of Counseling III
PCO 6278: Diversity and Multiculturalism in Counseling Psychology
PCO 6316C: Psychological Assessment I
PCO 6317C: Psychological Assessment II
PCO 6931: History and Contemporary Issues in Counseling Psychology
PCO 6939: Seminar: Current Topics in Counseling Psychology
PCO 7217: Professional Ethics and Skills in Counseling Psychology
PCO 7247: Group Counseling/Psychology
PCO 7537: Vocational Psychology
PCO 7944: Practicum in Counseling Psychology
PCO 7945: Advanced Practicum in Counseling Psychology
PCO 7949: Internship in Counseling Psychology
PEQ 5127: Advanced Instructors of Adapted Aquatics
PET 5936: Special Topics/Seminars
PET 6910: Supervised Research
PET 6940: Supervised Teaching
PET 6947: Graduate Internship in Exercise and Sport Sciences
PET 6971: Research for Master’s Thesis
PHA 5171: Pharmaceutical Biotechnology
PHA 5270: Health Care and Patient Safety
PHA 5271: Health Care Risk Management
PHA 5272: Risk Management, Liability and Compliance
PHA 5475: Synthesis of Prodrugs
PHA 5531: Neurotoxicology
PHA 6115: Equilibria, Complexations, and Interactions of Drugs

PHA 6116: In Vivo and In Vitro Stability of Drugs

PHA 6118: Molecular Diversity

PHA 6125: Pharmacokinetics and Biopharmaceutics

PHA 6170C: Pharmaceutical Product Formulation

PHA 6183: Pharmaceutical Gene Delivery

PHA 6185: Pharmaceutical Drug Development

PHA 6206: Introduction to Pharmaceutical Microeconomics

PHA 6227: Institutional Pharmacy Leadership I

PHA 6228: Institutional Pharmacy Leadership II

PHA 6235: Advanced Pharmaceutical Law

PHA 6236: Health Sciences Liability Law

PHA 6250: Patient Responsibility in Health Care

PHA 6264: Pharmacoeconomics and Health Technology Assessment

PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I

PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II

PHA 6268: Pharmacoepidemiology and Patient Safety

PHA 6269: Pharmaceutical Products and Public Policy

PHA 6273: Structure, Process, and Outcomes of Regulation

PHA 6274: Federal Regulations of Drugs and Pharmacy

PHA 6275: Federal Regulations of Controlled Substances

PHA 6276: Regulating Pharmaceutical Access and Costs

PHA 6277: Ethics in Drug Development Production and Use

PHA 6278: State Regulation of Drugs and Pharmacy

PHA 6279: Pharmaceutical Outcomes and Policy Seminar

PHA 6280: Medicare and Medicaid

PHA 6281: Practices and Procedures of Administrative Agencies

PHA 6282: Pharmaceutical Policy Process

PHA 6283: Commercial Applications of Pharmacoeconomics

PHA 6286: Pharmaceutical Microeconomics

PHA 6287: Pharmaceutical Health Economics

PHA 6288: Critical Review of Research Methods

PHA 6289: Regulating Clinical Research
PHA 6290: Pharmaceutical Fraud and Abuse
PHA 6291: Pharmaceutical Health Care Systems
PHA 6354: Natural Medicinal Products
PHA 6356: Structure Determination of Complex Natural Products
PHA 6357: Herbal & Dietary Supplements
PHA 6416: Pharmaceutical Analysis I
PHA 6417: Pharmaceutical Analysis II
PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
PHA 6427: Pharmacogenetics of Drug Metabolism
PHA 6432: Fundamentals of Pharmaceutical Chemistry
PHA 6440: Seminar in Drug Discovery
PHA 6444: Pharmaceutical Chemistry I
PHA 6447: Drug Design
PHA 6448: High Throughput Drug Discovery
PHA 6449: Pharmacogenomics
PHA 6471: Synthetic Medicinal Chemistry
PHA 6508: Systems Physiology and Pathophysiology I
PHA 6509: Systems Physiology and Pathophysiology II
PHA 6512L: Experiential Research Training in Pharmacodynamics
PHA 6521C: Research Techniques in Pharmacodynamics
PHA 6522L: ICBR Molecular Techniques Laboratory
PHA 6534: Toxicology of Chemical Weapons
PHA 6535: Principles of Nucleotide Activity
PHA 6540: Neurochemical Foundation of Pharmacodynamics
PHA 6543: Pharmaceutical Chemistry II
PHA 6556: Introduction to Clinical Toxicology
PHA 6557: Clinical Toxicology I
PHA 6630: Medication Therapy Management: A Hematologic Focus
PHA 6631: Foundations of Medication Therapy Management I
PHA 6632: Foundations of Medication Therapy Management II
PHA 6633: Medication Therapy Management: A Cardiovascular Focus
PHA 6634: Medication Therapy Management: An Endocrine Focus
PHA 6635: Medication Therapy Management: A Renal Focus
PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
PHA 6637: Medication Therapy Management: A Psychiatric Focus
PHA 6638: Medication Therapy Management: A Neurologic Focus
PHA 6639: Medication Therapy Management: A Respiratory Focus
PHA 6717: Measurement in Pharmacy Administration Research
PHA 6793: Evidentiary Basis of Pharmaceutical Use
PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
PHA 6798: The Use and Abuse of Statistics in Drug Regulation
PHA 6799: Patient Safety Program Evaluation
PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
PHA 6806: Pharmacoeconomic Modeling
PHA 6840: Medicinal Chemistry of Drugs of Abuse
PHA 6850: Principles of Forensic Science
PHA 6851: Forensic Analysis of DNA
PHA 6852: Mammalian Molecular Biology
PHA 6853: Biological Evidence and Serology
PHA 6854: Forensic Immunology
PHA 6855: Forensic Genetics
PHA 6856: Blood Spatter and Distribution
PHA 6860: Prevention of Pharmaceutical Crimes
PHA 6891: Introduction to Pharmacoepidemiology
PHA 6892: Practices and Procedures of the IRB
PHA 6893: Research Ethics
PHA 6894: Introduction to Graduate Studies
PHA 6896: Preclinical Drug Evaluation
PHA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
PHA 6905C: Research Procedures in Medicinal Chemistry
PHA 6910: Supervised Research
PHA 6934: Seminar in Medicinal Chemistry
PHA 6935: Selected Topics in Pharmacy
PHA 6936: Advanced Topics in Pharmaceutical Sciences
PHA 6937: Topics in Pharmaceutical Administration
PHA 6938: Research Seminar
PHA 6940: Supervised Teaching
PHA 6971: Research for Master’s Thesis
PHA 7939: Journal Colloquy in Pharmacodynamics
PHA 7979: Advanced Research
PHA 7980: Research for Doctoral Dissertation

PHC 6000: Epidemiology Methods I
PHC 6001: Principles of Epidemiology in Public Health
PHC 6002: Epidemiology of Infectious Diseases
PHC 6003: Epidemiology of Chronic Diseases and Disability
PHC 6006: An Introduction to One Health Problem Solving
PHC 6008: Cardiovascular Epidemiology
PHC 6009: Biology and Epidemiology of HIV/AIDS
PHC 6010: Data Management and Statistical Computing for Epidemiology
PHC 6011: Epidemiology Methods II
PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
PHC 6016: Social Epidemiology in Public Health
PHC 6020: Clinical Trial Methods
PHC 6034: Epidemic Investigation
PHC 6036: Environmental Infectious Diseases: A Molecular Approach
PHC 6050: Statistical Methods for Health Sciences Research I
PHC 6050C: Biostatistical Methods I
PHC 6051: Biostatistical Methods II
PHC 6052: Introduction to Biostatistical Methods
PHC 6053: Regression Methods for the Health and Life Sciences
PHC 6055: Biostatistical Computing Using R
PHC 6063: Biostatistical Consulting
PHC 6070: Epidemiology of Aging
PHC 6080: SAS for Public Health - Data
PHC 6081: SAS for Public Health - Analysis
PHC 6102: Introduction to Public Health Administrative Systems
PHC 6103: Systems Thinking for Public Health
PHC 6104: Evidence-Based Management of Public Health Programs
PHC 6105: Health Promotion Policy and Practice
PHC 6107: Introduction to Veterinary Public Health
PHC 6146: Public Health Program Planning and Evaluation
PHC 6153: Public Policy and Aging
PHC 6183: Disaster Preparedness and Emergency Response
PHC 6194: Spatial Epidemiology
PHC 6195: Health information for Diverse Populations: Theory & Methods
PHC 6220: Overview of Long-Term Care
PHC 6251: Assessment and Surveillance in Public Health
PHC 6301: Aquatic Systems and Environmental Health
PHC 6309: Environmental Justice Issues in Public Health
PHC 6312: Water Quality and Human Health
PHC 6313: Environmental Health Concepts in Public Health
PHC 6316: Health, Risk, and Crisis Communication
PHC 6317: Risk Communication for Public Health Practice
PHC 6346: Occupational and Environmental Health Among Agriculture Workers
PHC 6370: Public Health Biology
PHC 6403: Adolescence, Risk Taking and Health
PHC 6404: Gender, Sexuality, and Health
PHC 6405: Theoretical Foundations of Public Health
PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
PHC 6413: Critical Incidents and Violence in Communities
PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
PHC 6419: Biomedical and Psychological Aspects of Very Late Life
PHC 6421: Public Health Law and Ethics
PHC 6441: Health Disparities in the United States
PHC 6445: Global Public Health and Development II
PHC 6447: Ecology of HIV/AIDS in the Rural South
PHC 6512: Environmental Management of Vector-Borne Diseases
PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
PHC 6517: Public Health Concepts in Infectious Diseases
PHC 6519: Zoonotic Diseases in Humans and Animals
PHC 6520: Foodborne Diseases
PHC 6530: Public Health Issues of Mothers and Children
PHC 6543: Community Practice of Behavioral Health Risk Prevention
PHC 6544: Health Behavior Interventions in Practice
PHC 6561: Public Health Laboratory Techniques
PHC 6585: Health Promotion and Disease Prevention
PHC 6586: Interventions for Public Health
PHC 6601: Seminar in Contemporary Public Health Issues
PHC 6607: Critical Issues in Public Health
PHC 6700: Social and Behavioral Research Methods
PHC 6702: Exposure Measurement and Assessment
PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
PHC 6711: Measurement in Epidemiology and Outcomes Research
PHC 6716: Survey Research Methods
PHC 6722: Environmental and Global Health Research Methods Rotation
PHC 6762: International Public Health
PHC 6764: Global Public Health and Development I
PHC 6900: Environmental and Global Health Journal Club
PHC 6905: Independent Study
PHC 6912: Special Project: Independent Research
PHC 6913: Biostatistics Project
PHC 6917: Supervised Research Project
PHC 6930: Integrated Public Health Seminar
PHC 6931: Seminars in Public Health
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PHC 6938: Oral and Craniofacial Epidemiology
PHC 6945: Public Health Practicum
PHC 6946: Public Health Internship
PHC 6947: Occupational Health Field Research Experience
PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
PHC 7007: Cancer Epidemiology
PHC 7013: Bias in Observational Research
PHC 7038: Psychiatric Epidemiology
PHC 7056: Analysis of Longitudinal Data
PHC 7065: Critical Skills in Epidemiological Data Management
PHC 7066: Large Sample Theory
PHC 7427: Ethics in Population Science
PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
PHC 7727: Grant Writing for Population Health Research
PHC 7752: Seminar in Instrument Development for Public Health
PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
PHC 7902: Epidemiology Supervised Research Writing Circle
PHC 7907: Social and Behavioral Science Journal Club
PHC 7910: International Field Epidemiology
PHC 7916: National Field Epidemiology
PHC 7925: Biostatistics Journal Club
PHC 7934: Seminar I: Epidemiology Past, Present, and Future
PHC 7935: Critical Thinking in Environmental and Global Health
PHC 7979: Advanced Research
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PHH 5405: Modern Philosophy I
PHH 5406: Modern Philosophy II
PHH 5605: Studies in Continental Philosophy
PHH 6105: Seminar in Ancient Philosophy
PHH 6425: Seminar in Modern Philosophy
PHI 5135: Graduate Logic
PHI 5225: Philosophy of Language
PHI 5325: Philosophy of Mind
PHI 5365: Epistemology
PHI 5405: Philosophy of Science
PHI 5425: Philosophy of Social Science
PHI 5505: Metaphysics
PHI 5665: Ethical Theory
PHI 5905: Individual Work
PHI 5934: Topics in Philosophy
PHI 5935: Proseminar
PHI 6105: Seminar in Logic
PHI 6226: Seminar in Philosophy of Language
PHI 6306: Seminar in Epistemology
PHI 6326: Seminar in Philosophy of Mind
PHI 6406: Seminar in Philosophy of Science
PHI 6506: Seminar in Metaphysics
PHI 6667: Seminar in Ethics
PHI 6787: Seminar in Continental Philosophy
PHI 6905: Individual Work
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PHI 6934: Special Topics
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PHI 6971: Research for Master's Thesis
PHI 7979: Advanced Research
PHI 7980: Research for Doctoral Dissertation
PHP 5005: Ancient Philosophy I
PHP 5015: Ancient Philosophy II
PHP 5785: Foundations of Analytic Philosophy
PHP 6415: Seminar in Kant
PHP 6795: Seminar in Analytic Philosophy
PHP 6930: Seminar in a School or Thinker
PHT 5156: Exercise Physiology
PHT 6125C: Concepts in Clinical Biomechanics
PHT 6127C: Control of Gait and Posture
PHT 6167C: Applied Neurophysiology for Physical Therapy
PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
PHT 6615L: Research Instrumentation in Physical Therapy
PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
PHY 5277: Physics of Accident Reconstruction and Biomechanics
PHY 5905: Individual Work
PHY 6246: Classical Mechanics
PHY 6346: Electromagnetic Theory I
PHY 6347: Electromagnetic Theory II
PHY 6536: Statistical Mechanics I
PHY 6555C: Cryogenics
PHY 6645: Quantum Mechanics I
PHY 6646: Quantum Mechanics II
PHY 6648: Quantum Field Theory I
PHY 6905: Individual Work
PHY 6910: Supervised Research
PHY 6920: Departmental Colloquium
PHY 6932: Seminar in Molecular and Computational Physics
PHY 6943: Internship in College Teaching
PHY 6971: Research for Master's Thesis
PHY 7097: Advanced Topics in Theoretical Physics
PHY 7669: Quantum Field Theory II
PHY 7939: Special Topics
PHY 7979: Advanced Research
PHY 7980: Research for Doctoral Dissertation
PHZ 5155C: Physical Modeling and Simulation
PHZ 5245: Introduction to Magnetic Resonance
PHZ 5354: Introduction to Particle Physics
PHZ 5405: Introduction to Solid-State Physics
PHZ 6156: Computer Methods in Physics
PHZ 6166: Qualitative Methods of Theoretical Physics
PHZ 6355: Elementary Particle Physics I
PHZ 6358: Standard Model of Elementary Particles I
PHZ 6391: Seminar in Astrophysics
PHZ 6392: Seminar in Particle Physics
PHZ 6426: Solid State I
PHZ 6493: Seminar in Condensed Matter Physics
PHZ 6607: Special and General Relativity
PHZ 7357: Elementary Particle Physics II
PHZ 7359: Standard Model of Elementary Particles II
PHZ 7427: Solid State II
PHZ 7428: Modern Condensed Matter Physics
PHZ 7429: Phases of Condensed Matter
PHZ 7608: Special and General Relativity II
PKG 5003: Advanced Distribution and Transport Packaging
PKG 5006: Advanced Packaging Principles
PKG 5105: Advanced Consumer Products Packaging
PKG 5206C: Advanced Package Decoration
PKG 5256C: Advanced Analytical Packaging Methods
PKG 6100: Advanced Computer Tools for Packaging
PKG 6905: Individual Work in Packaging
PKG 6932: Special Topics in Packaging Sciences
PLP 5005C: General Plant Pathology
PLP 5102: Theory and Practice of Plant Disease Control
PLP 5115C: Citrus Pathology
PLP 5155: Microbiological Control of Plant Diseases and Weeds
PLP 6223C: Viral Pathogens of Plants
PLP 6241C: Bacterial Plant Pathogens
PLP 6262C: Fungal Plant Pathogens
PLP 6291: Plant Disease Diagnosis
PLP 6303: Host-Parasite Interactions II
PLP 6404: Epidemiology of Plant Disease
PLP 6502: Host-Parasite Interactions I
PLP 6621C: Pop Genetics Microbes
PLP 6656C: Fungal Biology
PLP 6905: Problems in Plant Pathology
PLP 6910: Supervised Research
PLP 6921: Colloquium in Principles of Plant Pathology
PLP 6932: Seminar in Plant Pathology
PLP 6940: Supervised Teaching
PLP 6942: Professional Internship in Plant Disease Clinic
PLP 6971: Research for Master's Thesis
PLP 7946: Plant Pathology Internship
PLP 7979: Advanced Research
PLP 7980: Research for Doctoral Dissertation
PLS 5222C: Propagation of Horticultural Crops
PLS 5241C: Advanced Plant Micropropagation
PLS 5405: Advanced Composting Technology

PLS 5632C: Integrated Weed Management

PLS 5652: Advanced Weed Science

PLS 6623: Weed Ecology

PLS 6626: Invasive Plant Ecology

PLS 6655: Plant/Herbicide Interaction

PMA 5205: Citrus Pest Management

PMA 6228: Field Techniques in Integrated Pest Management

POS 5935: Advanced Topics in Political Science

POS 6045: Seminar in American Politics

POS 6048: American Political Development

POS 6127: State Government and Politics

POS 6146: Urban Politics

POS 6157: Community Analysis

POS 6196: Patrons, Clients, Corruption, and Accountability

POS 6207: Political Behavior

POS 6208: Empirical Political Research

POS 6272: Political Participation

POS 6274: Political Campaigning

POS 6278: Advanced Campaign Strategy

POS 6279: The Politics of Direct Democracy

POS 6292: Religion and Politics

POS 6427: Legislative Process

POS 6453: Political Parties and Interest Groups

POS 6458: Politics of Campaign Finance

POS 6476: Bureaucratic Politics in the U.S.

POS 6707: Qualitative Research Methods for Political Science

POS 6712: Empirical Theories of Politics

POS 6716: Scope and Epistemologies of Political Science

POS 6736: The Conduct of Inquiry

POS 6737: Political Data Analysis

POS 6747: Topics in Political Research Methodology
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<td>Survey Research</td>
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<tr>
<td>POS 6909</td>
<td>Individual Work</td>
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<td>POS 6910</td>
<td>Supervised Research</td>
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<td>POT 5935</td>
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PUP 5935: Advanced Topics in Public Policy
PUP 6006: Policy Evaluation
PUP 6007: Policy Process
PUP 6009: Public Policy Analysis
PUP 6315: Race, Gender, and Politics
PUR 5507: Persuasion Theory and Research
PUR 6005: Theories of Public Relations
PUR 6006: Public Relations Foundations
PUR 6403: Crisis and Risk Management
PUR 6416: Public Relations and Fund Raising
PUR 6446: Public Relations and Philanthropy
PUR 6506: Public Relations Research
PUR 6607: Public Relations Management
PUR 6608: International Public Relations
PUR 6934: Problems in Public Relations
QMB 5303: Managerial Statistics
QMB 5304: Introduction to Managerial Statistics
QMB 5305: Advanced Managerial Statistics
QMB 6358: Statistical Analysis for Managerial Decisions I
QMB 6359: Statistical Analysis for Managerial Decisions II
QMB 6607: Decision Processes Under Uncertainty I
QMB 6616: Business Process Analysis
QMB 6693: Quality Management and Control Systems
QMB 6697: Optimization in Simulation Modeling I
QMB 6755: Managerial Quantitative Analysis I
QMB 6756: Managerial Quantitative Analysis II
QMB 6905: Individual Work in Information Systems and Operations Management
QMB 6910: Supervised Research
QMB 6930: Special Topics in Information Systems and Operations Management
QMB 6940: Supervised Teaching
QMB 6941: Internship
QMB 6957: International Studies in Quantitative Methods
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QMB 7931: Special Topics in Information Systems and Operations Management
QMB 7933: Seminar in Information Systems and Operations Management
QMB 7979: Advanced Research
QMB 7980: Research for Doctoral Dissertation
RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
RCS 6066: Rehabilitation Issues in Human Growth and Development
RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
RCS 6412: Rehabilitation Counseling Theory and Practice
RCS 6470: Human Sexuality and Disability
RCS 6601: Forensic Rehabilitation Consultation I
RCS 6602: Forensic Rehabilitation Consultation II
RCS 6625: Community Counseling and Case Management
RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
RCS 6740: Rehabilitation Research
RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
RCS 6801: Rehabilitation Counseling Practicum
RCS 6825: Internship in Rehabilitation Counseling
RCS 6905: Individual Work
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RCS 6931: Special Topics
RCS 6940: Supervised Teaching
RCS 6945: Advanced Rehabilitation Counseling Practicum
RCS 6971: Research for Master's Degree
RED 5046: Foundations of Reading in Grades PreK-12

RED 5316: Reading in the Primary Grades

RED 5337: Reading in the Secondary School

RED 5355: Reading Instruction in the Intermediate Grades

RED 5399: Practices in Beginning Reading Instruction

RED 6346: Seminar in Reading

RED 6520: Classroom Literacy Assessment and Instruction

RED 6546C: Diagnosis of Reading Difficulties

RED 6548C: Remediation of Reading Difficulties

RED 6647: Trends in Reading

RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties

RED 7019: Foundations of Literacy

RED 7817: Understanding Reading Difficulties

REE 6045: Introduction to Real Estate

REE 6058: Construction Considerations in Real Estate

REE 6105: Real Estate Appraisal

REE 6206: Primary Mortgage Markets and Institutions

REE 6208: Secondary Mortgage Markets and Securitization

REE 6315: Real Estate Market and Transaction Analysis

REE 6395: Investment Property Analysis

REE 6397: Real Estate Securities and Portfolios

REE 6705: Geographic Information Systems and Location Analysis

REE 6737: Real Estate Development

REE 6905: Individual Work in Real Estate

REE 6910: Supervised Research

REE 6930: Special Topics in Real Estate

REE 6935: Real Estate Case Studies

REE 6940: Supervised Teaching

REE 6948: Capstone Seminar and Applied Project

REE 6957: International Studies in Real Estate

REE 7979: Advanced Research

REE 7980: Research for Doctoral Dissertation

REL 6347: American Buddhism
REL 6368: Islam in Asia
REL 6397: Hindu Sacred Texts and Their Ritual Context
RLG 5143: Religion and Social Change
RLG 5195: Topics in Religion and Society
RLG 5297: Topics in Biblical Studies
RLG 5338: Topics in Asian Religions
RLG 5365: Studies in Islam
RLG 5396: Religion and Animals
RLG 5495: Topics in Religious Thought
RLG 5549: Studies in Christianity
RLG 5696: Topics in Jewish Thought
RLG 5906: Individual Work
RLG 5937: Topics in Religious Studies
RLG 6035: Method and Theory I
RLG 6036: Method and Theory II
RLG 6095: Utopias and Dystopias
RLG 6107: Core Seminar in Religion and Nature
RLG 6125: Religion and Politics in the Americas
RLG 6126: Religion in the Americas
RLG 6129: Hindu Traditions in America
RLG 6137: Religion in North America
RLG 6138: New Religious Movements
RLG 6167: Radical Environmentalism
RLG 6181: Ethics and the Natural Sciences
RLG 6183: Religion and Environmental Ethics
RLG 6187: Nature in Asian Religions
RLG 6196: Globalizing the Sacred
RLG 6310: Religion and Nature in South Asia
RLG 6319: Interpreting Asian Religions
RLG 6339: Women in the Hindu Tradition
RLG 6346: Buddhist Traditions
RLG 6385: Native Religions in the Americas
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RLG 6910: Supervised Research

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RLG 6957: Overseas Studies in Religion

RLG 6971: Research for Master's Thesis

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RSD 6110: Rehabilitation Science Theory and Application I

RSD 6112: Rehabilitation Science Theory and Application II

RSD 6114: Rehabilitation in the United Kingdom

RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science

RSD 6700: Rasch Measurement: Introduction and Application

RSD 6705: Research Methods in Rehabilitation

RSD 6706: Scientific Writing for the Rehabilitation Professional

RSD 6900: College Classroom Teaching Process and Practice

RSD 6905: Individual Work

RSD 6910: Supervised Research

RSD 6930: Special Topics in Rehabilitation Science

RSD 6940: Supervised Teaching

RSD 7979: Advanced Research

RSD 7980: Research for Doctoral Dissertation

RTV 5702: Telecommunication Regulation

RTV 6105: Writing for Electronic Media

RTV 6309: Advanced TV Reporting

RTV 6508: Audience Analysis

RTV 6801: Telecommunication Management

RTV 6807: Telecommunication Outlet Systems and Practices

RTV 6973: Project in Lieu of Thesis

SCE 5316: Inquiry-Based Science Teaching

SCE 5355: Foundations of Science Teaching

SCE 5695: Diversity and Equity in Science Teaching

SCE 5765: Data-Driven Science Instruction

SCE 6045: Environmental Education Methods and Materials

SCE 6117: Science Education in the Elementary School

SCE 6246: Science Instruction in Informal Settings
SCE 6338: Secondary Science Methods and Assessment
SCE 6647: Global Studies Methods in Science Education
SCE 6947: Practicum in Secondary Science Teaching and Assessment
SDS 6401: Counseling Skills for Non-Counselors
SDS 6411: Counseling with Children
SDS 6413: Counseling Adolescents
SDS 6436: Family-School Intervention
SDS 6520: Family, Student Development and Role of Teacher as Adviser
SDS 6620: Organization and Administration of School Counseling Programs
SDS 6831: Supervision for a Split Internship
SDS 6905: Individual Work
SDS 6936: Seminar in Counselor Education
SDS 6938: Special Topics
SDS 7800: Practicum in School Counseling
SDS 7820: Group Supervision in School Counseling
SDS 7830: Internship in Counseling and Development-600 Hours
SOP 6099: Survey of Social Psychology
SOP 6219C: Advanced Research Techniques in Social-Personality Psychology
SOP 6409: Seminar: Current Topics in Social-Personality Psychology
SOP 6419: Seminar: Attitudes and Social Cognition
SOP 6509: Seminar: Interpersonal Relations and Group Processes
SOP 6929: Colloquium on Research in Social-Personality Psychology
SPA 5051: Clinical Observation in Audiology
SPA 5102: Auditory Anatomy and Physiology
SPA 5128: Speech Perception
SPA 5204: Phonological Disorders
SPA 5211: Voice Disorders
SPA 5225: Principles of Speech Pathology: Stuttering
SPA 5245: Communicative Disorders Related to Cleft Palate
SPA 5254: Neurocognitive Language Disorders
SPA 5304: Principles of Audiological Evaluation
SPA 5315: Peripheral and Central Auditory Disorders
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SPA 6533: Clinical Practice in Aural Rehabilitation
SPA 6559: Alternative and Augmentative Communication
SPA 6564: Communication and Aging
SPA 6565: Seminar in Dysphagia
SPA 6568: Clinical Evaluation in Medical Speech-Language Pathology
SPA 6570: Seminar: Professional Aspects of Speech-Language Pathology
SPA 6581: Special Clinical
SPA 6805: Introduction to Graduate Research
SPA 6830: Communication Disorders in Medically Complex Pediatric Populations
SPA 6905: Individual Study
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SPA 6930: Proseminar in Speech-Language Pathology and Audiology
SPA 6935: Applied Reading Disabilities: Diagnosis and Treatment
SPA 6936: Special Topics
SPA 6940: Supervised Teaching
SPA 6942: Externship in Speech-Language Pathology
SPA 6971: Research for Master's Thesis
SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
SPA 7306: Audiologic Assessment in a Medical Setting
SPA 7318: Clinical Auditory Electrophysiology
SPA 7319: Balance Disorders: Evaluation and Treatment
SPA 7325: Audiologic Rehabilitation
SPA 7343: Cochlear Implants and Assistive Devices
SPA 7348: Principles of Amplification
SPA 7353: Environmental Hearing Conservation
SPA 7354: Seminar in Audiology: Hearing Conservation and Noise Control
SPA 7391: Business and Professional Issues in Audiology
SPA 7415: Neurolinguistics of Adult Language Disorders
SPA 7500: Public School Practicum
SPA 7523: Practicum in Speech Pathology in a Medical/Dental Setting
SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
SPA 7566: Counseling Individuals with Hearing Losses

SPA 7833: Audiology Research Project

SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities

SPA 7945: Graduate Practicum in Audiology

SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology

SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology

SPA 7958: Clinical Externship

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SPC 6239: Studies in Rhetorical Theory

SPM 5016: Sport Sociology

SPM 5206: Sport Ethics

SPM 5309: Sport Marketing

SPM 5506: Sport Finance

SPM 5936: Current Topics in Sport Management

SPM 6006: Contemporary Sport Industry

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SPM 6106: Management and Planning of Sport and Physical Activity Facilities

SPM 6158: Management and Leadership in Sport

SPM 6308: Study of Sport Consumer Behaviors

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SPM 6948: Advanced Practicum in Sport Management

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SPN 6166: Teaching Spanish for the Professions

SPN 6315: Advanced Composition and Syntax

SPN 6425: Writing for the Profession

SPN 6705: Foundations of Hispanic Linguistics

SPN 6715: Formal Instruction and Acquisition of Spanish

SPN 6735: Special Study in Spanish Linguistics
SPN 6785: Advanced Spanish Phonetics
SPN 6827: Sociolinguistics of the Spanish-Speaking World
SPN 6835: Spanish and Spanish-American Dialectology
SPN 6845: History of the Spanish Language
SPN 6848: Medieval Spanish Linguistics
SPN 6855: Structure of Spanish
SPN 6856: Spanish in Contact: Issues in Bilingualism
SPN 6900: Directed Readings in Spanish
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SPN 6945: Practicum in Advanced College Teaching
SPS 6052: Issues and Problems in School Psychology
SPS 6191: Psychoeducational Assessment I
SPS 6192: Psychoeducational Assessment II
SPS 6193: Academic Assessment & Intervention
SPS 6195: Developmental Psychopathology
SPS 6197: Psychoeducational Assessment III
SPS 6410: Direct Interventions I: Applied Behavior Analysis for School Psychologists
SPS 6707: Interventions in School Psychology II: Cognitive Behavioral Interventions
SPS 6708: Interventions in School Psychology III: System Level Interventions for Children and Youths
SPS 6815: Law and Ethics in Psychology
SPS 6905: Individual Study
SPS 6910: Supervised Research
SPS 6937: Special Topics in School Psychology
SPS 6940: Supervised Teaching
SPS 6941: Practicum in School Psychology
SPS 6942: School Psychology Practicum II
SPS 6945: Advanced Practicum in School Psychology
SPS 7205: School Psychology Consultation
SPS 7931: Seminar in School Psychology
SPS 7949: Internship in School Psychology
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SPW 6209: Colonial Spanish-American Literature
SPW 6216: Spanish Prose Fiction of the Golden Age

SPW 6236: Spanish-American Narrative from the origins to Criollismo

SPW 6269: Spanish Novel of the Nineteenth Century

SPW 6278: Postwar Spanish Fiction

SPW 6285: Contemporary Spanish-American Narrative I

SPW 6286: Contemporary Spanish-American Narrative II

SPW 6306: Spanish-American Theater

SPW 6315: Spanish Drama of the Golden Age

SPW 6337: Golden Age Poetry

SPW 6345: Twentieth-Century Spanish Poetry

SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo

SPW 6357: Contemporary Spanish-American Poetry

SPW 6366: Spanish-American Essay

SPW 6355: Spanish Romanticism

SPW 6354: Spanish Romanticism

SPW 6606: Cervantes

SPW 6729: The Generation of 1898

SPW 6806: Introduction to Graduate Study and Research

SPW 6902: Special Study in Spanish or Spanish-American Literature

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SPW 6910: Supervised Research

SPW 6934: Seminar in Spanish American Literature and Culture

SPW 6938: Seminar in Spanish Literature and Culture

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SRK 6905: Individual Study in Sanskrit

SSE 5320: Middle School Social Studies Methods

SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment

SSE 6046: Perspectives in Social Studies Education

SSE 6117: Social Studies Education—Elementary School

SSE 6133: Secondary School Social Studies Methods and Assessment
SSE 6478: Global Studies Methods in Social Studies

STA 5106: Computer Programs in Statistical Analysis

STA 5223: Applied Sample Survey Methods

STA 5325: Fundamentals of Probability

STA 5328: Fundamentals of Statistical Theory

STA 5503: Categorical Data Methods

STA 5507: Applied Nonparametric Methods

STA 5701: Applied Multivariate Methods

STA 5715: Applied Survival Analysis

STA 5823: Stochastic Process Methods

STA 5856: Applied Time Series Methods

STA 6092: Applied Statistical Practice

STA 6126: Statistical Methods in Social Research I

STA 6127: Statistical Methods in Social Research II

STA 6166: Statistical Methods in Research I

STA 6167: Statistical Methods in Research II

STA 6177: Applied Survival Analysis

STA 6178: Genetic Data Analysis

STA 6207: Regression Analysis

STA 6208: Basic Design and Analysis of Experiments

STA 6209: Design and Analysis of Experiments

STA 6226: Sampling Theory and Application

STA 6246: Theory of Linear Models

STA 6326: Introduction to Theoretical Statistics I

STA 6327: Introduction to Theoretical Statistics II

STA 6329: Matrix Algebra and Statistical Computing

STA 6505: Analysis of Categorical Data

STA 6526: Nonparametric Statistics

STA 6707: Analysis of Multivariate Data

STA 6826: Stochastic Processes

STA 6857: Time Series Analysis

STA 6866: Monte Carlo Statistical Methods
STA 6905: Individual Work

STA 6910: Supervised Research

STA 6934: Special Topics in Statistics

STA 6938: Seminar

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STA 7249: Generalized Linear Models

STA 7334: Limit Theory

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STA 7466: Probability Theory I

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STA 7527: Theory of Nonparametric Statistics

STA 7828: Topics in Stochastic Processes

STA 7934: Special Topics in Statistics

STA 7979: Advanced Research

STA 7980: Research for Doctoral Dissertation

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SUR 5385: Remote Sensing Applications

SUR 5386: Image Processing for Remote Sensing

SUR 5391C: Geomatics: Spatial Foundations of GIS

SUR 5425: Cadastral Information Systems

SUR 5525: Least Squares Adjustment Computations

SUR 6375: Terrain Analysis and Mapping

SUR 6395: Topics in Geographic Information Systems

SUR 6427: Land Tenure and Administration

SUR 6535: GPS-INS Integration

SUR 6905: Special Problems in Geomatics

SUR 6934: Topics in Geomatics

SUR 5050: Soils for Environmental Professionals
SWS 5050L: Soils for Environmental Professionals Laboratory

SWS 5115: Environmental Nutrient Management

SWS 5132: Tropical Soil Management

SWS 5182: Earth System Analysis

SWS 5208: Sustainable Agricultural and Urban Land Management

SWS 5224: Environmental Biogeochemistry

SWS 5234: Environmental Soil, Water, and Land Use

SWS 5235: South Florida Ecosystems

SWS 5246: Water Resource Sustainability

SWS 5247: Hydric Soils

SWS 5248: Wetlands and Water Quality

SWS 5305C: Soil Microbial Ecology

SWS 5308: Ecology of Waterborne Pathogens

SWS 5406: Soil and Water Chemistry

SWS 5424C: Soil Chemical Analysis

SWS 5551: Soils, Water, and Public Health

SWS 5605C: Environmental Soil Physics

SWS 5716C: Environmental Pedology

SWS 5721C: GIS in Land Resource Management

SWS 5805: Environmental Soil and Water Monitoring Techniques

SWS 6134: Soil Quality

SWS 6136: Soil Fertility

SWS 6161: Bioavailability of Soil Nutrients

SWS 6262: Soil Contamination and Remediation

SWS 6323: Advanced Microbial Ecology

SWS 6325: Rhizosphere Biochemistry

SWS 6366: Biodegradation and Bioremediation

SWS 6448: Biogeochemistry of Wetlands and Aquatic Systems

SWS 6454: Advanced Soil and Water Chemistry

SWS 6456: Advanced Biogeochemistry

SWS 6464C: Soil Mineralogy

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SWS 6722: Soil-Landscape Modeling

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SYA 6126: Contemporary Sociological Theory

SYA 6305: Methods in Social Research I

SYA 6306: Methods in Social Research II

SYA 6315: Qualitative Research Methods

SYA 6327: Research Problems in Deviance

SYA 6407: Quantitative Research Methods

SYA 6905: Individual Work

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SYA 6942: Applied Social Research Project

SYA 6971: Research for Master's Thesis

SYA 7933: Special Study in Sociology

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SYD 6436: Metropolitan Growth and Development

SYD 6517: Seminar in Environment and Society

SYD 6518: Core Issues in Environmental and Resource Sociology

SYD 6706: Racial and Ethnic Relations

SYD 6707: Black and White Americans: Sociological Perspectives

SYD 6806: Gender and Society

SYD 6807: Sociology of Gender

SYD 6825: Men and Masculinities

SYD 7808: Reproduction and Gender
SYO 6107: American Families
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SYO 6407: Health Disparities
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TAX 5005: Introduction to Federal Income Taxation
TAX 5025: Federal Income Tax 1
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TAX 5065: Tax Professional Research
TAX 6105: Corporate Taxation
TAX 6115: Advanced Corporate Taxation
TAX 6205: Partnership Taxation
TAX 6526: International Taxation
TAX 6726: Executive Tax Planning
TAX 6877: State and Local Taxation
THE 5238: African-American Theatre History and Practice
THE 5287: History of Decor and Architecture for the Stage
THE 5910: Introduction to Graduate Study in Theatre
THE 6265: Costume History
THE 6525: History, Literature, and Criticism I
THE 6526: History, Literature, and Criticism II
THE 6565: Seminar in Creative Process
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TPA 5067: Scene Design I
TPA 5072: Drawing and Rendering
TPA 5079: Graduate Scene Painting
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TPA 6026: Lighting Design II
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TPA 6054: Detail Design for Costume Designers
TPA 6069: Scene Design II
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TPA 6237: Pattern Making: Flat Patterning
TPA 6243: Pattern Making: Draping
TPA 6258: Computer Drafting 2D
TPA 6357: Programming and Presentation for the Lighting Designer
TPP 5234: Multi-Cultural Performance Workshop
TPP 6115: Graduate Acting I: Modern Acting Theory and Practice
TPP 6116: Graduate Acting II: Shakespeare and High Style
TPP 6145: Graduate Acting III: Period Styles
TPP 6149: Acting IV: Contemporary Realism
TPP 6225: Professional Seminar: Acting
TPP 6237: MFA Company Acting Workshop
TPP 6266: Acting for the Camera
TPP 6285: Voice and Movement I
TPP 6286: MFA Voice and Speech II: Shakespeare and High Styles
TPP 6297: The Alexander Technique I
TPP 6298: The Alexander Technique II
TPP 6299: The Alexander Technique III
TPP 6385: Directing
TPP 6515: Graduate Movement Training
TPP 6536: Graduate Stage Combat
TPP 6717: MFA Voice and Speech III: Period Styles
TPP 6718: MFA Voice and Speech IV: Advanced Vocal Training for the Actor
TPP 6946: Performance Practicum
TSL 5142: ESOL Curriculum, Methods, and Assessment
TSL 5325: Secondary ESOL Teaching Strategies
TSL 6145: Curriculum and Materials Development for ESOL K-12
TSL 6171: TESL I: Materials and Techniques
TSL 6172: TESL II: Materials for Special Purposes
TSL 6245: Language Principles for ESOL Teachers
TSL 6373: Methods of Teaching ESOL K-12
TSL 6440: Testing and Evaluation of ESOL
TSL 6700: Issues in ESOL for School Counselors and Psychologists
TTE 5006: Advanced Urban Transportation Planning
TTE 5256: Traffic Engineering
TTE 5305: Advanced Transportation Systems Analysis
TTE 5805: Geometric Design of Transportation Facilities
TTE 5835: Pavement Design
TTE 5837: Pavement Management Systems
TTE 6205: Freeway Operations and Simulation
TTE 6207: Advanced Highway Capacity Analysis
TTE 6259: Urban Streets Simulation and Control
TTE 6267: Traffic Flow Theory
TTE 6306: Computational Methods in Transportation Engineering
TTE 6315: Highway Safety Analysis
TTE 6505: Discrete Choice Analysis
TTE 6606: Urban Transportation Models
URP 6042: Urban Economy
URP 6061: Planning Administration and Ethics
URP 6100: Planning Theory and History
URP 6122: Alternative Conflict Management
URP 6131: Growth Management Powers I
URP 6132: Growth Management Seminar
URP 6203: Planning Research Design
URP 6231: Quantitative Data Analysis for Planners
URP 6270: Survey of Planning Information Systems
URP 6271: Planning Information Systems
URP 6272: Advanced Planning Information Systems
URP 6274: GPS for Planners: Introduction to Global Positioning System
URP 6275: Spatial Database Design and Development
URP 6276: Internet Geographic Information Systems
URP 6277: Land Use Visioning and Analysis
URP 6312: Land Development Planning and Evaluation
URP 6341: Urban Planning Project
URP 6421: Environmental Impact Statements
URP 6424: Sustainable Urbanism in the Americas
URP 6428: Advanced Environmental Planning
URP 6429: Natural Resources Planning and Management
URP 6445: Planning for Climate Change
URP 6526: Health and the Built Environment
URP 6541: Economic Development Planning
URP 6542: Urban Land Economics
URP 6543: Seminar in Capital Improvement Finance
URP 6547: Local Public Finance for Urban Planners
URP 6601: State Planning
URP 6603: Development Review
URP 6610: International Development Planning
URP 6711: Transportation and Land Use Coordination
URP 6716: Transportation Policy and Planning
URP 6718: Bikeways Planning and Design
URP 6743: Affordable Housing Law

URP 6745: Housing, Public Policy, and Planning

URP 6746: Topical Debates in Housing

URP 6821: Transportation and Land-Use Modeling

URP 6855: Urban Form in Cities throughout the Americas

URP 6871: Planning and Design I

URP 6872: Planning and Design II

URP 6880: Defensible Space and CPTED in Urban Design

URP 6884: Community Conservation and Revitalization

URP 6887: Advanced Defensible Space in Urban Design

URP 6905: Exploration and Directed Study

URP 6910: Supervised Research

URP 6920: Colloquium

URP 6931: Topical Seminar

URP 6933: Planning Information Seminar

URP 6940: Supervised Teaching

URP 6941: Urban Planning Internship

URP 6971: Research for Master’s Thesis

URP 6979: Terminal Project

VIC 5315: Corporate and Brand Identity on the Web

VIC 5325: Digital Imagery in Web Design

VIC 5326: Digital Media Layout and Design

VIC 6316: Brand Management

VME 5162C: Avian Diseases

VME 5244: Physiology: Organ Systems

VME 6008: Care of Aquatic Megavertebrates

VME 6010: Aquatic Animal Conservation Issues

VME 6011: Introduction to Aquatic Wildlife Health Issues

VME 6017: Manatee Health & Conservation

VME 6051: Cruelty to Animals and Interpersonal Violence

VME 6052: Animal Crime Scene Processing

VME 6054: Scientific and Legal Principles of Forensic Evidence

VME 6056: Animal Law

VME 6076C: Andrology
VME 6135: Diseases of Laboratory Animals I
VME 6136: Diseases of Laboratory Animals II
VME 6186: Advanced Topics in Disease Pathogenesis
VME 6421: Biology and Molecular Biology of Avian Viruses
VME 6430C: Contemporary Issues in Small Animal Surgery
VME 6464: Molecular Pathogenesis
VME 6505: Autoimmunity
VME 6570: Wildlife Conservation and Forensic Science
VME 6571: Forensic Applied Animal Behavior
VME 6572: Forensic Aspects of Agricultural Animal Welfare
VME 6573: Wildlife Forensic Genetics
VME 6575: Veterinary Forensic Medicine
VME 6576: Veterinary Forensic Pathology
VME 6577: Veterinary Forensic Pathology in Practice
VME 6578: Forensic Veterinary Osteology
VME 6579: Veterinary Forensic Radiology and Imaging
VME 6602: General Toxicology
VME 6603: Advanced Toxicology
VME 6604: Literature Survey in Toxicology
VME 6605: Toxic Substances
VME 6606: Ecological Risk Assessment
VME 6607: Human Health Risk Assessment
VME 6613: Forensic Toxicology I
VME 6614: Forensic Toxicology II
VME 6615: Veterinary Forensic Toxicology
VME 6650: Principles of Mammalian Pharmacology
VME 6766: Laboratory Quality Assurance/Quality Control
VME 6767: Issues in the Responsible Conduct of Research
VME 6771: Veterinary Epidemiologic Research
VME 6810: Integrating Veterinary Medicine with Shelter Systems
VME 6811: Shelter Animal Physical Health
VME 6812: Shelter Animal Behavior and Welfare
VME 6905: Problems in Veterinary Medical Sciences
VME 6910: Supervised Research
VME 6931: Seminar in Veterinary Medical Sciences
VME 6932: Seminar in Physiological Sciences
VME 6933: Seminar in Infectious Diseases and Experimental Pathology
VME 6934: Topics in Veterinary Medical Sciences
VME 6936: Seminar in Pathophysiology
VME 6938: Topics in Aquatic Animal Health
VME 6940: Supervised Teaching
VME 6971: Research for Master's Thesis
VME 7979: Advanced Research
VME 7980: Research for Doctoral Dissertation
WS 5323C: Impact of Diseases on Wildlife Population
WS 5496: Research Design in Wildlife Ecology
WS 5521: Plant-Animal Interactions
WS 5555C: Conservation Biology
WS 6444: Advanced Wetlands Ecology
WS 6455: Wildlife Population Ecology
WS 6466: Wildlife Population Modeling
WS 6468C: Pattern and Process in Landscape Ecology
WS 6525: Environmental Interpretation
WS 6543: Wildlife and Agriculture
WS 6544: Administration in Natural Resources
WS 6575: Mammalian Carnivores: Conservation and Management Issues
WS 6578: Human Dimensions of Biological Conservation
WS 6905: Research Problems in Wildlife and Range Sciences
WS 6910: Supervised Research
WS 6933: Seminar
WS 6934: Topics in Wildlife and Range Sciences
WS 6940: Supervised Teaching
WS 6971: Research for Master's Thesis
WS 7979: Advanced Research
WS 7980: Research for Doctoral Dissertation
WST 5933: Proseminar in Women's Studies
WST 6348: Ecofeminism
WST 6508: Advanced Feminist Theory
WST 6905: Independent Study
WST 6935: Special Topics in Women's Studies
WST 6936: Feminist Challenges to Disciplinary Paradigms
WST 6946: Internship in Applied Women's Studies and Gender Research
WST 6957: International Studies in Women's Studies and Gender Research
WST 6971: Research for Master's Thesis
ZOO 5115C: Vertebrate Paleontology
ZOO 5486C: Mammalogy
ZOO 6005: Integrative Principles of Zoology I
ZOO 6308: Dynamic Optimization Modeling in Behavioral and Evolutionary Ecology
ZOO 6406: Biology of Sea Turtles
ZOO 6456C: Ichthyology
ZOO 6542: Nutritional Ecology
ZOO 6905: Individual Studies
ZOO 6910: Supervised Research
ZOO 6920: Zoology Colloquium
ZOO 6927: Special Topics in Zoology
ZOO 6931: Seminar in Marine Turtle Biology
ZOO 6939: Seminar in Animal Behavior
ZOO 6971: Research for Master's Thesis
ZOO 7979: Advanced Research
ZOO 7980: Research for Doctoral Dissertation

Courses by Discipline

Agricultural and Biological Engineering Department

College of Agricultural and Life Sciences

Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

AOM 5334C: Agricultural Chemical Application Technology
AOM 5431: GIS and Remote Sensing in Agriculture and Natural Resources
AOM 5435: Advanced Precision Agriculture
AOM 6905: Individual Work in Agricultural Operations Management
AOM 6932: Special Topics in Agricultural Operations Management

Agricultural and Biological Engineering Department

Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

- **Agricultural production** includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

- **Biological engineering** includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

- **Information systems** includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

- **Land and water resources** includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

- **ABE 5015: Empirical Models of Crop Growth and Yield Response**
- **ABE 5038: Recent Developments and Applications in Biosensors**
- **ABE 5152: Electro-Hydraulic Circuits and Controls**
- **ABE 5332: Advanced Agricultural Structures**
- **ABE 5442: Advanced Agricultural Process Engineering**
- **ABE 5643C: Biological Systems Modeling**
- **ABE 5646: Biological and Agricultural Systems Simulation**
- **ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials**
- **ABE 5663: Advanced Applied Microbial Biotechnology**
- **ABE 5707C: Agricultural Waste Management**
- **ABE 5815C: Food and Bioprocess Engineering Design**
- **ABE 6005: Applied Control for Automation and Robots**
- **ABE 6031: Instrumentation in Agricultural Engineering Research**
- **ABE 6035: Advanced Remote Sensing: Science and Sensors**
ABE 6037C: Remote Sensing in Hydrology

ABE 6252: Advanced Soil and Water Management Engineering

ABE 6254: Simulation of Agricultural Watershed Systems

ABE 6265: Vadose Zone Modeling

ABE 6266: Nanotechnology in Water Research

ABE 6615: Advanced Heat and Mass Transfer in Biological Systems

ABE 6644: Agricultural Decision Systems

ABE 6816: Food and Bioprocess Sterilization

ABE 6905: Individual Work in Agricultural and Biological Engineering

ABE 6910: Supervised Research

ABE 6931: Seminar

ABE 6933: Special Topics in Agricultural and Biological Engineering

ABE 6940: Supervised Teaching

ABE 6971: Research for Master's Thesis

ABE 6972: Research for Engineer's Thesis

ABE 6974: Nonthesis Project

ABE 6986: Applied Mathematics in Agricultural and Biological Engineering

ABE 7979: Advanced Research

ABE 7979: Advanced Research

ABE 7980: Research for Doctoral Dissertation

CWR 6536: Stochastic Subsurface Hydrology

PKG 5003: Advanced Distribution and Transport Packaging

PKG 5006: Advanced Packaging Principles

PKG 5105: Advanced Consumer Products Packaging

PKG 5206C: Advanced Package Decoration

PKG 5256C: Advanced Analytical Packaging Methods

PKG 6100: Advanced Computer Tools for Packaging

PKG 6905: Individual Work in Packaging

PKG 6932: Special Topics in Packaging Sciences

Agricultural Education and Communication Department

Chair: E. W. Osborne
Graduate Coordinator: B. E. Myers

Complete faculty listing by department: [Follow link]
described in the Graduate Degrees section of the University of Florida Graduate Catalog. More information about our program can be found by following the link below.

AEC 5032: Agricultural Media Writing
AEC 5037: Agricultural Media Production
AEC 5060: Public Opinion and Agricultural and Natural Resource Issues
AEC 5074: Agriculture, Resources, People, and the Environment: A Global Perspective
AEC 5201: Teaching in Colleges of Agricultural and Life Sciences
AEC 5203: Advanced Teaching in Colleges of Agricultural and Life Sciences
AEC 5206: Teaching Methods in Agricultural Education
AEC 5227: Teaching in Agricultural Education Laboratory Facilities
AEC 5302: Professional Skill Development in Agriscience Education I
AEC 5324: Philosophy and Development of Agricultural Education
AEC 5454: Leadership Development for Extension and Community Nonprofit Organizations
AEC 5501: Professional Skill Development in Agriscience Education II
AEC 5541: Communication and Instructional Technologies in Agricultural and Life Sciences
AEC 5544: Curriculum Development and Assessment Techniques in Emerging Agricultural Technologies
AEC 5545: Special Methods in Teaching Agriculture
AEC 5546: Program Planning in Agricultural Education
AEC 6205: Advanced Curriculum and Teaching Methods
AEC 6210: Designing Educational Programs in Agricultural Settings
AEC 6211: Delivering Educational Programs in Agricultural Settings
AEC 6212: Teacher Education in Agriculture
AEC 6229: Laboratory Instruction: Theory and Practice
AEC 6300: Methodology of Planned Change
AEC 6316: From America to Zimbabwe: An Overview of International Extension Systems
AEC 6321: The Land Grant University and University Governance
AEC 6325: History and Philosophy of Agricultural Education
AEC 6419: Communication and Competencies for Global Leadership
AEC 6426: Development of a Volunteer Leadership Program
AEC 6512: Program Development in Extension Education
AEC 6540: Agricultural and Natural Resources Communications Theory and Strategies
AEC 6543: Teaching and Learning Theory: Applications in Agricultural Education
AEC 6552: Evaluating Programs in Extension Education
AEC 6611: Agricultural and Extension Adult Education
AEC 6704: Extension Administration and Supervision
AEC 6767: Research Strategies in Agricultural Education and Communication
AEC 6905: Problems in Agricultural and Extension Education
AEC 6910: Supervised Research
AEC 6912: Nonthesis Research in Agricultural and Extension Education
AEC 6933: Seminar in Agricultural Education and Communication
AEC 6940: Supervised Teaching
AEC 6945: Practicum in Agricultural Education and Communication
AEC 6947: Experiential Learning in Agricultural Education
AEC 6971: Research for Master's Thesis
AEC 7979: Advanced Research
AEC 7980: Research for Doctoral Dissertation
AGG 5504: Critical and Creative Thinking in Problem Solving and Decision Making

Agronomy Department

Chair: R. A. Gilbert
Graduate Coordinator: L. E. Sollenberger

Complete faculty listing by department: [Follow this link](#)

The Agronomy Department offers the degrees of Doctor of Philosophy and Master of Science (thesis and non-thesis options) in agronomy with specializations in plant physiology, ecology, management and nutrition, weed science (terrestrial and aquatic), and plant breeding and genetics. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate programs emphasize the development and subsequent application of basic principles in each specialization to the management of agricultural and natural ecosystems in Florida and throughout the world. The continuing need for increased plant production for food, fiber and energy to meet the demands of a rapidly escalating population is reflected in departmental research programs. When compatible with a student's program and permitted by prevailing circumstances, some thesis and dissertation research may be conducted wholly or in part in one or more of several countries.

Students seeking a graduate program in the Agronomy Department should hold a Bachelor of Science degree from an accredited college or university with a major in an area of plant science, or closely related discipline. A science background with basic courses in biology, botany, mathematics, chemistry, and physics is required of new graduate students.

AGR 5215C: Integrated Field Crop Science
AGR 5230C: Florida Grassland Agroecosystems
AGR 5266C: Field Plot Techniques
AGR 5277C: Tropical Crop Production
AGR 5307: Molecular Genetics for Crop Improvement
AGR 5321C: Genetic Improvement of Plants
AGR 5444: Ecophysiology of Crop Production
AGR 5511: Crop Ecology
AGR 6233: Tropical Grassland Agroecosystems
AGR 6237C: Research Techniques in Forage Evaluation
AGR 6311: Population Genetics
AGR 6322: Advanced Plant Breeding
AGR 6325L: Plant Breeding Techniques
AGR 6353: Cytogenetics
AGR 6422C: Environmental Crop Nutrition
AGR 6442C: Physiology of Agronomic Plants
AGR 6905: Agronomic Problems
AGR 6910: Supervised Research
AGR 6932: Topics in Agronomy
AGR 6933: Graduate Agronomy Seminar
AGR 6940: Supervised Teaching
AGR 6971: Research for Master's Thesis
AGR 7979: Advanced Research
AGR 7980: Research for Doctoral Dissertation
IPM 5305: Principles of Pesticides
PLS 5632C: Integrated Weed Management
PLS 5652: Advanced Weed Science
PLS 6623: Weed Ecology
PLS 6626: Invasive Plant Ecology
PLS 6655: Plant/Herbicide Interaction

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link.
For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/

ANS 5446: Animal Nutrition
ANS 6313: Current Concepts in Reproductive Biology
ANS 6718: Nutritional Physiology of Domestic Animals
ANS 6751: Physiology of Reproduction
PCB 5235: Immunology
PCB 5615: Molecular Evolution and Systematics
STA 6934: Special Topics in Statistics
ZOO 6927: Special Topics in Zoology

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link.
For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/.

**Animal Molecular and Cellular Biology Department**

*Director: P.J. Hansen*

*Complete faculty listing by department: [Follow this link](#)*

Animal Sciences Department

*Chair: G. E. Dahl*

*Graduate Coordinator: G. Adesogan*

*Complete faculty listing by department: [Follow this link](#)*

Animal Sciences is an academic department of the [College of Agriculture and Life Sciences (CALS)](http://www.animal.ufl.edu/amcb), a unit of the [Institute of Food and Agricultural Sciences (IFAS)](http://www.ifas.ufl.edu). Creating new solutions to tomorrow's problems underlies everything we do in the Animal Sciences Program. In the areas of teaching, research, and extension, our faculty integrates the most modern technologies available with personal expertise and attention to the needs of students and our industry. For more information about the Animal Sciences program, please follow the link below.

**Animal Sciences Courses**

- **ANS 5312C**: Applied Ruminant Reproductive Management
- **ANS 5935**: Reproductive Biology Seminar and Research Studies
- **ANS 6288**: Experimental Techniques and Analytical Procedures in Meat Research
- **ANS 6314**: Experimental Embryology
- **ANS 6447**: Ruminant Nutrition
- **ANS 6449**: Vitamins
- **ANS 6452**: Principles of Forage Quality Evaluation
- **ANS 6458**: Advanced Methods in Nutrition Technology
- **ANS 6636**: Meat Technology
- **ANS 6666L**: Molecular and Cellular Research Methods
- **ANS 6702**: Lactation Physiology of Farm Animals
- **ANS 6704**: Mammalian Endocrinology
- **ANS 6705**: Muscle Physiology
- **ANS 6707**: Growth Physiology in Farm Animals
- **ANS 6711**: Current Topics in Equine Nutrition and Exercise Physiology
- **ANS 6715**: Gastrointestinal and Feed Microbiology
- **ANS 6716**: Physiology in Farm Animals
- **ANS 6723**: Mineral Nutrition and Metabolism
- **ANS 6745**: Introduction to Statistical Genetics
- **ANS 6750**: Reproductive Physiology in Farm Animals
- **ANS 6767**: Molecular Endocrinology
The Anthropology Department takes pride in maintaining a holistic perspective, bridging the four traditional fields that have composed the discipline: sociocultural, archaeological, biological, and linguistic anthropology. Both graduate students and faculty conduct research that cut across the four-fields, and extend anthropological investigations into other disciplines.

The graduate program is a mentoring program emphasizing the PhD degree. Students are mentored by faculty advisors, together with supervisory committees chosen by students with the advice of advisors. Graduate students are expected to be in residence to attend classes and seminars, and receive individualized training. Distance-education graduate degrees are not offered. Students formally report on their progress each year, and the progress of each graduate student is evaluated by the faculty in their primary field.

Students receiving graduate degrees are well-prepared intellectually and professionally for success in a wide variety of careers, and become leaders in developing the next generation of anthropology. The department offers teaching experience and resources for presenting conference papers, submitting grant proposals, conducting fieldwork, and other activities appropriate to their professionalization. Graduate students are welcome to contribute to discussions in departmental meetings, and serve on some departmental committees.

ANG 5012: Fantastic Anthropology and Fringe Science
ANG 5085: Collection and Analysis of Visual Data in Anthropology
ANG 5126: Zooarcheology
ANG 5158: Florida Archeology
ANG 5162: Maya Archeoastronomy and Ethnoastronomy
ANG 5164: The Inca and Their Ancestors
ANG 5172: Historical Archeology
ANG 5194: Principles of Archeology
ANG 5255: Rural Peoples in the Modern World
ANG 5265: Methods in Ethnoecology
ANG 5266: Economic Anthropology
ANG 5303: Women and Development
ANG 5310: The North American Indian
ANG 5323: Peoples of Mexico and Central America
ANG 5327: Maya and Aztec Civilizations
ANG 5330: The Tribal Peoples of Lowland South America
ANG 5331: Peoples of the Andes
ANG 5336: The Peoples of Brazil
ANG 5341: Anthropology of the Caribbean
ANG 5352: Peoples of Africa
ANG 5354: Anthropology of Modern Africa
ANG 5395: Visual Anthropology
ANG 5420: Social Network Analysis in Cultural Anthropology
ANG 5426: Kinship and Social Organization
ANG 5464: Culture and Aging
ANG 5485: Research Design in Anthropology
ANG 5486: Computing for Anthropologists
ANG 5488: Geospatial Analysis in Cultural Anthropology
ANG 5525: Human Osteology and Osteometry
ANG 5531: Culture and Nutrition
ANG 5546: Seminar: Human Biology and Behavior
ANG 5620: Language and Culture
ANG 5621: Proseminar in Cultural and Linguistic Anthropology
ANG 5700: Applied Anthropology
ANG 5702: Anthropology and Development
ANG 5711: Culture and International Business
ANG 5743: Human Rights Missions in Forensic Anthropology
ANG 5744: International Forensic Fieldwork in Human Rights
ANG 5824L: Field Sessions in Archeology
ANG 6034: Seminar in Anthropological History and Theory
ANG 6086: Historical Ecology
ANG 6091: Research Strategies in Anthropology
ANG 6110: Archaeological Theory
ANG 6112: Critical Archaeology of Time
ANG 6113: Ideology and Symbolic Approaches in Archaeology
ANG 6120C: Environmental Archaeology

ANG 6122C: Archaeological Ceramics

ANG 6128: Lithic Technology

ANG 6146: Archaeology of Maritime Adaptations

ANG 6155: Southeastern U.S. Prehistory

ANG 6161: Problems in Caribbean Prehistory

ANG 6165: Problems in South American Archaeology

ANG 6183: Laboratory Training in Archeology

ANG 6185: Ethnoarchaeology

ANG 6186: Seminar in Archeology

ANG 6187: Experimental Archaeology

ANG 6190: Seminar in Contemporary Methods

ANG 6191: Archaeology of Death

ANG 6224: Painted Books of Ancient Mexico: Codices of Aztecs, Mixtecs, and Mayas

ANG 6241: Special Topics in Ecology of Religion

ANG 6267: Anthropology, Geographic Information System, and Human Ecosystems

ANG 6273: Legal Anthropology

ANG 6274: Principles of Political Anthropology

ANG 6286: Seminar in Contemporary Theory

ANG 6304: Seminar in Gender and International Development

ANG 6314: Peoples of the Arctic

ANG 6351: Peoples and Culture in Southern Africa

ANG 6360: Ethnicity in China

ANG 6366: Family, Gender, and Population in China

ANG 6407: Sickness and Power

ANG 6421: Landscape, Place, Dwelling

ANG 6452: Race and Racism in Anthropological Theory

ANG 6453: Human Rights in Cross-Cultural Perspective

ANG 6478: Evolution of Culture

ANG 6481: Research Methods in Cognitive Anthropology

ANG 6483L: Anthropology of Science

ANG 6511: Seminar in Physical Anthropology
ANG 6514: Human Origins
ANG 6524: Skeletal Mechanics in Biological Anthropology
ANG 6532: Molecular Genetics of Disease
ANG 6547: Human Adaptation
ANG 6552: Primate Behavior
ANG 6553: Primate Cognition
ANG 6555: Issues in Evolutionary Anthropology
ANG 6583: Primate Functional Morphology
ANG 6591L: Advanced Molecular Anthropology Laboratory
ANG 6592: Seminar in Molecular Anthropology
ANG 6593L: Biological Anthropology Laboratory
ANG 6701: Seminar on Applied Anthropology
ANG 6737: Medical Anthropology
ANG 6740: Advanced Techniques in Forensic Anthropology
ANG 6801: Ethnographic Field Methods
ANG 6905: Individual Work
ANG 6910: Supervised Research
ANG 6915: Research Projects in Social, Cultural, and Applied Anthropology
ANG 6917: Professions of Anthropology
ANG 6930: Special Topics in Anthropology
ANG 6940: Supervised Teaching
ANG 6945: Internship in Anthropology
ANG 6971: Research for Master's Thesis
ANG 7979: Advanced Research
ANG 7980: Research for Doctoral Dissertation

Applied Physiology and Kinesiology Department

Chair: S. Dodd
Graduate Coordinator: E. Christou

Complete faculty listing by department: Follow this link.

The Ph.D. program is offered with concentrations in biobehavioral science and exercise physiology. Students in the biobehavioral science concentration specialize in one of four areas: biomechanics, exercise/performance psychology, motor control/learning, or sports medicine. These interdisciplinary concentrations focus on preparing students as researchers with a blend of course work and research training.

A program leading to the Master of Science degree in applied physiology and kinesiology (thesis and non-thesis options) is also offered. Areas of concentration for the master's program include athletic training/sports medicine, biobehavioral science, clinical exercise physiology, exercise physiology, and human performance. The thesis option gives the student an opportunity to study, conduct research, and prepare a thesis in an area of special interest. The non-thesis option offers the student a specialization in a selected area of study, with additional work in other areas. A comprehensive written examination is required for this option, as is a capstone internship experience. Requirements for these degrees are given in the General Information section of this catalog.

Athletic training/sports medicine: This concentration provides comprehensive academic preparation, research, and clinical experience in the areas of injury prevention, assessment,
Biobehavioral Science: This thesis mandatory concentration is multidisciplinary and flexible, permitting students to tailor their scholarly experience to the development of research skills in one of several related disciplines: biomechanics, motor control and learning, exercise and performance psychology. Each area of specialization is briefly described below:

- **Biomechanics:** The specialization in biomechanics draws from the fields of neuroscience, engineering, and medicine. The course work and training include kinematics and kinetics of movement. Course work also includes anatomy/kinesiology, biomechanics, engineering, neuroscience, medicine, psychology, physical therapy, and statistics.

- **Motor learning / control:** This interdisciplinary specialization draws on experiences and a knowledge base in the movement and sport sciences, cognitive sciences, and physical therapy. Students are prepared to conduct research and provide expertise in traditional motor performance and learning settings.

- **Exercise / performance psychology:** This area of specialization provides the basis for understanding and influencing the underlying thought processes and attitudes that will ultimately determine the performance of individuals involved in sport, exercise, and other achievement oriented activities. The primary emphasis is to develop the scientific background and skills necessary for doctoral training and research.

Clinical exercise physiology: The purpose of this non-thesis program is to give students the opportunity to develop advanced knowledge and competencies in Exercise Physiology. Clinical Exercise Physiologists typically practice in hospitals, clinics and wellness centers as part of a health care team that administers tests and develops programs of exercise, counseling, and education for patients with cardiopulmonary, metabolic, and musculoskeletal diseases.

Exercise physiology: This thesis mandatory area of concentration is concerned with the scientific study of how the various physiological systems of the human body respond to physical activity. It is a multidisciplinary field with strong ties to the basic life sciences and medicine, and application to clinical, normal, and athletic populations.

Human performance: This non-thesis master's concentration merges a range of specializations within the Department into a curriculum that provides educational experiences to graduate students interested in studying the factors that determine human performance in both athletic and nonathletic domains. This flexible approach allows students to focus on specific applications that best meet their individual interests. Human performance incorporates components such as nutrition, psychology, motor behavior, and physiology that are applicable to athletic and clinical populations.

APK 5127: Assessment in Exercise Science

APK 5404: Sport Psychology

APK 611L: Practicum in Exercise Physiology

APK 6116C: Physiological Bases of Exercise and Sport Sciences

APK 6118: Neuromuscular Adaptation to Exercise

APK 6126: Cardiopulmonary Pathologies

APK 6128: EKG Interpretation

APK 6205C: Nature and Bases of Motor Performance

APK 6206: Planning Motor Actions

APK 6210: Controlling Motor Actions

APK 6225: Biomechanical Instrumentation

APK 6226C: Biomechanics of Human Motion

APK 6406: Exercise Psychology

APK 6408: Performance Enhancement

APK 6410: Seminar in Exercise Psychology

APK 6415: Seminar in Sport Psychology: Current Topics

APK 6900: Directed Independent Study

APK 6940: Advanced Practicum in Exercise and Sport Science

APK 7107: Cardiovascular Exercise Physiology

APK 7108: Environmental Stress Exercise Physiology

APK 7117: Exercise Metabolism

APK 7124: Free Radicals in Aging, Exercise and Disease

APK 7129: Pulmonary Function during Exercise
ATR 6124: Clinical Anatomy for the Exercise Sciences
ATR 6145: Human Pathophysiology for the Exercise Sciences
ATR 6215: Evidence-Based Orthopedic Exam I: Upper-Extremity
ATR 6216: Evidence-Based Orthopedic Exam II: Lower-Extremity
ATR 6304: Rehabilitation and Modalities of Athletic Injuries
ATR 6624: Athletic Training Research and Technology I
ATR 6625: Athletic Training Research and Technology II
ATR 6934: Seminar in Athletic Training
HLP 6515: Evaluation Procedures in Health and Human Performance
HLP 6911: Research Seminar
HLP 6935: Variable International Topics
PET 5936: Special Topics/Seminars
PET 6910: Supervised Research
PET 6940: Supervised Teaching
PET 6947: Graduate Internship in Exercise and Sport Sciences
PET 6971: Research for Master's Thesis

Astronomy Department

Chair: C. Telesco
Graduate Coordinator: V. Sarajedini.

Complete faculty listing by department: Follow this link.

The University of Florida's Astronomy Department is one of the largest in the country. Research is an integral part of the graduate program. Students have opportunities to work with faculty and staff on a broad range of astronomical problems using in-house, national and international, and ground- and space-based facilities. Support for graduate studies is available through fellowships, research assistantships, and teaching assistantships. For more information on the program, please follow the link below or visit our website.

AST 5113: Solar System Astrophysics I
AST 5114: Solar System Astrophysics II
AST 6112: Solar System Astrophysics
AST 6215: Stellar Structure and Function
AST 6245: Stellar Atmospheres and Radiative Processes
AST 6309: Galactic and Extragalactic Astronomy
AST 6336: Interstellar Matter
AST 6415: Observational Cosmology
AST 6416: Physical Cosmology
AST 6506: Celestial Mechanics
AST 6725C: Observational Techniques
Behavioral Science and Community Health Department

Chair: B. Curbow
Complete faculty listing by department: Follow this link.

The Department of Behavioral Science & Community Health (BSCH) is one of nine academic departments housed in the School of Public Health and Health Professions at the University of Florida. This department offers a Doctor of Philosophy (PhD) degree (SBS track). For more information about the program, please visit the link below.

GEY 5935: Topics in Gerontology
GEY 6220: Overview of Geriatric Care Management
GEY 6646: Issues and Concepts in Gerontology
GEY 6905: Independent Study in Gerontology
GEY 6936: Professional Development in Gerontology/Geriatrics
PHC 6195: Health information for Diverse Populations: Theory & Methods
PHC 6316: Health, Risk, and Crisis Communication
PHC 6607: Critical Issues in Public Health
PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
PHC 7752: Seminar in Instrument Development for Public Health
PHC 7907: Social and Behavioral Science Journal Club
RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
RCS 6066: Rehabilitation Issues in Human Growth and Development
RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
RCS 6412: Rehabilitation Counseling Theory and Practice
RCS 6470: Human Sexuality and Disability
RCS 6601: Forensic Rehabilitation Consultation I
RCS 6602: Forensic Rehabilitation Consultation II
RCS 6625: Community Counseling and Case Management
RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
RCS 6740: Rehabilitation Research
RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
RCS 6801: Rehabilitation Counseling Practicum
RCS 6825: Internship in Rehabilitation Counseling
RCS 6905: Individual Work
RCS 6910: Supervised Research
RCS 6931: Special Topics
RCS 6940: Supervised Teaching
RCS 6945: Advanced Rehabilitation Counseling Practicum
RCS 6971: Research for Master's Degree

Biochemistry and Molecular Biology Department

Chair: James B. Flanegan.
Graduate Coordinator: Kevin Brown

Complete faculty listing by department: Follow this link.

Biochemistry and Molecular Biology Department faculty mentor Ph.D. students in the College of Medicine interdisciplinary program (IDP) in medical sciences. Students interested in pursuing a doctoral degree can view specific features of the biochemistry and molecular biology concentration at [http://biochem.med.ufl.edu/](http://biochem.med.ufl.edu/) and [http://idp.med.ufl.edu](http://idp.med.ufl.edu). For admission information, visit the IDP website. Department faculty also mentor Ph.D. students in other college programs and participate actively in the research and teaching functions of various centers such as the Center for Epigenetics and the Center for Structural Biology. The Department offers a wide variety of courses for graduate students studying in the life sciences. The research expertise of the faculty spans the areas from cell biology, metabolism, and molecular biology to physical biochemistry/structural biology. Current research interests include viral protease inhibitors, viral RNA replication, bioenergetics and proton translocation, X-chromosome structure and function, cytoskeletal assembly and dynamics, enzyme mechanism and control, chromatin structure, gene expression and regulation, mitochondrial biogenesis and evolution, the genetics of inherited diseases, nutrient membrane transporters, protein site-directed mutagenesis, ribosome structure and function, signal transduction, structural biology, and dynamics of macromolecules, protein-nucleic acid interactions, transgenic animal models, and virus crystal structure. Prospective graduate students should have adequate training in chemistry and biology. Minor deficiencies may be made up immediately after entering graduate school. Previous undergraduate experience in a research laboratory is highly recommended. Doctoral students are required to take a core IDP course in fall term of their first year; and beginning in spring term, students take advanced classes in areas of interest. Specific advanced-level courses may be recommended by the student's supervisory chair and committee. The following courses are open to all graduate students and advanced undergraduates. Additional courses are listed in the Advanced Concentration in Biochemistry and Molecular Biology section under Medical Sciences.

BCH 5413: Mammalian Molecular Biology and Genetics
BCH 6040: Research Discussion in Biochemistry and Molecular Biology
BCH 6107: Biophysical Techniques in Proteomics and Protein Science
BCH 6206: Advanced Metabolism
BCH 6207: Advanced Metabolism: Role of Membranes in Signal Transduction and Metabolic Control
BCH 6208: Advanced Metabolism: Regulation of Key Reactions in Carbohydrate and Lipid Metabolism
BCH 6209: Advanced Metabolism: Regulation of Key Reactions in Amino Acid and Nucleotide Metabolism
BCH 6415: Advanced Molecular and Cell Biology
BCH 6740: Physical Biochemistry/Structural Biology
BCH 6741C: Magnetic Resonance Imaging and Spectroscopy in Living Systems
BCH 6744: Molecular Structure Determination by X-ray Crystallography
College of Liberal Arts and Sciences

Chair: Craig W. Osenberg
Graduate Coordinator: W. Bradley Barbazuk

Complete faculty listing by department: Follow this link.

The Department of Biology offers two graduate programs: Botany and Zoology. Both programs offer graduate work leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

More information regarding these programs is available by following the links below and by visiting our departmental website: http://www.biology.ufl.edu.

BOT 5225C: Plant Anatomy

BOT 5305: Paleobotany

BOT 5505C: Intermediate Plant Physiology

BOT 5625: Plant Geography

BOT 5655C: Physiological Plant Ecology

BOT 5685C: Tropical Botany
BOT 5695C: Ecosystems of Florida
BOT 5725C: Taxonomy of Vascular Plants
BOT 6508C: Proteomics Theory and Practice
BOT 6516: Plant Metabolism
BOT 6566: Plant Growth and Development
BOT 6716C: Advanced Taxonomy
BOT 6726C: Principles of Systematic Biology
BOT 6905: Individual Studies in Botany
BOT 6910: Supervised Research
BOT 6927: Advances in Botany
BOT 6935: Special Topics
BOT 6936: Graduate Student Seminar
BOT 6940: Supervised Teaching
BOT 6943: Internship in College Teaching
BOT 6971: Research for Master's Thesis
BOT 7979: Advanced Research
BOT 7980: Research for Doctoral Dissertation
PCB 5046C: Advanced Ecology
PCB 5307C: Limnology
PCB 5338: Principles of Ecosystem Ecology
PCB 5356: Tropical Ecology
PCB 5415C: Behavioral Ecology
PCB 6049: Seminar in Ecology
PCB 6377C: Physiological Ecology of Vertebrates
PCB 6447C: Community Ecology
PCB 6675C: Evolutionary Biogeography
PCB 6695: Seminar in Evolutionary Biology
ZOO 5115C: Vertebrate Paleontology
ZOO 5486C: Mammalogy
ZOO 6005: Integrative Principles of Zoology I
ZOO 6308: Dynamic Optimization Modeling in Behavioral and Evolutionary Ecology
ZOO 6406: Biology of Sea Turtles
BME 5052L: Biomedical Engineering Laboratory

BME 5085: Patents, Product Development, and Technology Transfer

BME 5401: Biomedical Engineering and Physiology I

BME 5407: Molecular Biomedical Engineering

BME 5500: Biomedical Instrumentation

BME 5703: Statistical Methods for Biomedical Engineering

BME 5937: Special Topics

BME 6010: Clinical Preceptorship

BME 6324: Stem Cell Engineering

BME 6330: Cell and Tissue Engineering

BME 6360: Neural Engineering

BME 6502: Introduction to Medical Imaging

BME 6505: Advanced Diagnostic Radiological Physics

BME 6522: Biomedical Multivariate Signal Processing
BME 6533: Radiologic Anatomy

BME 6534: Advanced Therapeutic Radiological Physics

BME 6535: Radiological Physics, Measurements and Dosimetry

BME 6590: Medical Physics

BME 6591: Therapeutic Radiological Physics I

BME 6592: Therapeutic Radiological Physics II

BME 6593: Therapeutic Radiological Physics III

BME 6705: Mathematical Modeling of Biological and Physiological Systems

BME 6905: Individual Work in Biomedical Engineering

BME 6907: BME Project

BME 6910: Supervised Research

BME 6936: Biomedical Engineering Seminar

BME 6938: Special Topics in Biomedical Engineering

BME 6940: Supervised Teaching

BME 6971: Research for Master's Thesis

BME 7979: Advanced Research

BME 7980: Research for Doctoral Dissertation

Biostatistics Department

College of Public Health and Health Professions
College of Medicine

Interim Chair: Samuel Wu
Graduate Coordinator: Babette Brumback

Complete faculty listing by department: Follow this link.

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/](http://biostat.ufl.edu/education/phd-in-biostatistics/).

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/](http://biostat.ufl.edu/education/ms-in-biostatistics/).
Biostatistics Department

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
Write collaborative papers for peer-reviewed subject matter journals
Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/](http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/).

Master of Science
The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/](http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/).

GMS 6818: Design and Conduct Clinical Trials I
GMS 6861: Applied Biostatistics I
GMS 6862: Applied Biostatistics II
GMS 6863: Analysis and Study Design for High Dimension, Low Sample Size Data

Chemical Engineering Department
Chair: R. Dickinson.
Graduate Coordinator: A. Chauhan.

Complete faculty listing by department: [Follow this link](http://biostat.ufl.edu/education/ims-in-biostatistics/ms-curriculum-overview/).

The Ph.D., M.E., and M.S. degrees in chemical engineering require course work in three core areas:

- The chemical engineering basis area, consisting of three core courses in the mathematical, the molecular, and the continuum bases of chemical engineering
- The chemical engineering science and systems area, consisting of a selection of courses in such areas as transport phenomena, electrochemical engineering, thermodynamics, kinetics, reaction engineering, process control, separation processes, and heat and mass transfer
- The research specialty area, consisting of courses designed to build depth in a field of specialization. Courses may be from other academic units, or may be chemical engineering courses such as colloid science, corrosion, polymer science, advanced materials, and biochemical engineering

BME 6221: Biomolecular Cell Mechanics
BME 6322: Dynamics of Cellular Processes
BME 6644: Pharmacokinetics
ECH 5708: Disinfection, Sterilization, and Preservation
ECH 5938: Topics in Colloid Science
ECH 6126: Thermodynamics of Reaction and Phase Equilibria
ECH 6270: Continuum Basis of Chemical Engineering
ECH 6272: Molecular Basis of Chemical Engineering
ECH 6285: Transport Phenomena
ECH 6326: Computer Control of Processes
ECH 6506: Chemical Engineering Kinetics
ECH 6526: Reactor Design and Optimization
ECH 6709: Electrochemical Engineering Fundamentals and Design
ECH 6726: Interfacial Phenomena I
ECH 6727: Interfacial Phenomena II
ECH 6843: Experimental Basis of Chemical Engineering
ECH 6847: Mathematical Basis of Chemical Engineering
ECH 6851: Impedance Spectroscopy
ECH 6905: Individual Work
ECH 6910: Supervised Research
ECH 6926: Graduate Seminar
ECH 6937: Topics in Chemical Engineering I
ECH 6939: Topics in Chemical Engineering III
ECH 6940: Supervised Teaching
ECH 6971: Research for Master's Thesis
ECH 7938: Advanced Special Chemical Engineering Topics for Doctoral Candidates
ECH 7979: Advanced Research
ECH 7980: Research for Doctoral Dissertation

Chemistry Department

Chair: W. Dolbier
Graduate Coordinator: B. W. Smith

The Department of Chemistry granted its first master's degree in 1909 and the first Ph.D. in 1930. Specializations in biochemistry, organic, physical, inorganic and analytical are offered with extensive interdisciplinary research opportunities (e.g., bio/nano-science, particle science, green chemistry, polymer chemistry, chemical physics, health related biochemistry, chemistry-engineering, and genomics).

The Department presently offers the Master of Science and Doctor of Philosophy degrees with a major in chemistry. The non-thesis Master of Science in Teaching degree is also offered with a major in chemistry.

CHM 5224: Basic Principles for Organic Chemistry
CHM 5235: Organic Spectroscopy
CHM 5275: The Organic Chemistry of Polymers
CHM 5305: Chemistry of Biological Molecules
CHM 5413L: Advanced Physical Chemistry Laboratory
CHM 5511: Physical Chemistry of Polymers
CHM 6036: Chemical Biology
CHM 6037: Chemical Biology and Biochemistry Seminar
CHM 6153: Electrochemical Processes
CHM 6154: Chemical Separations
CHM 6155: Spectrochemical Methods
CHM 6158C: Electronics and Instrumentation
CHM 6159: Mass Spectrometric Methods
CHM 6165: Chemometrics
CHM 6180: Special Topics in Analytical Chemistry
CHM 6190: Analytical Chemistry Seminar
CHM 6225: Advanced Principles of Organic Chemistry
CHM 6226: Advanced Synthetic Organic Chemistry
CHM 6227: Topics in Synthetic Organic Chemistry
CHM 6251: Organometallic Compounds
CHM 6271: The Chemistry of High Polymers
CHM 6301: Enzyme Mechanisms
CHM 6302: Chemistry and Biology of Nucleic Acids
CHM 6303: Methods in Computational Biochemistry and Structural Biology
CHM 6306: Special Topics in Biological Chemistry Mechanisms
CHM 6381: Special Topics in Organic Chemistry
CHM 6390: Organic Chemistry Seminar Presentation
CHM 6391: Organic Chemistry Seminar Discussion
CHM 6430: Chemical Thermodynamics
CHM 6461: Statistical Thermodynamics
CHM 6470: Chemical Bonding and Spectra I
CHM 6471: Chemical Bonding and Spectra II
CHM 6480: Elements of Quantum Chemistry
CHM 6490: Theory of Molecular Spectroscopy
CHM 6520: Chemical Physics
CHM 6580: Special Topics in Physical Chemistry
CHM 6586: Computational Chemistry
CHM 6590: Physical Chemistry Seminar
CHM 6620: Advanced Inorganic Chemistry I
CHM 6621: Advanced Inorganic Chemistry II
CHM 6626: Applications of Physical Methods in Inorganic Chemistry
CHM 6628: Chemistry of Solid Materials
CHM 6670: Inorganic Biochemistry
CHM 6680: Special Topics in Inorganic Chemistry
CHM 6690: Inorganic Chemistry Seminar
The Department of Civil and Coastal Engineering offers two distinct graduate programs: civil engineering and coastal and oceanographic engineering. All degrees except the Ph.D. are available in a thesis or non-thesis option. The non-thesis option has two formats: report and 30-hour non-report. Students who elect the non-thesis report must successfully complete a document of substantial engineering content for a minimum of two hours credit in CEG 6974 for civil engineering majors, or CCE 6905 for coastal and oceanographic engineering majors.

Minor or supporting work is encouraged from a variety of related or allied fields of study. Ph.D. students are required to take a preliminary examination. Requirements for the M.S., M.E., and Ph.D. degrees are given in the Graduate Degrees section of this catalog.
CEG 6117: Advanced Deep Foundation Design
CEG 6201: Experimental Determination of Soil Properties
CEG 6207: Geosensing II
CEG 6405: Seepage in Soils
CEG 6505: Numerical Methods of Geomechanics
CEG 6515: Earth Retaining Systems and Slope Stability
CES 5010: Probabilistic and Stochastic Methods in Civil Engineering
CES 5116: Finite Elements in Civil Engineering
CES 5325: Design of Highway Bridges
CES 5606: Topics in Steel Design
CES 5607: Behavior of Steel Structures
CES 5715: Prestressed Concrete
CES 5726: Design of Concrete Systems
CES 5801: Design and Construction in Timber
CES 5835: Design of Reinforced Masonry Structures
CES 6106: Advanced Structural Analysis
CES 6108: Structural Dynamics
CES 6165: Computer Methods in Structural Engineering
CES 6551: Design of Folded Plates and Shells
CES 6571: Design of Temporary Structures
CES 6585: Wind Engineering
CES 6588: Protective Structures
CES 6590: Impact Engineering
CES 6591: Applied Protective Structures
CES 6592: Retrofit Protective Structures
CES 6593: Advanced Protective Structures
CES 6706: Advanced Reinforced Concrete
CES 6855: Condition Assessment of Structures
CGN 5125: Legal Aspects of Civil Engineering
CGN 5315: Civil Engineering Systems
CGN 5605: Public Works Planning
CGN 5606: Public Works Management
CGN 5715: Experimentation and Instrumentation in Civil Engineering Materials Research

CGN 6150: Engineering Project Management

CGN 6155: Civil Engineering Practice I

CGN 6156: Construction Engineering II

CGN 6505: Properties, Design and Control of Concrete

CGN 6506: Bituminous Materials

CGN 6525: Sustainable Materials

CGN 6905: Special Problems in Civil Engineering

CGN 6910: Supervised Research

CGN 6936: Civil Engineering Graduate Seminar

CGN 6940: Supervised Teaching

CGN 6971: Research for Master's Thesis

CGN 6972: Research for Engineer's Thesis

CGN 6974: Master of Engineering or Engineer Degree Report

CGN 7979: Advanced Research

CGN 7980: Research for Doctoral Dissertation

CWR 5125: Groundwater Flow I

CWR 5127: Evaluation of Groundwater Quality

CWR 5235: Open Channel Hydraulics

CWR 6115: Surface Hydrology

CWR 6126: Variable-Density Groundwater Flow

CWR 6236: Sediment Transport I

CWR 6240: Mixing and Transport in Turbulent Flow

CWR 6255: Diffusive and Dispersive Transport

CWR 6525: Groundwater Flow II

CWR 6537: Contaminant Subsurface Hydrology

EOC 5860: Port and Harbor Engineering

EOC 6196: Littoral Processes

EOC 6430: Coastal Structures

EOC 6850: Numerical Simulation Techniques in Coastal and Ocean Engineering

EOC 6905: Individual Study in Coastal and Oceanographic Engineering

EOC 6932: Selected Field and Laboratory Problems
EOC 6934: Advanced Topics in Coastal and Oceanographic Engineering
EOC 6939: Graduate Seminar
EOC 6971: Research for Master’s Thesis
EOC 6972: Research for Engineer’s Thesis
EOC 7979: Advanced Research
EOC 7980: Research for Doctoral Dissertation
OCP 5293: Coastal Processes
OCP 6050: Physical Oceanography
OCP 6165: Ocean Waves I: Linear Theory
OCP 6165L: Ocean Waves Laboratory
OCP 6167: Ocean Waves II: Nonlinear Theory
OCP 6168: Data Analysis Techniques for Coastal and Ocean Engineers
OCP 6169: Random Sea Analysis
OCP 6295: Estuarine and Shelf Hydrodynamics I
OCP 6297: Coastal and Estuarine Sediment Transport
OCP 6298: Coastal Sediment Transport Processes
TTE 5006: Advanced Urban Transportation Planning
TTE 5256: Traffic Engineering
TTE 5305: Advanced Transportation Systems Analysis
TTE 5805: Geometric Design of Transportation Facilities
TTE 5835: Pavement Design
TTE 5837: Pavement Management Systems
TTE 6205: Freeway Operations and Simulation
TTE 6207: Advanced Highway Capacity Analysis
TTE 6259: Urban Streets Simulation and Control
TTE 6267: Traffic Flow Theory
TTE 6306: Computational Methods in Transportation Engineering
TTE 6315: Highway Safety Analysis
TTE 6505: Discrete Choice Analysis
TTE 6606: Urban Transportation Models

Classics Department

Chair: Victoria Pagán.
Graduate Coordinator: Jennifer Rea.
Complete faculty listing: Follow this link.

The department offers the following degrees and programs: the Doctor of Philosophy in classical studies; the Master of Arts degree in classical studies or Latin; the Master of Latin degree, and the Master of Arts in Teaching degree in Latin. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Within the Ph.D. program are three tracks:

- Philology (prepares students for careers in colleges and universities)
- Classical civilization (available via distance course work)
- Latin and Roman studies (available via distance course work).

Requirements for the philology track of the doctoral degree include:

- 60 credit hours after the M.A. (or a total of 90 credit hours)
- Five additional seminars after the M.A. in classics at the 500 level or higher
- Three of the following seminars: GRE 6425, GRW 6105, LAT 6425, LNW 6105, and CLA 6805
- A reading knowledge of two modern languages, one of which must be German
- Reading lists in Greek and Roman authors
- Supervised experience in teaching Latin, Greek, or civilization courses is advised
- Successful completion of a series of qualifying examinations appropriate to the chosen specialization (Greek reading; Latin reading; classical Greek literature in its historical context; classical Latin literature in its historical context; special author/topic)
- An oral preliminary examination, dissertation, and final examination

The M.A. degree in classical studies is recommended for students who plan to continue on to the doctoral level. The M.A. degree in Latin is recommended for students who plan to pursue a career in secondary teaching. Both M.A. programs require 30 credit hours, including 6 credits of GRW 6971 or LNW 6971, a thesis, and final examination.

The Master of Latin degree is a non-thesis degree, designed for currently employed and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of classics, and enhance their professional qualifications through a program of summer course work and directed independent study and/or distance learning courses during the regular academic year. The Master of Arts in Teaching, a non-thesis degree, is offered with a program in Latin and is intended for students preparing to teach in community colleges or high schools.

CLA 6125: Augustan Age

CLA 6515: Roman Dynasty: Nero and the Julio-Claudians

CLA 6795: Greek and Roman Archeology

CLA 6805: The Classical Research Tradition

CLA 6885: Roman Law and Society

CLA 6895: Athenian Law and Society

CLA 6905: Individual Work

CLA 6930: Greece and the Near East

CLT 6295: Greek Drama in Translation

GRE 6425: Greek Prose Composition

GRE 6755: Epigraphy

GRK 6905: Individual Work in Modern Greek

GRW 6105: The Greek Tradition

GRW 6216: Greek Novel

GRW 6316: Greek Tragedy

GRW 6317: Ancient Greek Comedy

GRW 6345: Greek Lyric Poetry

GRW 6346: Pindar

GRW 6347: Homer

GRW 6386: Greek Historians

GRW 6506: Plato
Clinical and Health Psychology Department

College of Public Health and Health Professions

Department Chair: William W. Latimer.
Graduate Coordinator: S.R. Boggs.
Complete faculty listing: Follow this link.

The Department of Clinical and Health Psychology is a unit of the College of Public Health and Health Professions. The department's programs are its doctoral clinical psychology studies leading to the Ph.D. degree in psychology; an American Psychological Association accredited doctoral internship program; and postdoctoral studies and research. Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

The clinical psychology doctoral curriculum adheres to the scientist-practitioner model of education and training. Program strengths include research, education, and professional training in health care psychology, with organized areas of concentration in clinical health psychology, clinical child/pediatric psychology, neuropsychology, neurorehabilitation and clinical neuroscience, and emotion neuroscience/psychopathology. Education and training experiences are also available in rural psychology. Interested students can apply for acceptance into the Public Health
Program and obtain dual M.P.H./Ph.D. degrees.

Progress in the program is determined by departmental policies which are consistent with American Psychological Association accreditation standards. The curriculum has been continuously accredited by the American Psychological Association since 1953.

Admission to the Department is through appropriate application to the Department’s admission committee. A bachelor's degree is generally adequate preparation for graduate admission. It should include undergraduate courses in both experimental psychology and statistics, along with at least three courses from the following psychology areas: developmental, learning, perception, personality, physiological, and social.

For more information, please see the program page below and our website: [http://chp.phhp.ufl.edu](http://chp.phhp.ufl.edu).

CLP 5316: Health Psychology
CLP 5426: Introduction to Neuropsychology
CLP 6304: Psychological Foundations of Clinical Psychology I
CLP 6307: Human Higher Cortical Functioning
CLP 6308: Psychological Foundations of Clinical Psychology II
CLP 6309: Psychological Foundations of Clinical Psychology III
CLP 6344C: Lifespan Foundations of Behavioral Health and Illness I
CLP 6345: Lifespan Foundations of Behavioral Health and Illness II
CLP 6375: Introduction to Clinical Psychology
CLP 6407: Psychological Treatment I
CLP 6417: Psychological Treatment II
CLP 6425: Seminar in Clinical Neuropsychology
CLP 6430: Clinical Psychological Assessment
CLP 6434C: Clinical Psychology Assessment I
CLP 6435C: Clinical Psychology Assessment II
CLP 6446C: Psychological Assessment of Children
CLP 6447C: Psychological Assessment of Adults
CLP 6476: Lifespan Psychopathology
CLP 6497: Psychopathological Disturbances
CLP 6527C: Measurement, Research Design, and Statistical Analysis in Clinical Psychology I
CLP 6528C: Measurement, Research Design, and Statistical Analysis in Clinical Psychology II
CLP 6529: Applied Multivariate Methods in Psychology
CLP 6905: Individual Work
CLP 6910: Supervised Research
CLP 6940: Supervised Teaching
CLP 6943: Core Practicum in Clinical Psychology
CLP 6945: Advanced Practicum in Neuropsychology
CLP 6946: Advanced Practicum in Applied Medical Psychology
CLP 6947: Practicum in Intervention
CLP 6948: Advanced Practicum in Clinical Child Psychology
CLP 6971: Research for Master's Thesis
CLP 7317: Advanced Health Psychology and Behavior Medicine
CLP 7404C: Special Issues, Methods, and Techniques in Psychological Treatment
CLP 7427C: Neuropsychological Assessment of Children
CLP 7428C: Neuropsychological Assessment of Adults
CLP 7934: Special Topics In Clinical Psychology
CLP 7949: Internship
CLP 7979: Advanced Research
CLP 7980: Research for Doctoral Dissertation
DEP 6216: Psychological Disturbances of Children
GEY 6306: Interpersonal Communication Within the Aging Network
GEY 7408: Psychotherapy with Older Adults

Comparative Law Department

Director and Graduate Coordinator: P.A. Malavet.

Complete faculty listing by department: Follow this link.

The LL.M. in Comparative Law degree is designed for graduates of foreign law schools who want to enhance their understanding of the American legal system and the English common law system from which it evolved. Requirements for this degree are given in the General Information section of this catalog.

The program begins with Introduction to American Law, a 4-credit summer course that gives students a foundation in the American legal process. It also helps students acclimate to the College of Law and the University community before the start of the academic year. During the fall and spring terms, and with the director's approval, students choose their remaining 22 credits from more than 100 Juris Doctor and LL.M. in Taxation courses and seminars. For admission information consult the College of Law Prospectus or write to the Comparative Law Office P.O. Box 117643, University of Florida, Gainesville, FL 32611-7643 USA.

LAW 7801: Introduction to the Legal System of the United States for LL.M. in Comparative Law, Part II
LAW 7805: Legal Writing and Research for LL.M. in Comparative Law
LAW 7906: Directed Research for LL.M. in Comparative Law
LAW 7932: Introduction to the Legal System of the United States for LLM in Comparative Law, Part I

Computer and Information Science and Engineering Department

College of Liberal Arts and Sciences

Chair: Paul Gader
Graduate Coordinator: Jih-kewon Paei.

Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline; to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, Engineer, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- Computer systems: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software
engineering, programming languages, multimedia systems, and web technologies
- **Database and Information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B. Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:
An additional 12 credits of letter-graded course work in CISE beyond the core
6 letter-graded credits from either CISE or (with approval) from some other department.
Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B, to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A maximum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: http://www.cise.ufl.edu

**CAP 5100: Human-Computer Interaction**

**CAP 5416: Computer Vision**

**CAP 5510: Bioinformatics**

**CAP 5515: Computational Molecular Biology**

**CAP 5635: Artificial Intelligence Concepts**

**CAP 5705: Computer Graphics**

**CAP 5805: Computer Simulation Concepts**

**CAP 6137: Malware Reverse Engineering**

**CAP 6402: Aesthetic Computing**

**CAP 6516: Medical Image Analysis**

**CAP 6610: Machine Learning**

**CAP 6615: Neural Networks for Computing**

**CAP 6617: Advanced Machine Learning**

**CAP 6685: Expert Systems**

**CAP 6701: Advanced Computer Graphics**

**CDA 5155: Computer Architecture Principles**

**CDA 5636: Embedded Systems**

**CDA 6156: High Performance Computer Architecture**

**CEN 5035: Software Engineering**

**CEN 6070: Software Testing and Verification**

**CEN 6075: Software Specification**

**CIS 6905: Individual Study**

**CIS 6910: Supervised Research**

**CIS 6930: Special Topics in CIS**

**CIS 6935: Graduate Seminar**

**CIS 6940: Supervised Teaching**
CIS 6971: Research for Master's Thesis
CIS 7979: Advanced Research
CIS 7980: Research for Doctoral Dissertation
CNT 5106C: Computer Networks
CNT 5410: Computer and Network Security
CNT 5412: Network and System Security
CNT 5517: Mobile Computing
CNT 6107: Advanced Computer Networks
CNT 6885: Distributed Multimedia Systems
COP 5536: Advanced Data Structures
COP 5555: Programming Language Principles
COP 5615: Distributed Operating System Principles
COP 5618: Concurrent Programming
COP 5625: Programming Language Translators
COP 5725: Database Management Systems
COP 6726: Database System Implementation
COP 6755: Distributed Database Systems
COT 5405: Analysis of Algorithms
COT 5442: Approximation Algorithms
COT 5519: Sparse Matrix Algorithms
COT 5520: Computational Geometry
COT 5615: Mathematics for Intelligent Systems
COT 6315: Formal Languages and Computation Theory

Dental Sciences Department

College of Dentistry
Endodontics Chair and Graduate Coordinator: Roberta Pileggi
Orthodontics Chair and Graduate Coordinator: Calogero Dolce
Periodontics Chair: Ikramuddin Aukhil; Graduate Coordinator: Rodrigo Neiva
Restorative Dental Sciences Interim Chair: William Willis; Graduate Coordinator: Edgar O'Neill

Complete faculty listing: Follow this link.

The College of Dentistry offers the Master of Science degree in dental sciences with concentrations in endodontics, orthodontics, periodontics, and prosthodontics. These concentrations include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include:

- Satisfactory completion of all course work
- Meeting the requirements for clinical certification in the respective dental specialty
- Thesis or project based on research.

Prerequisites for admission, in addition to those of the Graduate School, include:

- D.D.S. or D.M.D. degree
- Completion of Parts I and II of the American Dental Association's National Board of Dental Examinations.
The application deadline for Endodontics, Periodontics, and Prosthodontics is August 1.
The application deadline of Orthodontics is September 2.

Send applications to:
Master of Science Program,
College of Dentistry,
P.O. Box 100402,
Health Science Center,
University of Florida,
Gainesville, FL 32610-0402

Requirements for the M.S. degree are provided in the Graduate Degrees section of this catalog.
For further information, see the Dental Science program link below.

DEN 6602: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 1: Class I Treatment
DEN 6603: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 2: Class II Treatment
DEN 6604: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 3: Class II Treatment and Overbite Treatments
DEN 6605: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 4: Class II Treatment and Overbite Treatments
DEN 6606: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 5: Class III and Crossbite Treatments and Soft Tissue Considerations
DEN 6607: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 6: Impactions, Transplantations and Stability
DEN 6608: Analysis, Diagnosis, and Treatment Planning: Part I
DEN 6609: Analysis, Diagnosis, and Treatment Planning: Part II
DEN 6610: Biology of Tooth Movement: Part I
DEN 6612: Orthodontic Biomechanics: Part I
DEN 6613: Orthodontic Biomechanics: Part II
DEN 6614: Ortho-Perio Relationships: Part I
DEN 6615: Ortho-Perio Relationships: Part II
DEN 6616: Orthognathic Surgery: Part I
DEN 6617: Orthognathic Surgery: Part II
DEN 6618: Postnatal Growth and Development
DEN 6622: Principles of Occlusion
DEN 6623: Maxillofacial Prosthetics
DEN 6624: Dental Implant Restoration
DEN 6625: Fixed Prosthodontic Ceramics
DEN 6626: Advanced Removable Partial Dentures
DEN 6627: Treatment Planning Seminar
DEN 6642: Introduction to Advanced Endodontics
DEN 6643: Treatment Planning/Cases Presentation
DEN 6644: Nonsurgical Endodontic Care I
DEN 6645: Nonsurgical Endodontic Care II  
DEN 6646: Surgical Endodontics I  
DEN 6647: Surgical Endodontics II  
DEN 6652: Review of Periodontics Literature I  
DEN 6653: Review of Periodontics Literature II  
DEN 6654: Review of Periodontics Literature III  
DEN 6655: Review of Periodontics Literature IV  
DEN 6656: Introduction to Advanced Periodontology  
DEN 6657: Periodontal Histology and Histopathology  
DEN 6658: Treatment Planning in Periodontal Therapy  
DEN 6670: Craniofacial Anomalies  
DEN 6671: Prenatal Growth and Development  
DEN 6672: Materials in Orthodontics  
DEN 6674: Advanced Oral Pathology  
DEN 6675: Craniofacial Pain  
DEN 6678: Advanced Oral Medicine and Drug Interactions in Dentistry  
DEN 6679: Advanced Radiology and Interpretation  
DEN 6680: Principles and Craniofacial Biology and Emerging Therapies  
DEN 6681: Craniofacial Pathobiology  
DEN 6905: Individual Study  
DEN 6910: Supervised Research  
DEN 6934: Special Topics in Dentistry  
DEN 6935: Special Topics in Dentistry  
DEN 6936: Practice Management  
DEN 6940: Supervised Teaching  
DEN 6941: Clinical Teaching in Dentistry  
DEN 6942: Grand Rounds  
DEN 6971: Research for Master's Thesis  
DEN 6973: Project in Lieu of Thesis  

Department of Health Education & Behavior  

Chair: Julie A. Tucker  
Graduate Coordinator: Christine B. Stopka  

Complete faculty listing by department: Follow this link.
The Department of Health Education & Behavior offers a Doctor of Philosophy (Ph.D.) in Health and Human Performance with a concentration in Health Behavior, a non-thesis 30-credit hour Master of Science and a 36-credit Master of Science (M.S.) in Health Education and Behavior. Requirements for the Ph.D. and M.S. degrees are given in the General Information section of this catalog.

The Ph.D. degree program trains health behavior researchers for academic positions in federal health agencies such as the Centers for Disease Control and Prevention and the National Institutes of Health for postdoctoral research fellowships and for the private sector.

The 30-credit hour, non-thesis M.S. degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector. Full-time students can complete this M.S. option in one year. This degree may also give students unique and distinguishing training experiences when applying to professional schools such as law, medicine, physician assistant, dentistry, chiropractic, osteopathy, nursing, occupational therapy, and physical therapy.

The 36-credit hour project in lieu of thesis, and the 36-credit hour thesis options are designed for students interested in developing research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically can complete these options in about 4 semesters.

The Department also offers an accelerated B.S./M.S. program in health education and behavior to enable students to receive both B.S. and M.S. degrees with a reduction of 12 credits (about one semester of coursework).

Students who complete a graduate degree program in the Department of Health Education & Behavior acquire a range of skills required to research, plan, implement, and evaluate health promotion policies and programs aimed at improving the health and well-being of individuals, families, and communities. Specific skills include:

- Conducting needs and capacity assessments to identify health priorities
- Planning, implementing, and evaluating health promotion policies and programs
- Conducting research on questions associated with health problems and their determinants and health promotion policies and programs
- Administering and managing health promotion programs
- Advocating for health promotion policies and programs in schools, communities, health care facilities, and worksites
- Developing social marketing and health communication messages and campaigns
- Researching and developing social media and new media-based health promotion applications
- Serving as a resource person for health information and referrals
- Using a variety of teaching-learning strategies appropriate to the target audience and setting
- Writing scholarly and professional articles
- Working collaboratively with public and private agencies, nongovernmental organizations (NGOs) and the private sector to achieve the goal of a healthier population.

This degree prepares the health promotion specialists and health behavior scientists to work in:

- Local, state, and federal health, education and social agencies
- Nongovernmental health organizations
- Schools and universities
- Healthcare settings
- Private sector

Sample position titles for individuals with this degree include:

- Health education specialist
- Health promotion specialist
- Public health adviser or public health analyst
- Health promotion coordinator or health promotion consultant
- Campus health educator or patient health educator,
- Health communication specialist
- Wellness specialist
- Wellness promotion coordinator
- Prevention specialist

For additional information, visit [http://www.hhp.ufl.edu/heb](http://www.hhp.ufl.edu/heb).

HSC 5135: Emotional Health Education
HSC 5138: Human Sexuality
HSC 5142: Drug Education
HSC 5315C: Teaching Health in Elementary Schools
HSC 5536C: Medical Terminology for the Health Professions
HSC 5576: Nutrition Education for Special Populations
HSC 5606: Spirituality and Health
HSC 5618: Advanced Exercise Therapy, Adapted Physical Activity, & Health
HSC 5626: Minority Health Issues
HSC 5657: Health and End-of-Life Issues
HSC 5925: Seminar in Health Education
HSC 5956: Writing for Professional Publications
HSC 6037: Philosophy and Principles of Health Education
HSC 6216: Environmental Health
HSC 6235: Patient Health Education
HSC 6318: Planning Health Education Programs
HSC 6506: Epidemiology
HSC 6567: Health Promotion and Programming in Gerontology
HSC 6571: Contemporary Issues in Health Promotion
HSC 6575: Women's Health Issues
HSC 6595: HIV/AIDS Education
HSC 6603: Theories of Health Behavior and Practice in Health Education
HSC 6605: Scientific Foundations of Holistic Health
HSC 6625: Trends in International Health
HSC 6629: Health Promotion for Priority Populations
HSC 6637: Social Marketing and Health
HSC 6646: Community Health Methods in Injury Prevention & Control
HSC 6665: Health Communication
HSC 6667: Health Communication Programs
HSC 6668: Interpersonal Communication and Health
HSC 6695: Worksite Health Promotion
HSC 6712: Evaluating Health Education Programs
HSC 6735: Research Methods in Health Education
HSC 6850: Internship in Health Education
HSC 6904: Readings in Health Education
HSC 6910: Supervised Research
HSC 6935: Current Topics in Health Education
HSC 6971: Research for Master’s Thesis
HSC 6973: Project in Lieu of Thesis
HSC 7904: Advanced Readings in Health Education
HSC 7905: Advanced Independent Study in Health Education
HSC 7937: Advanced Seminar in Health Education
PEQ 5127: Advanced Instructors of Adapted Aquatics
PHC 6105: Health Promotion Policy and Practice
Department of Languages, Literatures and Cultures

Complete faculty listing by department: Follow this link

FLE 6385: Foreign Languages Teaching Methods
FRE 6060: Beginning French for Graduate Students I
FRE 6061: Beginning French for Graduate Students II
FRE 6466: Advanced Translation and Stylistics
FRE 6735: Special Studies in French Linguistics
FRE 6736: The French language in the Americas
FRE 6785: French Phonetics and Phonology
FRE 6827: Sociolinguistics of French
FRE 6845: History of the French Language
FRE 6855: Structure of French
FRE 6856: French in the 21st Century
FRE 6940: Supervised Teaching
FRE 6943: Romance Language Teaching Methods
FRE 6945: Practicum in Advanced College Teaching
FRE 6956: Overseas Studies in French
FRW 6217: Seventeenth-Century French Prose
FRW 6276: Readings in Eighteenth-Century Literature
FRW 6288: Twentieth-Century French Novel
FRW 6315: Seventeenth-Century French Drama
FRW 6328: Twentieth-Century French Theater
FRW 6346: French Poetry of the Renaissance
FRW 6355: Modern French Poetry
FRW 6396: French Cinema
FRW 6416: Later French Medieval Literature
FRW 6536: The Romantic Period
FRW 6556: French Realism and Naturalism
FRW 6715: The Philosophic Movement
FRW 6780: Studies in Francophone Literature and Culture (Excluding the Caribbean and Sub-Saharan Africa
FRW 6805: Introduction to Graduate Study and Research
FRW 6825: French Critical Theory
FRW 6900: Special Study in French Literature
FRW 6905: Individual Work
FRW 6910: Supervised Research
FRW 6938: Seminar in French Literature
FRW 6971: Research for Master's Thesis
FRW 7979: Advanced Research
FRW 7980: Research for Doctoral Dissertation
GER 6060: Beginning German for Graduate Students I
GER 6061: Beginning German for Graduate Students II
GER 6505: German Culture
GER 6940: Supervised Teaching
GET 6295: Weimar Cinema
GET 6299: New German Cinema and its Legacy
GEW 6205: Foundations of Literary Study
GEW 6266: History of the German Novel
GEW 6305: Studies in German Drama and Theater
GEW 6405: Medieval and Renaissance Literature
GEW 6425: From Luther to Lessing: Early Modern German Literature
GEW 6535: German Classical and Romantic Literature
GEW 6558: Young Germany, Biedermeier, Realism, and Naturalism
GEW 6725: Culture and Society in the Weimar Republic
GEW 6735: Modern German Literature
GEW 6736: Contemporary German Literature
GEW 6745: Literature and Culture in the Third Reich
GEW 6826: German Literary Theory
GEW 6900: Seminar in Germanic Languages and Literatures
GEW 6901: Special Study in Germanic Languages and Literatures
GEW 6905: Independent Study
GEW 6910: Supervised Research
GEW 6971: Research for Master's Thesis
GEW 7979: Advanced Research
GEW 7980: Research for Doctoral Dissertation
Digital Worlds Institute

Director: James C. Oliverio
Graduate Coordinator: Marko Suvajdzic
Complete faculty listing: Follow this link.

The Digital Worlds Institute exists to nurture leading edge education between the arts, communications, engineering and the sciences, utilizing advanced media systems and digital culture. By bringing together the diverse talents of University of Florida faculty, students, and staff in a multifaceted collaborative environment, the Institute serves as a platform for interdisciplinary research and teaching that would not have occurred within the confines of any one college or department. Through the use of interactive tools and technologies, the Institute promotes transdisciplinary creativity across classrooms, continents and cultures.

For more information, please see the program page below and our website: https://www.digitalworlds.ufl.edu.

DIG 5555C: Digital Media Projection Design I
DIG 5931C: Special Topics
DIG 6027C: Interactive Storytelling
DIG 6028: Roots of Digital Culture
DIG 6050C: Entertainment Technology
DIG 6125C: Digital Design & Visualization
DIG 6126C: Interaction Design
DIG 6256C: Audio Design For Digital Production
DIG 6358C: APPLIED 3D MODELING
DIG 6556C: Digital Media Projection Design II
DIG 6589C: Digital Portfolio
DIG 6719: Videogame Theory and Analysis
DIG 6744C: Movement, Media and Machines
DIG 6751C: Protocols for Multimedia Interfaces
DIG 6788C: Digital Production & Game Design
DIG 6840C: Interdisciplinary Research Seminar in Digital Arts & Sciences
DIG 6850C: Digital Arts & Sciences Convergence
DIG 6906: Independent Study - Graduate Level
DIG 6950C: Digital Performance Production
DIG 6971: Research for Master's Thesis
DIG 6973: Capstone Project in Lieu of Thesis

Economics Department

Chair: R. D. Blair
Graduate Coordinator: S. M. Slutsky.
Complete faculty listing: Follow this link.

The department offers the Master of Arts (thesis and nonthesis option) and Doctor of Philosophy degrees in economics with specializations in econometrics, economic theory, industrial organization, international economics, monetary economics, and public finance.

MA requirements: A minimum of 36 credits of course work is required for the M.A. with and without thesis. A maximum of six credits of the research course ECO 6971 may be included.
for a master's degree with thesis. The following core courses are required: ECO 7408 and ECO 7404 or equivalent, ECO 7415 or equivalent, ECO 7115, and ECO 7206.

Ph.D. requirements: Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) an acceptable score on the GRE, and (c) for nonnative speakers of English, an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

All core courses must be completed in the first year. In addition, students must complete courses in three fields of specializations and pass qualifying examinations in two of those fields.

Complete descriptions of the minimum requirements for the M.A. and Ph.D. degrees are provided elsewhere in this catalog.

ECO 5715: Open Economy Macroeconomics
ECO 6075: Economics/Consumer Education
ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
ECO 6409: Game Theory Applied to Business Decisions
ECO 6716: International Macroeconomics
ECO 6906: Individual Work in Economics
ECO 6910: Supervised Research
ECO 6936: Special Topics
ECO 6940: Supervised Teaching
ECO 6957: International Studies in Economics
ECO 6971: Research for Master's Thesis
ECO 7113: Information Economics
ECO 7115: Microeconomic Theory
ECO 7118: Markets and Institutions
ECO 7119: Information, Incentives, and Agency Theory
ECO 7120: General Equilibrium and Welfare Economics
ECO 7206: Macroeconomic Theory I
ECO 7272: Economic Growth I
ECO 7404: Game Theory for Economists
ECO 7405: Mathematical Economics: Game Theory
ECO 7406: Dynamic Economics: Theory and Applications
ECO 7408: Mathematical Methods and Applications to Economics
ECO 7415: Statistical Methods in Economics
ECO 7424: Econometric Models and Methods
ECO 7426: Econometric Methods I
ECO 7427: Econometric Methods II
ECO 7452: Best Empirical Practices in Economics
ECO 7516: Tax Theory and Public Policy
ECO 7525: Welfare Economics and The Second Best
ECO 7534: Empirical Public Economics I
ECO 7535: Empirical Public Economics II
ECO 7536: Theoretical Public Economics
ECO 7706: Theory of International Trade
ECO 7707: International Economic Relations
ECO 7925: Research Skills Workshop
ECO 7938: Advanced Economics Seminar
ECO 7979: Advanced Research
ECO 7980: Research for Doctoral Dissertation
ECP 5415: Antitrust Policy and Managerial Decisions
ECP 5702: Managerial Economics
ECP 5705: Economics of Business Decisions
ECP 6407: Economics for Managing Information for Electronic Commerce
ECP 6417: Public Policy and Social Control
ECP 6701: Competitive Strategies in Expanding Markets
ECP 6708: Cases in Competitive Strategy
ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
ECP 7408: Empirical Industrial Organization
ECP 7418: Economics of Regulation
ECP 7419: Current Research in Regulation
HSA 6436: Health Economics

Electrical and Computer Engineering Department

Chair: J. Harris.
Graduate Coordinators: G. Bosman, J. McNair

Complete faculty listing Follow this link.

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the Graduate Degrees Section of this catalog. For more information about our program, please visit the link below.

CNT 6805: Network Science and Applications
EEE 5317C: Introduction to Power Electronics
EEE 5320: Bipolar Analog IC Design
EEE 5322: VLSI Circuits and Technology
EEE 5364: Fundamentals of Data Converters
EEE 5400: Future of Microelectronics Technology
EEE 5405: Microelectronic Fabrication Technologies
EEE 5426: Introduction to Nanodevices
EEE 5502: Foundations of Digital Signal Processing
EEE 5544: Noise in Linear Systems
EEE 5556: Electronic Countermeasures
EEE 6287: Brain Machine Interface Engineering
EEE 6321: MOS Analog IC Design
EEE 6323: Advanced VLSI Design
EEE 6325: Computer Simulation of Integrated Circuits and Devices
EEE 6328C: Microwave IC Design
EEE 6374: Radio Frequency (RF) Integrated Circuits and Technologies
EEE 6382: Semiconductor Physical Electronics
EEE 6390: VLSI Device Design
EEE 6397: Semiconductor Device Theory I
EEE 6402: Nonclassical Si-Based Nanoscale CMOS Devices
EEE 6428: Computational Nanoelectronics
EEE 6431: Carbon Nanotubes
EEE 6460: Advanced Microsystem Technology
EEE 6465: Design of MEMS Transducers
EEE 6503: Digital Filtering
EEE 6504: Adaptive Signal Processing
EEE 6512: Image Processing and Computer Vision
EEE 6586: Automatic Speech Processing
EEL 5182: State Variable Methods in Linear Systems
EEL 5225: Principles of Micro-Electro-Mechanical Transducers
EEL 5400: Airborne Sensors and Instrumentation
EEL 5401: Airborne Laser Scanning: Data Processing and Analysis
EEL 5441: Fundamentals of Photonics
EEL 5462: Advanced Antenna Systems
EEL 5490: Lightning
EEL 5666C: Intelligent Machines Design Laboratory
EEL 5718: Computer Communications
EEL 5721: Reconfigurable Computing
EEL 5737: Principles of Computer System Design
EEL 5764: Computer Architecture
EEL 5840: Elements of Machine Intelligence
EEL 5905: Individual Work
EEL 5934: Special Topics in Electrical Engineering
EEL 6065: Electrical & Computer Engineering Technical Writing
EEL 6264: Advanced Electric Energy Systems I
EEL 6265: Advanced Electric Energy Systems II
EEL 6443: Integrated and Fiber Optics
EEL 6486: Electromagnetic Field Theory and Applications I
EEL 6487: Electromagnetic Field Theory and Applications II
EEL 6507: Queuing Theory and Data Communications
EEL 6509: Wireless Communication
EEL 6528: Digital Communications with Software-defined Radios
EEL 6532: Information Theory
EEL 6533: Statistical Decision Theory
EEL 6535: Digital Communications
EEL 6537: Spectral Estimation
EEL 6550: Error Correction Coding
EEL 6555: Signal Processing for Active Sensing
EEL 6588: Wireless Ad Hoc Networks
EEL 6591: Wireless Networks
EEL 6614: Modern Control Theory
EEL 6617: Linear Multivariable Control
EEL 6619: Robust Control Systems
EEL 6686: Embedded Systems Seminar
EEL 6706: Fault-Tolerant Computer Architecture
EEL 6763: Parallel Computer Architecture
EEL 6769: Hardware-Software Interactions: Nonnumeric Processing
EEL 6814: Neural Networks for Signal Processing
EEL 6825: Pattern Recognition and Intelligent Systems
The Department of English offers the Master of Arts degree (thesis and nonthesis options) and the Doctor of Philosophy degree in English, along with the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog. For more information about our programs, please follow the hyperlinks below or visit our website: http://www.english.ufl.edu/programs.html.
ENG 6910: Supervised Research
ENG 6932: Film and Video Production
ENG 6971: Research for Master's Thesis
ENG 7939: Seminar in Variable Topics
ENG 7979: Advanced Research
ENG 7980: Research for Doctoral Dissertation
ENL 6206: Studies in Old English
ENL 6216: Studies in Middle English
ENL 6226: Studies in Renaissance Literature
ENL 6236: Studies in Restoration and 18th-Century Literature
ENL 6246: Studies in Romantic Literature
ENL 6256: Studies in Victorian Literature
ENL 6276: Studies in 20th-Century British Literature
LAE 6940: Supervised Teaching
LAE 6947: Writing Theories & Practices
LIT 5335: Approaches to Children's and Adolescent Literature
LIT 6037: Studies in Verse
LIT 6047: Studies in Drama
LIT 6236: Postcolonial Studies
LIT 6308: Studies in Comics and Animation
LIT 6309: Communications and Popular Culture
LIT 6327: Studies in Folklore
LIT 6357: African-American or African Diaspora Lit/Cultures
LIT 6358: Theoretical Approaches to Black Cultural Studies
LIT 6855: Issues in Cultural Studies
LIT 6856: Cultural Studies: Interventions
LIT 6857: Cultural Studies: Movements
LIT 6934: Variable Topics
SPC 6239: Studies in Rhetorical Theory

Entomology and Nematology Department

College of Agricultural and Life Sciences
Chair: John L. Capinera
Graduate Coordinator: Heather J. McAuslane
The Entomology and Nematology Department offers the Master of Science (thesis and nonthesis options) and Doctor of Philosophy degrees in entomology and nematology with the following specializations: entomology, nematology, and pest management. Minimum requirements for the M.S. and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

The Department also offers a cooperative Doctor of Philosophy degree with Florida A&M University and distance education courses leading to the M.S. degree. Members of the Graduate Faculty include the department resident faculty, faculty located on University of Florida campuses away from Gainesville, scientists with other State of Florida agencies such as the Division of Plant Industry and Florida Department of Agriculture and Consumer Services, and scientists of the U.S. Department of Agriculture. The Graduate Faculty is qualified to direct graduate students in all specialties of entomology, nematology, and acarology.

New graduate students should have backgrounds in biology, chemistry, physics, and mathematics. Minor deficiencies may be made up after entering graduate school.

For more information, please see the program page below, and visit our website: [http://entnemdept.ufl.edu](http://entnemdept.ufl.edu).

**ALS 5156: Agricultural Ecology Principles and Applications**

**ALS 6166: Exotic Species and Biosecurity Issues**

**ALS 6935: Topics in Biological Invasions**

**ENY 5006: Graduate Survey of Entomology**

**ENY 5006L: Graduate Survey of Entomology Laboratory**

**ENY 5031C: Insect Field Biology**

**ENY 5151C: Techniques in Insect Systematics**

**ENY 5160C: Survey of Science with Insects**

**ENY 5164: Graduate Survey of Invertebrate Field Biology**

**ENY 5212: Insects and Wildlife**

**ENY 5223C: Biology and Identification of Urban Pests**

**ENY 5225C: Principles of Urban Pest Management**

**ENY 5236: Insect Pest and Vector Management**

**ENY 5241: Biological Control**

**ENY 5245: Agricultural Acarology**

**ENY 5332: Graduate Survey of Urban Vertebrate Pest Management**

**ENY 5405: Insects as Vectors of Plant Pathogens**

**ENY 5516: Turf and Ornamental Entomology**

**ENY 5566: Tropical Entomology**

**ENY 5567: Tropical Entomology Field Laboratory**

**ENY 5572: Advanced Apiculture**

**ENY 5611: Immature Insects**

**ENY 5820: Insect Molecular Genetics**

**ENY 6166: Insect Classification**

**ENY 6203: Insect Ecology**

**ENY 6203L: Insect Ecology Laboratory**
ENY 6248: Termite Biology and Control
ENY 6401: Insect Physiology
ENY 6401L: Insect Physiology Laboratory
ENY 6454: Behavioral Ecology and Systematics of Insects
ENY 6591C: Advanced Mosquito Identification
ENY 6593: Advanced Mosquito Biology
ENY 6651C: Insect Toxicology
ENY 6665: Advanced Medical and Veterinary Entomology I
ENY 6665L: Advanced Medical and Veterinary Entomology Laboratory
ENY 6706: Forensic Entomology
ENY 6706L: Forensic Entomology Laboratory
ENY 6821: Insect Microbiology
ENY 6822C: Molecular Biology Techniques with Invertebrates and Their Pathogens
ENY 6905: Problems in Entomology
ENY 6910: Supervised Research
ENY 6931: Entomology Seminar
ENY 6932: Special Topics in Entomology
ENY 6934: Selected Studies in Entomology
ENY 6940: Supervised Teaching
ENY 6942: Insect Diagnostics
ENY 6943: Entomology Internship
ENY 6944: Entomology Extension Internship
ENY 6971: Research for Master’s Thesis
ENY 7979: Advanced Research
ENY 7980: Research for Doctoral Dissertation
NEM 5004C: Graduate Survey of Nematology
NEM 5707C: Plant Nematology
NEM 6101C: Nematode Morphology and Anatomy
NEM 6102: Nematode Systematics and Molecular Phylogeny
NEM 6102L: Nematode Systematics and Molecular Phylogeny Laboratory
NEM 6103: Insect Parasitic Nematodes
NEM 6104L: Insect Parasitic Nematodes Laboratory
NEM 6201: Nematode Ecology
The Department of Environmental and Global Health focuses upon environmental factors that impact human health. Department faculty, scientists, and students employ numerous disciplines in studying these environmental factors: virology, bacteriology, parasitology, entomology, toxicology, epidemiology, water sciences, veterinary health, environmental engineering, aerosol biology, wildlife health, etc. Research work often involves international travel and collaboration. A central theme for the department is the interdisciplinary thinking called One Health which reflects the collaborations necessary to tackle public health's most difficult problems. Faculty, students and staff often perform research in the laboratories in the Emerging Pathogens Institute, the Center for Environmental and Human Toxicology, or the Aquatic Pathobiology Laboratory.

The Department of Environmental and Global Health offers graduate work leading to the degrees of Doctor of Philosophy, Master of Health Science, and Master of Public Health.

PHC 6006: An Introduction to One Health Problem Solving

PHC 6722: Environmental and Global Health Research Methods Rotation

PHC 6900: Environmental and Global Health Journal Club

PHC 6947: Occupational Health Field Research Experience

Environmental and Land Use Law Department

Director and Graduate Coordinator: Christine A. Klein

Florida's sensitive, varied and beautiful natural environment makes the University of Florida a natural choice for students who want to focus on the national and global issues of land use and environmental law. Florida provides a perfect setting to study first-hand the efforts to reconcile growth and conservation.

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

For more information, please see the program page below and our website: http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law.
Environmental Engineering Sciences Department

Director: K. Hatfield
Graduate Coordinator: P. Chadik

Complete faculty listing [Follow this link.]

The Department of Environmental Engineering Sciences offers graduate study in the following areas: Air Resources; Biogeochemical Systems; Environmental Nanotechnology; Solid and Hazardous Waste Management; Storm Water, Water Supply and Waste Water; Sustainability Science & Engineering Systems Ecology and Ecological Engineering and Water Resources. Students graduated from the program will demonstrate depth in individual focus areas as well as breadth of core knowledge concepts in all areas. Please visit the link below for more information about our program in Environmental Engineering Sciences.

CWR 6116: Advanced Surface Hydrology
CWR 6252: Environmental Biochemistry of Trace Metals
EES 5105: Advanced Wastewater Microbiology
EES 5107: Ecological and Biological Systems
EES 5207: Environmental Chemistry
EES 5245: Water Quality Analysis
EES 5305C: Ecological and General Systems
EES 5306: Energy Analysis
EES 5307: Ecological Engineering
EES 5315: Ecology and the Environment
EES 5415: Environmental Health
EES 6007: Advanced Energy and Environment
EES 6009: Ecological Economics
EES 6026C: Environmental Systems Dynamics
EES 6028: Spatial Modeling Using Geographic Information Systems
EES 6051: Advanced Environmental Planning and Design
EES 6135: Aquatic Microbiology
EES 6136: Aquatic Autotrophs
EES 6137: Aquatic Heterotrophs
EES 6140: Biology of Exotic Species
EES 6208: Principles of Water Chemistry I
EES 6209: Principles of Water Chemistry II
EES 6225: Atmospheric Chemistry
EES 6246: Advanced Water Analysis
EES 6301: Comparative Approaches in Systems Ecology
EES 6308C: Wetland Ecology
EES 6309: Wetland Treatment Systems
EES 6318: Principles of Industrial Ecology
EES 6335: Springs Ecosystems
EES 6356: Estuarine Systems
EES 6371: Environmental Meteorology and Oceanography
EES 6405: Environmental Toxicology
ENV 5072: Pollution Control and Prevention
ENV 5075: Environmental Policy
ENV 5105: Foundations of Air Pollution
ENV 5305: Advanced Solid Waste Treatment Design
ENV 5306: Municipal Refuse Disposal
ENV 5518: Field Methods in Environmental Hydrology
ENV 5520: Fluid Flow in Environmental Systems
ENV 5555: Wastewater Treatment
ENV 5565: Hydraulic Systems Design
ENV 6050: Advanced Pollutant Transport
ENV 6052: Immiscible Fluids in Porous Media
ENV 6116: Air Pollution Sampling and Analysis
ENV 6126: Air Pollution Control Design
ENV 6130: Aerosol Mechanics
ENV 6146: Atmospheric Dispersion Modeling
ENV 6215: Health Physics
ENV 6216: Radioactive Wastes
ENV 6301: Advanced Solid Waste Containment Design
ENV 6416: Advanced Stormwater Control Systems
ENV 6435: Advanced Water Treatment Process Design
ENV 6435C: Advanced Water Treatment Process Design
ENV 6435L: Water Treatment Process Design Laboratory
ENV 6437: Advanced Wastewater System Design
ENV 6438: Advanced Potable Water Systems Design
ENV 6439: Activated Carbon: Environmental Design and Application
ENV 6441: Water Resources Planning and Management
The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: [http://epidemiology.phhp.ufl.edu](http://epidemiology.phhp.ufl.edu).

**PHC 6010: Data Management and Statistical Computing for Epidemiology**

**PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II**

**PHC 6052: Introduction to Biostatistical Methods**

**PHC 6070: Epidemiology of Aging**

**PHC 6405: Theoretical Foundations of Public Health**

**PHC 6517: Public Health Concepts in Infectious Diseases**

**PHC 6711: Measurement in Epidemiology and Outcomes Research**

**PHC 6716: Survey Research Methods**

**PHC 6912: Special Project: Independent Research**

**PHC 6938: Oral and Craniofacial Epidemiology**

**PHC 7065: Critical Skills in Epidemiological Data Management**

**PHC 7427: Ethics in Population Science**
The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for those degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: http://epidemiology.phhp.ufl.edu.

GMS 6801: Epidemiology, Prevention, and Control of Infectious Diseases
GMS 6813: Clinical Trials
GMS 6819: Design and Conduct Clinical Trials II
GMS 6827: Advanced Clinical Trial Methods
GMS 6841: Design and Analysis of Translational Research in Biomedical Sciences
GMS 6882: Directed Readings in Epidemiology and Health Policy
GMS 6884: Research in Epidemiology and Health Policy
PHC 6008: Cardiovascular Epidemiology
PHC 6034: Epidemic Investigation
PHC 7007: Cancer Epidemiology
PHC 7902: Epidemiology Supervised Research Writing Circle
PHC 7934: Seminar I: Epidemiology Past, Present, and Future

Family, Youth, and Community Sciences Department

Interim Chair: Tracy Irani
Graduate Coordinator: Larry F. Forthun

The FYCS graduate program is an interdisciplinary applied social science program that prepares students for advanced degrees (e.g., Ph.D.) and careers in such areas as family and youth services, Extension and community-based education, community development and nonprofit management, program planning and evaluation, and social policy. Graduates find careers in both the public and private sectors including:

- Child and Youth Development in areas such as juvenile justice, dropout prevention programs, recreational and camp programs, and youth ministry;
- Community Development Practice in local and regional government, private nonprofit organizations (such as chambers of commerce, local development corporations, and local, national and international foundations) and citizen's groups;
- Nonprofit Organizational Management, such as management of community based, nonprofit organizations;
- Family and Social Services, such as family preservation programs, assistance for abused and neglected children and other public assistance programs; and
- Cooperative Extension Service in such areas as youth development, family and consumer sciences and community development.

Contact the graduate coordinator for more information.

FYC 5008: Personal and Family Tax Planning
FYC 5009: Personal and Family Insurance Planning
FYC 5106: Personal and Family Retirement and Estate Planning
FYC 5935: Personal and Family Financial Planning Capstone
FYC 6020: Principles of Family, Youth, and Community Sciences
FYC 6111: Families and Violence
FYC 6117: Military Families in Community Context
FYC 6131: Ethics for FYCS Practitioners
FYC 6207: Adolescent Problematic Behavior
FYC 6221: Grant Proposals for Community-Based Organizations
FYC 6222: Parenting and Child Relationships
FYC 6223: Promoting Positive Youth Development
FYC 6224: Resilience and Positive Youth Development
FYC 6230: Theories of Youth and Family Development
FYC 6234: Theoretical Approaches to Youth Programming
FYC 6302: Sustainable Community Development
FYC 6320: Community Development and Civic Engagement
FYC 6330: Theories of Community Development
FYC 6331: Involving Youths in Community Issues
FYC 6412: Historical Foundations of Philanthropy
FYC 6421: Nonprofit Organizations
FYC 6422: Policy Issues and Case Studies in Nonprofit Organizations
FYC 6423: Non-Governmental Organizations
FYC 6424: Fund Raising for Community Nonprofit Organizations
FYC 6425: Risk Management in Nonprofit Organizations
FYC 6620: Program Planning and Evaluation for Human Service Delivery
FYC 6662: Public Policy and Human Resource Development
FYC 6800: Scientific Reasoning and Research Design
FYC 6802: Advanced Research Methods for Family, Youth, and Community Sciences
FYC 6901: Problems in Family, Youth, and Community Sciences
FYC 6912: Nonthesis Project in Family, Youth, and Community Sciences
FYC 6932: Topics, in Family, Youth, and Community Sciences
FYC 6933: Seminar in Human Resource Development
FYC 6934: Professional Internship/Practicum in Family, Youth, and Community Sciences
FYC 6971: Research for Master's Thesis

Finance, Insurance, and Real Estate Department

*Chair: Michael D. Ryngaert*
*Graduate Coordinator: Mahen Nimalendran*

*Complete faculty listing: Follow this link.*

The Department of Finance, Insurance, and Real Estate offers graduate work leading to the Master of Science degree with major programs in finance and real estate; the Master of Science in Entrepreneurship (M.S.E.); and the Doctor of Philosophy degree in business administration with a concentration in finance, insurance, quantitative analysis, or real estate. Complete descriptions of the minimum requirements for the M.S., M.S.E, and Ph.D. degrees are provided in the *Graduate Degrees* section of this catalog.

Finance, Real Estate, and Entrepreneurship are also available as concentrations within the M.B.A program. For information about the M.B.A. program, please consult that listing in the *Graduate Degrees* section.

For more information see the program pages below, and visit our website: [http://warrington.ufl.edu/departments/fire](http://warrington.ufl.edu/departments/fire).

**ENT 5275: Family Business Management**

**ENT 6006: Entrepreneurship**

**ENT 6008: Entrepreneurial Opportunity**

**ENT 6016: Venture Analysis**

**ENT 6116: Business Plan Formation**

**ENT 6416: Venture Finance**

**ENT 6506: Social Entrepreneurship**

**ENT 6616: Creativity in Entrepreneurship**

**ENT 6905: Individual Work in Entrepreneurship**

**ENT 6930: Special Topics**

**ENT 6933: Entrepreneurship Lecture Series**

**ENT 6946: Entrepreneurial Consulting Project**

**ENT 6950: Integrated Technology Ventures**

**ENT 6957: International Studies in Entrepreneurship**

**FIN 5405: Business Financial Management**

**FIN 5437: Finance I: Asset Valuation, Risk, and Return**

**FIN 5439: Finance II: Capital Structure and Risk Management Issues**

**FIN 6108: Personal Financial Management**

**FIN 6246: Money and Capital Markets**

**FIN 6296: Capitalism**

**FIN 6306: Investment Banking**

**FIN 6418: International Cash Flow Management**

**FIN 6425: Corporation Finance**

**FIN 6427: Measuring and Managing Value**
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
Fisher School of Accounting

Warrington College of Business Administration

Director: Gary A. McGill
Graduate Coordinators: Dominique DeSantiago, Stephen Asare

Complete faculty listing by department: [Follow this link](http://warrington.ufl.edu/accounting).

As a professional school in a major public research university, the Fisher School of Accounting (FSA) is committed to scholarly research, teaching, and service to advance knowledge and prepare future leaders for business, professional, and academic careers.

The Fisher School of Accounting offers graduate work leading to the Master of Accounting (M.Acc.) degree with a major in accounting, and the Ph.D. degree with a major in business administration and an accounting concentration. Requirements for these degrees are available in the [Graduate Degrees](http://warrington.ufl.edu/accounting) section of this catalog.

For more information, please see the program pages below, or visit our website: [http://warrington.ufl.edu/accounting](http://warrington.ufl.edu/accounting).

**ACG 5005:** Financial Accounting

**ACG 5065:** Financial and Managerial Accounting

**ACG 5075:** Managerial Accounting

**ACG 5226:** Advanced Accounting

**ACG 5505:** Governmental Accounting

**ACG 5637:** Auditing I

**ACG 5647:** Auditing II

**ACG 5815:** Accounting Regulation

**ACG 6136:** Accounting Theory

**ACG 6175:** Financial Reporting and Analysis

**ACG 6207:** Accounting for Risk

**ACG 6265:** International Accounting and Taxation

**ACG 6635:** Issues in Audit Practice

**ACG 6685:** Forensic Accounting

**ACG 6691:** International Auditing

**ACG 6697:** Information Systems Assurance

**ACG 6905:** Individual Work in Accounting

**ACG 6935:** Special Topics in Accounting

**ACG 6940:** Supervised Teaching

**ACG 7885:** Accounting Research I

**ACG 7886:** Accounting Research II
ACG 7887: Research Analysis in Accounting
ACG 7939: Theoretical Constructs in Accounting
ACG 7979: Advanced Research
ACG 7980: Research for Doctoral Dissertation
TAX 5005: Introduction to Federal Income Taxation
TAX 5025: Federal Income Tax 1
TAX 5027: Federal Income Tax 2
TAX 5065: Tax Professional Research
TAX 6105: Corporate Taxation
TAX 6115: Advanced Corporate Taxation
TAX 6205: Partnership Taxation
TAX 6526: International Taxation
TAX 6726: Executive Tax Planning
TAX 6877: State and Local Taxation

Food and Resource Economics Department

College of Agricultural and Life Sciences

Interim Chair: Rodney L. Clouser
Acting Graduate Coordinator: Sherry Larkin

Complete faculty listing by department: Follow this link

The Food and Resource Economics Department offers the Master of Agribusiness (M.AB) (non-thesis), Master of Science with Concentration in Agribusiness (M.S.AB.) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Department participates in programs with the Center for Latin American Studies, the Center for African Studies, the Center for Tropical Agriculture, the School of Natural Resources and Environment, the College of Law, and the Florida Sea Grant College Program.

The Department programs reflects the diversity of Florida's agriculture which has more than fifty major commodities. With over thirty faculty involved in a full range of research, extension, and teaching programs in areas including Agricultural Marketing, International Trade, Policy, Production/Farm Management, International Development, Marine Economics, Natural Resource and Environmental Economics, Community/Regional Development and Labor Economics. In addition to the main campus location, the department has faculty at research centers throughout the state.

Several members of the faculty have garnered international reputations in diverse fields such as trade policy, generic advertising, citrus economics, sugar policy, business retention and expansion, leadership development, consumer attitudes towards genetically modified food, and dairy marketing.

The Department offers a combined bachelor's/master's degree program for the Master of Science and Master of Science with Concentration in Agribusiness. Contact the Graduate Program Office in 1170 McCarty Hall for information.

For more information, please see the program pages below, and see our website: http://www.fred.ifas.ufl.edu.

AEB 5167: Economic Analysis in Small Farm Livelihood Systems
AEB 5188: Economics of Agribusiness Decisions
AEB 5326: Agribusiness Financial Management
AEB 5516: Quantitative Methods in Agribusiness Decisions
AEB 5757: Strategic Agribusiness Human Resource Management
AEB 6106: Microeconomic Principles and Analysis
AEB 6139: Strategic Agribusiness Management
AEB 6145: Agricultural Finance
AEB 6183: Agribusiness Risk Management
AEB 6225: Public Policy and the Agribusiness Firm
AEB 6301: Food Wholesale and Retail Marketing
AEB 6363: Agricultural Marketing
AEB 6385: Management Strategies for Agribusiness Firms
AEB 6533: Static and Dynamic Optimization Models in Agriculture
AEB 6553: Elements of Econometrics
AEB 6592: Mathematical Programming for Economic Analysis
AEB 6675: International Agribusiness Marketing
AEB 6815: Science and Research Methodology
AEB 6817: Survey Research Methods for Economists
AEB 6905: Problems in Food and Resource Economics
AEB 6910: Supervised Research
AEB 6921: Workshop in Food and Resource Economics I
AEB 6933: Special Topics
AEB 6934: Workshop in Food and Resource Economics II
AEB 6942: Advanced Applications in Agribusiness Experience
AEB 6971: Research for Master's Thesis
AEB 7108: Microeconomic Theory II
AEB 7174: Economic Coordination and Organizational Behavior in Agribusiness
AEB 7182: Agricultural Risk Analysis and Decision Making
AEB 7184: Production Economics
AEB 7240: Macroeconomic Theory in Open Economies II
AEB 7373: Consumer Demand and Applied Analysis
AEB 7453: Natural Resource and Environmental Economics
AEB 7483: Seminar in Natural Resource and Environmental Economics
AEB 7571: Econometric Methods I
AEB 7572: Econometric Methods II
AEB 7645: Economic Development and Agriculture
AEB 7979: Advanced Research
AEB 7980: Research for Doctoral Dissertation
Food Science and Human Nutrition Department

College of Agricultural and Life Sciences

Chair: Susan S. Percival
Graduate Coordinators: Harry S. Sitren (M.S. in Food Science and Human Nutrition / Ph.D. in Food Science), James F. Collins (Ph.D. in Nutritional Sciences)

The Food Science and Human Nutrition Department (FSHN) is one of the world’s largest combined academic programs where food science, nutritional sciences, and dietetics are all studied within one department. FSHN has nearly 30 full-time faculty members, 80 graduate assistants, and close to 1,000 undergraduate students. Our programs are accredited by the Institute of Food Technologists (IFT) and the Academy of Nutrition and Dietetics. After completing undergraduate degrees, our students typically move on to professional employment, further education or training in food or nutrition graduate programs, or on to professional school programs. We have a strong record of excellent placement of our graduate students in industry and professional organization employment positions, as faculty members at colleges and universities, or in postdoctoral training experiences.

Our faculty has trained at institutions from around the world; they have been widely successful in their teaching, research, and extension efforts. Throughout our programs in food science, nutrition, and dietetics, our faculty is recognized nationally and internationally as experts in their respective fields.

The Food Science and Human Nutrition Department offers programs leading to the degrees of Master of Science in Food Science and Human Nutrition, Doctor of Philosophy in Food Science, and Doctor of Philosophy in Nutritional Sciences (offered under the auspices of the Center for Nutritional Sciences). Minimum requirements for these degrees are located in the Graduate Degrees section of this catalog.

For more information please click the links to the program pages below, or see our website: http://fshn.ifas.ufl.edu.

DIE 6241: Advanced Medical Nutrition Therapy
DIE 6242: Advanced Medical Nutrition Therapy II
DIE 6516: Professional Development in Dietetics
DIE 6905: Problems in Dietetics
DIE 6938: Advanced Dietetic Seminar
DIE 6942: Dietetic Internship I
DIE 6944: Dietetic Internship II
DIE 6949: Dietetic Internship in Sports Nutrition
FOS 5126C: Psychophysical Aspects of Foods
FOS 5205: Current Issues in Food Safety and Sanitation
FOS 5225C: Principles in Food Microbiology
FOS 5437C: Food Product Development
FOS 5561C: Citrus Processing Technology
FOS 5645: Functional Foods and Nutraceuticals
FOS 5732: Current Issues in Food Regulations
FOS 6125C: Sensory Evaluation of Food
FOS 6215: Principles of Food Safety
FOS 6216: Food Safety Systems
FOS 6217: Food Safety, Sanitation, and Microbiology
FOS 6226C: Advanced Food Microbiology
FOS 6315C: Advanced Food Chemistry
FOS 6317C: Flavor Chemistry and Technology
FOS 6355C: Instrumental Analysis and Separations
FOS 6428C: Advanced Food Processing
FOS 6455C: Industrial Food Fermentations
FOS 6736: Food Regulations
FOS 6905: Problems in Food Science
FOS 6910: Supervised Research
FOS 6915: Research Planning
FOS 6936: Topics in Food Science
FOS 6938: Food Science Seminar
FOS 6940: Supervised Teaching
FOS 6971: Research for Master's Thesis
FOS 7979: Advanced Research
FOS 7980: Research for Doctoral Dissertation
HUN 5246: Current Issues in Dietary Supplements
HUN 5441: Metabolic Response to Enteral and Parenteral Nutrition
HUN 5447: Nutrition and Immunity
HUN 6245: Advanced Human Nutrition
HUN 6255: Clinical Nutrition
HUN 6301: Nutritional Aspects of Lipid Metabolism
HUN 6305: Nutritional Aspects of Carbohydrates
HUN 6321: Proteins and Amino Acids in Nutrition
HUN 6331: Vitamins in Human Nutrition
HUN 6356: Minerals in Nutrition
HUN 6812C: Analytical Techniques in Nutritional Biochemistry
HUN 6905: Problems in Nutritional Sciences
HUN 6910: Supervised Research
HUN 6936: Topics in Nutritional Sciences
HUN 6938: Nutritional Sciences Seminar
HUN 6939: Advanced Clinical Nutrition
HUN 6940: Supervised Teaching
HUN 6971: Research for Master's Thesis
HUN 7979: Advanced Research
HUN 7980: Research for Doctoral Dissertation
Geography Department

Chair: M. W. Binford
Graduate Coordinator: C. J. Matyas

Complete faculty listing by department: Follow this link.

The Department of Geography offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The focus of the Department is in human-environment interactions, with "environment" interpreted very broadly. The Department provides four main areas of specialization for graduate research: economic and cultural geography; resource management and land use and land cover change; medical geography; and physical geography. Economic and cultural geography concerns such topics as spatial economic theory and housing and care of the elderly. Resource management and land-use and land-cover change focus on agricultural change and resource conservation and development in the tropics and subtropics, and rural and urban land use and land cover change in tropical and temperate regions. Africa and Latin America are the primary areas of regional emphasis outside of the U.S. Physical geography in the Department concentrates on climatology, fluvial geomorphology, and hydrology. Medical geography studies the geographic aspects of human health including disease ecology and transmission and healthcare issues. The Department's extensive geographic information system, remote sensing, and computer cartography teaching and research facilities contribute to and support all of the areas of research. Faculty from the Department are also major participants in the Emerging Pathogens Institute, Florida Climate Institute, Land Use and Environmental Change Institute (L.U.E.C.I.), and the Water Institute. Prospective students should examine the research interests of the Graduate Faculty to obtain a more detailed sense of the Department's specialties (see the departmental website: www.geog.ufl.edu).

To ensure the incorporation of relevant interdisciplinary perspectives in each student's program, the Department maintains close ties with other departments in Liberal Arts and Sciences, and with programs in African studies, Latin American studies, the School of Natural Resources and Environment, the Institute on Aging, urban and regional planning, tropical agriculture, tropical ecology, water resources, the Warrington College of Business Administration, the College of Agriculture and Life Sciences, College of Public Health and Health Professions, and the Hydrological Sciences Academic Cluster. Certificates in certain of these fields may be obtained in addition to graduate degrees in geography. Geography administers the Graduate Certificate in Applied Atmospheric Sciences.

A graduate student should preferably have an undergraduate major in geography, but applicants with degrees in one of the social or physical sciences are accepted into the Department's graduate program. Deficiencies in undergraduate work in geography must be corrected concurrently with registration in graduate level courses. All students in the graduate program are required to take courses in contemporary geographic thought and geographic research skills.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

GEA 6419: Seminar: South America
GEA 6466: Seminar on Geography of Amazonia
GEA 6468: Resource Utilization and Conservation in Latin America
GEO 5305: Environmental Biogeography
GEO 5346: Natural Hazards
GEO 5556: Geography of Innovation and Technological Change
GEO 5605: Advanced Urban Geography
GEO 5809: Geography of World Agriculture
GEO 5905: Individual Study: Directed Reading
GEO 5920: Geography Colloquium
GEO 5945C: Field Course in Geography
GEO 6118: Contemporary Geographic Thought and Research
GEO 6119: Proposal Writing in Geography
GEO 6160: Introduction to Quantitative Methods for Geographers
GEO 6161: Intermediate Quantitative Methods for Geographers
GEO 6166: Advanced Quantitative Methods for Spatial Analysis
GEO 6255: Climatology
GEO 6282: Fluvial Morphology
GEO 6348: Floods Seminar
GEO 6375: Land Change Science Seminar
GEO 6429: Seminar: Cultural Geography
GEO 6435: Seminar in Population
GEO 6451: Medical Geography
GEO 6495: Environment and Behavior
GEO 6905: Individual Work
GEO 6921: How to Survive and Thrive in Academia
GEO 6931: Seminar in Cultural and Political Ecology
GEO 6938: Selected Topics in Geography
GEO 6971: Research for Master’s Thesis
GEO 7979: Advanced Research
GEO 7980: Research for Doctoral Dissertation
GEY 6341: Shelter and Care Options for U.S. Elderly
GIS 5008C: Maps and Graphs
GIS 5009C: Advanced Cartography
GIS 5028C: Advanced Aerial Photo Interpretation
GIS 5038C: Remote Sensing
GIS 5107C: Geographic Information Systems in Research
GIS 5306: Geographic Information Systems Applications in Environmental Systems
GIS 5540: Business Geography and New Real Estate Market Analysis
GIS 6104: Spatial Networks
GIS 6425C: GIS Models for Public Health
MET 5504: Weather and Forecasting
MET 6530: Hurricanes
MET 6565: Seminar in Atmospheric Teleconnections
MET 6752: Atmospheric Data Analysis

Geological Sciences Department

Chair: P. A. Mueller.
Graduate Coordinator: J. M. Jaeger.
Complete faculty listing: Follow this link.

The Department of Geological Sciences is composed of a group of internationally recognized faculty, graduate students, and dedicated support staff. Faculty and students in the Department of Geological Sciences are involved in exciting and groundbreaking research projects throughout the world and in Florida. The Department houses world-class analytical and computing facilities for research and teaching.

The Department has identified six primary areas of emphasis in its research and teaching programs: environmental geology and hydrology, palaeoclimatology, tectonophysics, geochemistry and mineralogy/petrology, marine and coastal geology, and paleomagnetism. For more detailed information on current departmental activities, faculty, and research centers, see http://web.geology.ufl.edu. The Department has collaborative, interdisciplinary programs of study and research with the Florida Museum of Natural History, the Center for Wetlands Research, the Land Use and Environmental Change Institute (L.U.E.C.I.), and the hydrological sciences cluster.
ESC 5211: Current Topics in Earth Science for Teachers

GLY 5156: Geologic Evolution of North America

GLY 5245: Hydrogeochemistry

GLY 5246: Geochemistry

GLY 5247: Surface and Ground Water Interactions

GLY 5248: Physical Geochemistry

GLY 5255: Organic Geochemistry and Geobiology

GLY 5328: Advanced Igneous Petrology

GLY 5455: Introduction to Geophysics and Tectonics

GLY 5466: Seismology and Earth Structure

GLY 5468: Terrestrial Gravity and Magnetism

GLY 5476: Environmental Geophysics

GLY 5558C: Sedimentology

GLY 5576: Continental Margin Stratigraphy

GLY 5705: Geomorphology

GLY 5736: Marine Geology

GLY 5786L: Topics in Field Geology

GLY 5827: Ground Water Geology

GLY 6075: Global Climate Change: Past, Present, and Future

GLY 6268C: Isotope Geology

GLY 6297: Topics in Geochemistry

GLY 6425: Tectonics

GLY 6519: Stratigraphy and Timescales

GLY 6620C: Micropaleontology

GLY 6695: Topics in Paleoclimatology

GLY 6826: Hydrogeologic Modeling

GLY 6862: Numerical Methods in Earth Sciences

GLY 6905: Individual Work

GLY 6931: Seminar

GLY 6932: Special Topics in Geology

GLY 6940: Supervised Teaching

GLY 6943: Internship in College Teaching
GLY 6971: Research for Master's Thesis
GLY 7979: Advanced Research
GLY 7980: Research for Doctoral Dissertation

Health Outcomes and Policy Department

College of Medicine

Chair: Betsy Shenkman
Graduate Coordinator: Jill Herndon
Complete faculty listing by department: Follow this link.

Students can pursue either a Master of Science degree or a Graduate Certificate.

There is increasing emphasis on assessing health outcomes throughout the lifespan in a variety of health care and community settings. Nationally, the National Institute of Health and other federal and state agencies focus on the development of evidence-based programs to promote health, improve health care delivery, and enhance health outcomes. Outcomes research generates evidence that informs health care program design in clinical and community settings, the promotion of effective clinical and community interventions, quality of care, cost-effective and clinically appropriate choices for patients in allocation of health care resources (clinical effectiveness), and incorporation of best practice models into health-related programs and policies. Outcomes research also provides mechanisms to understand how to translate research into practice and policy, how to improve the quality and efficiency of health programs, and how to achieve equitable and appropriate delivery of health programs and clinical care, particularly for underserved and vulnerable populations.

Our graduate programs are designed to train professionals in the health care and health research fields about the science that supports the development and evaluation of evidence-based clinical and community-based programs focused on improving health outcomes. Further, our programs emphasize methods for translating research into practice and policy. The unique combination of courses offered through these graduate programs will give trainees the tools needed to examine health outcomes and policies in a variety of settings across different age spans and to examine the individual, social, health system, and health policy factors that influence health outcomes.

In addition to traditional graduate students, both programs are available to medical students, post-doctoral students, fellows, residents, Ph.D. students, and junior faculty.

GMS 6802: Examining Health Outcomes for Chronic Diseases in Clinical and Community-based Research
GMS 6803: Data Management for Clinical Research
GMS 6811: Grant Writing Skills for Clinical Research
GMS 6812: Cancer Health Outcomes Assessment
GMS 6816: Pediatric Child Health Outcomes Assessment for Clinical and Community-Based Research
GMS 6821: Measuring and Analyzing Health Outcomes I
GMS 6822: Measuring and Analyzing Health Outcomes II
GMS 6823: Methods for Evaluating Health Care Outcomes and Costs: Module 1
GMS 6824: Methods for Evaluating Health Care Outcomes and Costs: Module 2
GMS 6825: Methods for Evaluating Health Care Outcomes and Costs: Module 3
GMS 6826: Advanced Design and Methodology for Case-Control Studies in Clinical Research
GMS 6829: Longitudinal Research Design
GMS 6830: Health Outcomes Research and Policy Development
GMS 6832: Economic Methods for Evaluating Value in Health
GMS 6833: Health Care Policy and Vulnerable Populations
GMS 6834: Health Policy and Formulation of Payment Mechanisms for Health Care
GMS 6835: Health Policy Issues in Children's Health
GMS 6842: Translational Research Methods
GMS 6844: Experimental and Quasi-Experimental Research Designs for Community Settings
The Department of Health Services Research, Management, and Policy offers degree programs at both the master's and doctoral level. The Master of Health Administration (M.H.A.) prepares individuals for management positions in the health care field. The Department also participates in the Master of Public Health (M.P.H.) degree by offering a concentration in Public Health Management and Policy (more information available here).

At the doctoral level, the Department offers the Ph.D. degree in Health Services Research. This full-time program prepares graduates to investigate and evaluate the complexities of health care systems in the U.S. and elsewhere. Health services research is a multidisciplinary field that examines the delivery, organization, financing, and outcomes of health care services.

Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below and our website: http://hsrmp.phhp.ufl.edu.
HSA 6385: Performance Management for Health Care Managers
HSA 6427: Legal and Ethical Issues in Health Administration
HSA 6855: Internship in Health Administration
HSA 6858: Internship in Health Services Research
HSA 6878: Externship in Legal Aspects of Health Services Administration
HSA 6905: Individual Study in Health Administration
HSA 6910: Supervised Research
HSA 6911: Research Seminar in Health Services Research
HSA 6930: Special Topics in Health Services Administration
HSA 6935: Seminar in Health Administration
HSA 6939: Capstone Seminar in Health Administration
HSA 6940: Supervised Teaching
HSA 6946: Internship in Public Health Management and Policy
HSA 7106: Seminar in Health Care Access and Utilization
HSA 7116: Health Services Organizational Research
HSA 7157: Research Foundations of Health Policy
HSA 7414: Society, Health, and Medical Care
HSA 7437: Advanced Health Economics
HSA 7707: Health Services Research Methods I
HSA 7708: Health Services Research Methods II
HSA 7759: Quality and Outcomes in Health Services Research
HSA 7905: Advanced Individual Study in Health Services Research
HSA 7936: Seminar in Health Care Costs and Financing
HSA 7938: Advanced Seminar in Health Services Research
HSA 7979: Advanced Research
HSA 7980: Research for Doctoral Dissertation

History Department

College of Liberal Arts and Sciences

Chair: Sean P. Adams
Graduate Coordinator: Elizabeth Dale

The Department of History offers the following graduate degrees: Master of Arts with fields of specialization in African, Asian, European, Latin American, and United States history, and the Doctor of Philosophy with fields of specialization in African, European, Latin American, and United States history. In addition to materials required by the Graduate School for admission, applicants must send directly to the History Department the following evidence of aptitude and interest: Three recommendations, from persons competent to evaluate your potential for graduate work; A 3- to 5-page essay identifying your career goals and particular areas of interest; a sample of your written work in history. Interested students should consult the department web page for more information.

AFH 5297: History of African Agriculture
AFH 5348: History of West Africa
AFH 5458: Southern Africa
AFH 5934: Topics in African History
AFH 6259: Seminar in Modern Africa
AFH 6805: Theories and Methods of African History
AFH 6934: Africa
AFH 6936: Readings in African History
AMH 5405: The South to 1860
AMH 5905: Special Studies
AMH 5930: Topics in United States History
AMH 6198: Early American Society
AMH 6199: Nineteenth Century America
AMH 6290: Modern America
AMH 6356: Research in U.S. History
AMH 6406: Readings in Southern History, 1607-1865
AMH 6465: Seminar in U.S. Urban History
AMH 6506: Seminar in American Labor History
AMH 6516: Seminar in American Foreign Relations and Expansion
AMH 6557: Seminar in Constitutional or Legal History of the United States
ASH 5388: Topics in East Asian History
EUH 5195: The Archaeology of the Middle Ages
EUH 5546: Topics in British History
EUH 5934: Topics in European History
EUH 6126: Readings in Medieval History
EUH 6174: Conversion in the Middle Ages
EUH 6175: Ethnicity in the Middle Ages
EUH 6176: Villages and Peasants in the Middle Ages
EUH 6177: Economy and Society in Late Antiquity and the Early Middle Ages
EUH 6213: Europe, 1500-1763
EUH 6289: Readings, Modern Europe
EUH 6469: Modern German History
EUH 6935: Readings, Early Modern Europe
EUH 6937: Readings in Mediterranean History

HIS 5450: Slavery in the New World: Comparative Perspectives

HIS 5484: Science and the Enlightenment

HIS 5485: Special Studies in the History of Science

HIS 6060: Historical Method

HIS 6061: Introduction to Historiography

HIS 6416: Problems in Comparative Legal History

HIS 6445: Postcolonial Theories

HIS 6469: Topics in Historiography of History of Science

HIS 6478: Topics in the Scientific Revolution

HIS 6480: Pre-Newtonian Sciences

HIS 6488: Readings in the History of Science

HIS 6905: Individual Study

HIS 6910: Supervised Research

HIS 6940: Supervised Teaching

HIS 6943: Internship in College Teaching

HIS 6957: Nonthesis Project in History

HIS 6971: Research for Master's Thesis

HIS 7979: Advanced Research

HIS 7980: Research for Doctoral Dissertation

LAH 5438: Modern Mexico

LAH 5475: Caribbean, Nineteenth and Twentieth Centuries

LAH 5476: Caribbean History to 1800: Slavery, Colonization, and International Conflict

LAH 5527: Andean Nations

LAH 5607: History of Amazonia

LAH 5637: Brazil Since 1750

LAH 5933: Topics in Caribbean History

LAH 5934: Topics in Latin American History

LAH 6934: Seminar in Colonial Spanish America

LAH 6936: Seminar in History of Brazil

LAH 6938: Seminar in Modern Spanish America

Horticultural Sciences Department
College of Agricultural and Life Sciences

Chairs: K.M. Folta (Interim Chair, Horticultural Sciences) and W. Mackay (Environmental Horticulture)
Graduate Coordinator: G. A. Moore (Horticultural Sciences) and L. Trenholm (Environmental Horticulture)

Complete faculty listing: [Follow this link.](http://www.hos.ufl.edu)

The Horticultural Sciences Department Graduate Program at the University of Florida has a wide array of opportunities for graduate study.

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HSE) and Horticultural Sciences (HS) departments and offers graduate programs leading to the Master of Science (thesis or nonthesis options) and the Doctor of Philosophy degrees. Members of the program's Graduate Faculty include department resident faculty and faculty at University of Florida Research and Education Centers located throughout Florida.

The Horticultural Sciences Department offers a combined bachelor's/master's degree program. Please contact the graduate coordinator for information.

For admission to the HOS graduate program, apply to either the HS or HSE departments, depending on your career/research interest. Details about the program and how to apply are listed on their website: [http://hos.ufl.edu](http://hos.ufl.edu).

### Course List:

**ALS 5934:** Graduate Professional Development Seminar

**HOS 5085C:** Principles of Postharvest Horticulture

**HOS 5115C:** Horticultural Plant Morphology and Identification

**HOS 5242:** Genetics & Breeding of Vegetable Crops

**HOS 5306:** Molecular Biology of Plant Hormones

**HOS 5330:** Postharvest Technologies for Horticultural Crops

**HOS 5432:** Advanced Nutritional Management of Ornamental Crops

**HOS 5515C:** Greenhouse and Nursery Operations

**HOS 5516C:** Advanced Production of Greenhouse and Nursery Crops

**HOS 5555:** Tropical Fruit Production and Research in Florida

**HOS 5711:** Phytochemicals in Food & Health

**HOS 6201:** Breeding Perennial Cultivars

**HOS 6236:** Molecular Marker Assisted Plant Breeding

**HOS 6331:** Postharvest Biology

**HOS 6345:** Environmental Physiology

**HOS 6412:** Nutrition of Horticultural Crops

**HOS 6523:** Research and Development in Turfgrass Science

**HOS 6545:** Advanced Citiculture I

**HOS 6546:** Advanced Citiculture II

**HOS 6905:** Problems in Horticultural Science

**HOS 6910:** Supervised Research

**HOS 6931:** Horticultural Science Seminar

**HOS 6932:** Special Topics

**HOS 6934:** Professional Seminar Preparation

**HOS 6940:** Supervised Teaching
HOS 6941: Practicum in Horticultural Science
HOS 6971: Research for Master’s Thesis
HOS 7979: Advanced Research
HOS 7980: Research for Doctoral Dissertation
ORH 5026C: Advanced Annual and Perennial Gardening
ORH 5086: Advanced Golf and Sports Turf Management
ORH 5282: Orchid Biology and Culture
ORH 5322C: Palm Biology and Culture
ORH 5817C: Advanced Florida Native Landscaping
ORH 7941: Doctor of Plant Medicine: Internship in Environmental Horticulture
PCB 5065: Advanced Genetics
PLS 5222C: Propagation of Horticultural Crops
PLS 5241C: Advanced Plant Micropropagation
PLS 5405: Advanced Composting Technology

Human Development and Organizational Studies in Education Department

Director: Linda B. Eldridge
Graduate Coordinator: Patricia Ashton

Complete faculty listing by department: Follow this link.

Programs leading to the Master of Arts in Education (M.A.E.), Master of Education (M.Ed.), Education Specialist (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees are offered through this school with programs in Counseling and Counselor Education, Educational Leadership, Higher Education Administration, Marriage and Family Counseling, Mental Health Counseling, Research and Evaluation Methodology, School Counseling and Guidance, and Student Personnel in Higher Education.

Requirements for these degrees are given in the Graduate Degrees section of this catalog.

More information can be found at our website: http://education.ufl.edu/hdose

EDA 5938: Special Topics
EDA 6061: Educational Organization and Administration
EDA 6107: Leading Change in Educational Organizations
EDA 6192: Educational Leadership: The Individual
EDA 6193: Educational Leadership: Instruction
EDA 6195: Educational Policy Development
EDA 6215: Communications in Educational Leadership
EDA 6222: Administration of School Personnel
EDA 6225: Labor Relations in Public Education
EDA 6232: Public School Law
EDA 6242: Public School Finance
EDA 6271: Technology Leadership for Educational Administrators
EDA 6423: Data-Driven Decision Making in Educational Organizations
EDA 6503: The Principalship
EDA 6905: Individual Work
EDA 6931: Special Topics
EDA 6935: Problems in School Administration and Supervision
EDA 6948: Supervised Practice in School Administration
EDA 6971: Research for Master’s Thesis
EDA 7206: Organizational Leadership in Education
EDA 7945: Practicum in Supervision and Administration
EDA 7979: Advanced Research
EDA 7980: Research for Doctoral Dissertation
EDA 7985: Research Design in Educational Administration
EDF 5441: Assessment in General and Exceptional Student Education
EDF 6113: Educational Psychology: Human Development
EDF 6211: Educational Psychology: General
EDF 6215: Educational Psychology: Learning Theory
EDF 6232: Principles of Learning and Instructional Practice
EDF 6400: Quantitative Foundations of Education Research Overview
EDF 6401: Educational Statistics
EDF 6403: Quantitative Foundations of Educational Research
EDF 6434: Educational Measurement
EDF 6436: Theory of Measurement
EDF 6471: Survey Design and Analysis in Educational Research
EDF 6475: Qualitative Foundations of Educational Research
EDF 6481: Quantitative Research Methods in Education
EDF 6905: Individual Study
EDF 6910: Supervised Research
EDF 6938: Special Topics
EDF 6940: Supervised Teaching
EDF 6941: Practicum in Educational Research
EDF 6971: Research for Master’s Thesis
EDF 7117: Affective Development and Education

EDF 7405: Advanced Quantitative Foundations of Educational Research

EDF 7412: Structural Equation Models

EDF 7413: Advanced Topics in Structural Equation Modeling

EDF 7435: Rating Scale Design and Analysis in Educational Research

EDF 7439: Item Response Theory

EDF 7474: Multilevel Models

EDF 7479: Qualitative Data Analysis: Approaches and Techniques

EDF 7483: Qualitative Data Collection: Approaches and Techniques

EDF 7486: Methods of Educational Research

EDF 7491: Evaluation of Educational Products and Systems

EDF 7639: Research in Educational Sociology

EDF 7931: Seminar in Educational Research

EDF 7932: Multivariate Analysis in Educational Research

EDF 7979: Advanced Research

EDF 7980: Research for Doctoral Dissertation

EDG 6250: The School Curriculum

EDG 6285: Evaluation in the School Program

EDG 6356: Teaching, Learning and Assessment

EDG 6905: Individual Work

EDG 6910: Supervised Research

EDG 6931: Special Topics

EDG 6940: Supervised Teaching

EDG 6971: Research for Master's Thesis

EDG 6973: Project in Lieu of Thesis

EDG 7222: Curriculum Theory and Research

EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education

EDG 7665: Bases of Curriculum and Instruction Theory

EDG 7941: Field Experience in Curriculum and Instruction

EDG 7979: Advanced Research

EDG 7980: Research for Doctoral Dissertation

EDH 6040: Theory of College Student Development

EDH 6046: Diversity Issues in Higher Education
EDH 6049: Domestic and International College Student Services
EDH 6051: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community Junior College in America
EDH 6066: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6503: Resource Development in Higher Education
EDH 6632: Current Issues in Community College Leadership
EDH 6637: Crisis Management in Higher Education
EDH 6931: Special Topics in Higher Education
EDH 6935: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7505: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDP 6052: Cognitive Psychology Applied to Education
EDS 6140: Supervision of Instruction
MHS 5005: Introduction to Counseling
MHS 6000: Assessment and Treatment of Family Violence
MHS 6020: Counseling in Community Settings
MHS 6061: Spiritual Issues in Multicultural Counseling
MHS 6071: Diagnosis and Treatment of Mental Disorders
MHS 6200: Assessment in Counseling
MHS 6340: Career Development
MHS 6401: Counseling Theories and Applications
MHS 6421: Play Counseling and Play Process with Children
MHS 6428: Multicultural Counseling
MHS 6430: Introduction to Family Counseling
MHS 6440: Marriage Counseling
MHS 6450: Substance Abuse Counseling
MHS 6464: Introduction to Disaster Mental Health Counseling
MHS 6466: Trauma and Crisis Intervention: Theory and Practice
MHS 6468: Multicultural issues in disaster mental health counseling
MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
MHS 6471: Sexuality and Mental Health
MHS 6480: Developmental Counseling Over the Life Span
MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
MHS 6500: Group Counseling: Theories and Procedures
MHS 6602: Educational Mediation
MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
MHS 6720: Professional Identity and Ethics in Counseling
MHS 6831: Supervision for a Split Internship
MHS 6905: Individual Work
MHS 6910: Supervised Research
MHS 6940: Supervised Teaching
MHS 6971: Research for Master’s Thesis
MHS 7402: Brief Therapy
MHS 7407: Advanced Counseling Theories
MHS 7431: Advanced Family Counseling
MHS 7600: Consultation Procedures
MHS 7610: Practicum in Counseling Supervision
MHS 7730: Seminar in Counseling Research
MHS 7740: Research in Counseling
MHS 7800: Practicum in Counseling
MHS 7804: Group Supervision in Agency Counseling
MHS 7805: Practicum in Agency Counseling
MHS 7806: Practicum in Marriage and Family Counseling
MHS 7807: Group Supervision in Marriage and Family Counseling
MHS 7830: Internship in Counseling and Development-600 Hours
MHS 7840: Internship in Counselor Education
MHS 7946: Internship in Agency Program Management
MHS 7979: Advanced Research
MHS 7980: Research for Doctoral Dissertation
SDS 6401: Counseling Skills for Non-Counselors
SDS 6411: Counseling with Children
SDS 6413: Counseling Adolescents
SDS 6436: Family-School Intervention
SDS 6520: Family, Student Development and Role of Teacher as Adviser
SDS 6620: Organization and Administration of School Counseling Programs
SDS 6831: Supervision for a Split Internship
SDS 6905: Individual Work
SDS 6936: Seminar in Counselor Education
SDS 6938: Special Topics
SDS 7800: Practicum in School Counseling
SDS 7820: Group Supervision in School Counseling
SDS 7830: Internship in Counseling and Development-600 Hours

Industrial and Systems Engineering Department

Chair: J. Geunes.
Graduate Coordinator: J. C. Smith and P. Momcilovic.

Complete faculty listing by department: [Follow this link](#)

The Department of Industrial and Systems Engineering offers the Master of Engineering and the Master of Science degrees, each with a thesis or nonthesis option, with specialization in engineering management, manufacturing and logistics, operations research, quality engineering, and special interest options such as health systems. In addition, the Department offers the Engineer degree and the Doctor of Philosophy degree with specialization in linear, combinatorial, nonlinear, and global optimization; supply chain management and e-commerce; financial engineering; manufacturing management; facilities location and layout; quality engineering; and stochastic processes.

Complete descriptions of the requirements for the M.E., M.S., Engineer, and Ph.D. degrees are provided in the General Information section of this catalog.

A degree in one of the engineering disciplines or in mathematics, statistics, physics, computer sciences, quantitative management, or similar fields is prerequisite. Where the student's background is deficient, an articulation program of foundation courses will be required.

The Department offers a combined bachelor's/master's degree program of B.S/I.S.E./Master of Science (Management), B.S/I.S.E./Master of Engineering or Master of Science, and a B.S. from disciplines within the College of Engineering/Master of Science or Master of Engineering. Contact the graduate coordinator for information.

EIN 6227: Advanced Quality Management and Engineering for Business Processes
EIN 6336: Advanced Production and Inventory Control
EIN 6357: Advanced Engineering Economy
EIN 6367: Facilities Layout and Location
EIN 6392: Manufacturing Management
EIN 6905: Special Problems
EIN 6910: Supervised Research
EIN 6918: Graduate Seminar
EIN 6940: Supervised Teaching
EIN 6971: Research for Master's Thesis
EIN 6972: Research for Engineer's Thesis
EIN 7933: Special Problems
EIN 7979: Advanced Research
EIN 7980: Research for Doctoral Dissertation
ESI 5236: Reliability Engineering
ESI 6162C: Advanced Industrial Applications of Microprocessors
ESI 6314: Deterministic Methods in Operations Research
ESI 6321: Applied Probability Methods in Engineering
ESI 6323: Models for Supply Chain Management
ESI 6341: Intro to Stochastic Optimization
ESI 6355: Decision Support Systems for Industrial and Systems Engineers
ESI 6417: Linear Programming and Network Optimization
ESI 6418: Linear Programming Extensions and Applications
ESI 6420: Fundamentals of Mathematical Programming
ESI 6429: Introduction to Nonlinear Optimization
ESI 6448: Discrete Optimization Theory
ESI 6449: Integer Programming
ESI 6470: Principles of Manufacturing Systems Engineering
ESI 6492: Global Optimization
ESI 6529: Digital Simulation Techniques
ESI 6533: Advanced Simulation Design and Analysis
ESI 6546: Stochastic Modeling and Analysis
ESI 6552: Systems Architecture
ESI 6553: Systems Design
ESI 6555: Systems Management
ESI 6912: Advanced Topics in ISE

Information Systems and Operations Management Department

Warrington College of Business Administration

Chair: Haldun Aytug
Graduate Coordinator: Praveen Pathak

Complete faculty listing: Follow this link

The primary mission of the Department of Information Systems & Operations Management is a commitment to scholarly research, teaching and service to advance the state of knowledge in information systems and supply chain management and to train future leaders for professional and academic careers.

The Department offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Combined Bachelor/Master of Science: The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.

For more information, please see the program pages below and our website: http://warrington.ufl.edu/departments/isom

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
ISM 6223: Business Telecom Strategy and Applications II
ISM 6224: Business Telecom Strategy and Applications III
ISM 6226: Business Telecom Strategy and Applications
ISM 6236: Business Objects I
ISM 6239: Business Objects II
ISM 6257: Intermediate Business Programming
ISM 6258: Advanced Business Programming
ISM 6259: Business Programming
ISM 6405: Business Intelligence
ISM 6423: Data Analysis for Decision Support
ISM 6485: Electronic Commerce and Logistics
ISM 6486: eCommerce Technologies
ISM 6487: Risks and Controls in eCommerce
ISM 6942: Electronic Commerce Practicum
ISM 7166: Advanced Business Systems Design and Development III
QMB 7933: Seminar in Information Systems and Operations Management

QMB 7979: Advanced Research

QMB 7980: Research for Doctoral Dissertation

Interior Design Department

Chair: M. Portillo.
Graduate Coordinator: N. Park

Complete faculty listing by department: Follow this link.

Doctor of Philosophy:
The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

Master of Interior Design:
The Master of Interior Design (M.I.D.) provides opportunities for students to direct their attention toward a variety of topics, including:

- Design pedagogy and processes
- Sustainable, safe, and secure environments
- Creative performance and innovation
- Built heritage conservation.

Regardless of the study emphasis selected by the student, the M.I.D. program has a central focus with three categories of course work:

- Design studio
- Seminars in current interior design topics
- Theories and methods of research

All M.I.D. students must complete an approved research topic with a written thesis. Requirements for the M.I.D. and Ph.D. degrees are given in the General Information section of this catalog.

Applications:
All applications must include acceptable GRE scores, transcripts for all previous academic work, and if the applicant's native language is not English, a satisfactory score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute. This information must be received in the Office of the Registrar by February 2. In addition to satisfying University requirements for admission, the applicants are required to submit to the Graduate Program Assistant, Department of Interior Design, 336 Architecture, P.O. Box 115705, University of Florida, Gainesville, FL 32611-5705, the following:

- A portfolio of your design work (if applicable). The portfolio must be accompanied by a self-addressed, stamped envelope.
- A written essay on your goals and aspirations related to graduate studies
- Three letters of recommendation.
- A personal interview is not required, but many applicants choose to visit the campus and Department as a part of the application process.

Students enrolled in the Bachelor of Interior Design program at the University of Florida may apply to the M.I.D. program during their junior year (see below). The Department reserves the right to retain student course work for the purposes of record, exhibition, or instruction. Field trips are required for all students; students should plan to have adequate funds available. Students are required to purchase a computer for course work. It may be necessary to assess studio fees to defray costs of base maps, plans, and other generally used materials.

Admission: Applications are processed through February 2 for fall term and all applicants are encouraged to apply as soon as possible. Admission decisions are made between February and the end of April. All new students begin their studies in the fall to coincide with curriculum sequencing.

Graduate course requirements according to background: After assessment of previous design work, leveling courses may be required to prepare the student for the M.I.D. 36 hours of graduate course work. Therefore, each student entering the Master of Interior Design program works with the graduate coordinator to evaluate the student’s unique background to determine the specific courses needed to facilitate interest and experience. Estimated credit hours and length of study time vary according to each student's individual baccalaureate degree and experience.

There are four options:

- For students enrolled in the Bachelor of Design program at the University of Florida, 12 hours of graduate-level course work in the senior year can be counted for both the undergraduate and the M.I.D. degrees. An additional 24 graduate credit hours are required. Expect at least 1 additional year to complete the M.I.D.
- For students who graduated from a Council of Interior Design Accreditation (CIDA) accredited first professional degree program within an architectural framework, the course of study is estimated to be 36 graduate credit hours. Expect 2 years to complete the M.I.D.
- For students who graduated from a design-related (architecture or interior design) baccalaureate degree program, the course of study is estimated to be a minimum of 59 graduate credit hours (includes the 36-hour M.I.D.). Expect 3 years to complete leveling courses and the master's degree.
- For students with a bachelor's degree in a field other than design, the course of study is estimated to be 86 undergraduate and graduate credit hours. Expect 3 to 4 years to complete leveling courses and the M.I.D.

Estimates of the number of credit hours and length of study time may be adjusted based on the individual student's previous preparation including experience as a practicing designer, architect, or other professional.

Program requirements: After leveling courses are completed and with approval by the graduate coordinator and supervisory committee chair, a student completes 24 hours of departmentally approved graduate work in the Department of Interior Design. In addition, with the graduate coordinator's approval, the student is required to take 3 hours of course work in graduate statistics and 9 hours of multidisciplinary graduate electives that reinforce and extend the research.

Courses from such academic units as Psychology, Anthropology, Sociology, Engineering, Education, and Business Administration provide possible electives. The College of Design, Construction and Planning offers the Certificate in Historic Preservation. If the focus of a student is the renovation and preservation of built environments, then historic preservation courses leading to a certificate would strengthen the research and design effort. Likewise, existing appropriate courses in Architecture, Landscape Architecture, Urban and Regional Planning, and Building Construction offer both collaborative study and research opportunities for M.I.D. students.

Each student must select a two-member supervisory committee to guide course selection and to guide thesis selection, study, and production.
IND 5023: Introduction to Architectural Interiors
IND 5106: History of Interior Design I
IND 5136: History of Interior Design II
IND 5212C: Architectural Interiors I
IND 5213C: Introduction to Architectural Interiors Lab
IND 5227C: Advanced Architectural Interiors I
IND 5231C: Architectural Interiors II
IND 5232C: Advanced Architectural Interiors II
IND 5317C: Interior Design Communication Systems
IND 5326: Color Theory Planning and Practice
IND 5427C: Interior Design Construction Documents
IND 5428: Materials for Interior Design
IND 5434C: Interior Lighting
IND 5445C: Furniture Design
IND 5454C: Advanced Interior Design Detailing and Construction Documents
IND 5464C: Computer Applications in Three-Dimensional Design
IND 5466: Interior Environmental Technology
IND 5508: Business and Professional Practices for Interior Designers
IND 5638: Design Environments and Human Interaction
IND 5937: Current Topics in Interior Design
IND 6239: Advanced Topics in Interior Design Studio
IND 6639: Methods of Interior Design Research
IND 6906: Independent Studies and Readings
IND 6940: Supervised Teaching
IND 6941: Interior Design Internship
IND 6971: Research for Master’s Thesis

Landscape Architecture Department

College of Design, Construction, and Planning
Chair: Gina Gurucharri
Graduate Coordinator: Kevin Thompson
Complete faculty listing by department: Follow this link

The mission of the Department of Landscape Architecture is to advance the ethical, creative, and skillful application of the art and the science of planning and designing urban, rural and natural environments. The Master of Landscape Architecture seeks excellence through professional practice and service, and through research and scholarly pursuit.

Interstate field trips are required as a part of the normal program curriculum. Students should plan to have adequate funds for field trips and for studio materials. Students are also required to own a laptop computer meeting minimum department requirements. These specifications are available through the department of Landscape Architecture's website at URL: http://www.dcp.ufl.edu/landscape.
The Graduate program in Landscape Architecture offers flexibility in meeting the needs of applicants with varied backgrounds. Students entering the graduate program in landscape architecture follow one of the following tracks:

**Pre MLA Program**
Graduate students who do not possess an LAAB accredited professional degree in landscape architecture are invited to enroll in the Pre MLA program. The Pre MLA Program aids the development of basic analytical, design and graphic skills. Upon successful completion of the Pre MLA Summer term, students advance into a two-semester sequence of articulation courses that provide a foundation of applied landscape design and planning theory as well as competencies in landscape construction.

**MLA Advanced Graduate Studies Program**
Graduate students having completed the Pre MLA program or entering the MLA program with an LAAB accredited professional baccalaureate degree in Landscape Architecture commence a two year program of advanced graduate coursework towards the completion of the MLA degree.

**MLA Program + Construction**
Graduate students with a non-accredited or non-LAAB accredited degree in Landscape Architecture may apply directly to the MLA program but may be required to take additional coursework to develop core competencies required for advanced graduate study.

**MLA Research Degree**
Graduate students with an LAAB accredited professional degree in Landscape Architecture and a significant history of achievement in professional practice may tailor a program of advanced study to meet their specific needs. Proposals for the MLA Research Degree option are reviewed by the Graduate Coordinator and an approved course of study is determined through consultation with the Graduate Committee.

The normal tenure of advanced graduate study is five semesters which includes a summer semester internship. Students complete a minimum of 52 credit hours composed of lecture courses, seminars, design and construction studios, internship and individual study (special studies, supervised research and thesis or terminal project). This time period would be extended should a student elect to expand the course work or seek a concurrent degree in a related field.

**Design studios:** Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a methodology appropriate to the studio's selected projects, to analyze the findings generated by this research and to use the findings to build an argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both an formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

**Thesis or terminal project:** The Department recognizes that students have different professional goals and personal strengths and interests. A thesis is appropriate for students interested in further research or teaching, or in pursuing advanced degrees. A project (with a significant research component) is appropriate for students interested in design or project-oriented aspects of landscape architecture, or if their specific areas of interest suggest a nontraditional approach.

**Programs, centers, and institutes:** The College of Design, Construction, and Planning has several research centers and institutes. The course work and summer sessions afforded by these programs offer both required and elective course work for graduate students in landscape architecture:

- **The Center for Landscape Conservation Planning:** The Center for Landscape Conservation Planning conducts applied research on the relationship between conservation and land use while providing learning opportunities for students.
- **The Center for International Design and Planning:** The Center for International Design and Planning conducts interdisciplinary research with a focus on emerging design and planning trends in an era of globalization with a focus on resilient development systems and adaptive design and planning strategies.
- **The Preservation Institute:** Nantucket gives students an opportunity to receive specialized educational experience in a broad range of preservation topics using Nantucket as a resource for case-study projects.
- **The Preservation Institute:** Caribbean gives students an opportunity to conduct and apply research regarding the conservation of the rich cultural traditions of the Greater Caribbean basin.
- **The GEOPLAN Center** is dedicated to the development of geographic and spatial information systems. Graduate students receive instruction in geographic information systems and are involved in a multidisciplinary studio that applies the tools and systems understanding afforded by GIS.

**Graduate advisement:** Students are initially advised by the Graduate Coordinator. He or she has guided the student's application through the acceptance process and is familiar with the student's background and needs. A plan of study is developed that includes required and optional courses. By the end of the second semester of study, each student is required to form a supervisory committee composed of two faculty members. The primary purpose of the graduate committee is to advise the student on educational objectives and the thesis or terminal project course work.

**Application Procedure**
Details of application procedure are found on the Department of Landscape Architecture's website. Applicants are encouraged to familiarize themselves with the details of the application procedures and the application requirements. Applications will ONLY be considered for the track for which they have been submitted. Make certain you are applying to the correct track based on your background and credentials and the criteria detailed above.

**Application Dates**
Applications are to be completed and submitted prior to the deadline noted on the Department's website. Unless otherwise noted, international applications must be received by November 1st. Applications from within the US are to be received no later than February 1st. Early applications are encouraged.

**Application materials to be submitted online and/or to the Office of the Registrar**
Application materials include the online application form accompanied by official transcripts, Letters of Recommendation, GRE scores, and TOEFL scores (applicants with English as a second language) to Office of the Registrar: Admissions Section, Criser Hall, University of Florida, Gainesville, Florida 32611.

**Application Materials to be submitted directly to the Department**
In addition to the materials submitted to the registrar's office, applicants must also submit a letter of intention to the Department of Landscape Architecture (Graduate Program Assistant).

**Application Portfolio**
All applicants are encouraged to submit a portfolio of creative works.

**Application Status**
Applications will be processed once all material has been received and must be complete prior to the application deadline. Applicants will be contacted by the Program Assistant if their application is incomplete. Please respond quickly if you have been contacted to increase the chances of your application being considered in the current review period. Only completed applications will be processed for review.

Once the application has been processed for review, applicants will receive written notification of their application status, generally sometime in the middle of March. Please do not contact the department with inquiries of your application status prior to the end of March.
LAA 5331: Site Design Methodologies
LAA 5366: Principles of Landscape Architecture
LAA 6231: Landscape Architecture Theory
LAA 6322: Project Management for Landscape Architects
LAA 6342: Landscape Architecture Criticism
LAA 6349C: Design Communications for Landscape Architects
LAA 6382: Ecological and Environmental Policy
LAA 6525L: Advanced Landscape Construction Design
LAA 6536: Landscape Management
LAA 6656C: Advanced Landscape Architectural Design
LAA 6713: Cultural Landscapes
LAA 6716: History of Landscape Architecture
LAA 6905: Directed Study
LAA 6931: Water Conservation through Site Design and Green Roofs
LAA 6931C: Special Topics
LAA 6933: Topics in European Design: Paris, France
LAA 6935: Gardens of the World
LAA 6941: Supervised Internship
LAA 6952C: European Landscape Architecture Studio
LAA 6971: Research for Master’s Thesis
LAA 6979: Terminal Project

Latin American Studies Department

Director: C. D. Deere.
Graduate Coordinator: R. F. Brown.

Complete faculty listing by department: Follow this link.

The Center for Latin American Studies offers the following graduate programs:

- Latin American Studies
- Sustainable Development Practice

FOT 6940: Translation Studies Practicum

LAS 6008: Ecological Principles

LAS 6220: Issues and Perspectives in Latin American Studies

LAS 6290: Tropical Conservation and Development

LAS 6291: Conservation and Development Skills
LAS 6292: Tropical Conservation and Development Research Methods
LAS 6293: Design and Methods of Research in Latin American Studies
LAS 6295: Latin American Business Environment
LAS 6296: Latin American Business Topics
LAS 6905: Individual Work
LAS 6938: Seminar in Modern Latin American Studies
LAS 6940: Tropical Conservation and Development Practicum
LAS 6943: Development Theory and Practice in Latin America
LAS 6971: Research for Master’s Thesis

Linguistics Department

Chair: F. McLaughin
Graduate Coordinator: E. Potsdam

Complete faculty listing by department: Follow this link

The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in:

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

Requirements for these degrees are given in the Graduate Degrees section of this catalog. For detailed information on the program, please visit the link below. For further information on the program, including financial aid, please visit http://lin.ufl.edu.

EAP 5835: Academic Spoken English I
EAP 5836: Academic Spoken English II
EAP 5837: Academic Spoken English Tutorial
EAP 5845: Academic Writing
EAP 5846: Research and Technical Writing
EAP 5937: Special Topics in Academic Spoken English
LIN 5657: Gender and Language
LIN 5741: Applied English Grammar
LIN 6084: Introduction to Graduate Research
LIN 6165: Field Methods
LIN 6208: Phonetics for Linguists
LIN 6226: Advanced Phonetics
LIN 6323: Phonology
LIN 6341: Issues in Phonology
LIN 6402: Morphology
LIN 6410: Issues in Morphology
LIN 6501: Syntax
LIN 6520: Issues in Syntax
LIN 6571: Structure of Specific Language
LIN 6601: Sociolinguistics
LIN 6622: Bilingualism
LIN 6707: Psycholinguistics
LIN 6708C: Methods in Psycholinguistics
LIN 6720: Second Language Acquisition
LIN 6773: Topics in Computational Linguistics
LIN 6796: Cognitive Neuroscience of Language
LIN 6804: Semantics I
LIN 6826: Introduction to Formal Pragmatics
LIN 6856: Semantics II
LIN 6905: Individual Study
LIN 6910: Supervised Research
LIN 6932: Special Topics
LIN 6940: Supervised Teaching
LIN 6971: Research for Master's Thesis
LIN 7118: History of Linguistics
LIN 7641: Seminar in Language Variation
LIN 7725: Topics in Second Language Acquisition
LIN 7885: Discourse Analysis and Pragmatics
LIN 7979: Advanced Research
LIN 7980: Research for Doctoral Dissertation
TSL 6171: TESL I: Materials and Techniques
TSL 6172: TESL II: Materials for Special Purposes

M.E. Rinker, Sr., School of Construction Management

Director: Robert Ries
Director of Master's Programs: Robert E. Minchin

Complete faculty listing: Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary doctoral program in design, construction, and planning. Areas of specialization in the program include architecture, construction management, interior design, landscape architecture, and urban and regional planning. Within the area of construction management, specialization options include sustainable construction, information systems, construction safety, affordable housing, productivity, and human resource management. These specializations prepare students to assume college-level faculty positions and industry research positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115703.
The M.E. Rinker Sr. School offers courses leading to the degrees of Master of Science in Construction Management (thesis), Master of Construction Management (nonthesis), and Master of International Construction Management (nonthesis distance education program for experienced professionals). An individual plan of study is prepared for each student to insure that the student’s goals are achieved within the broad policy guidelines of the Rinker School. Specialization may be in such areas as construction management, sustainable construction, information systems, construction safety, and construction law. Requirements for the M.E.C., M.S.C.M., M.I.C.M., and Ph.D. degrees are given in the General Information section of this catalog.

**Master of Construction Management (M.C.M.) or Master of Science in Construction Management (M.S.C.M.):** To be eligible for admission to the M.C.M. or M.S.C.M. programs, a student must hold a 4-year undergraduate degree in building construction or its equivalent in related fields. "Equivalent in related fields" should include studies in construction materials and methods, structures, and management. Students with deficiencies in these related fields may need longer residence for the master's degree, as they will be required to take specified basic courses to provide a foundation for advanced courses. There is no foreign language requirement.

No more than 3 credits of BCN 6971 may be used to satisfy the credit requirements for the M.S.C.M. degree without written permission of the Director of Master's Programs.

**Master of International Construction Management (M.I.C.M.):** This program prepares students to assume upper-level management responsibilities in a multinational company. To be eligible for admission to the M.I.C.M. program, a student must have

- A 4-year undergraduate degree
- At least 5 years of meaningful, supervisory-level construction management experience
- Acceptable GRE scores (verbal and quantitative)
- A grade point average of 3.0 on a 4.0 scale
- Employer sponsorship
- International students must submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

No more 3 credits of ICM 6934 may be used to satisfy the credit requirements for the M.I.C.M. without written permission of the Director. All candidates are required to take ICM 6930. In addition to these 6 research-oriented graduate credit hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses and special electives. All candidates are required to pass a comprehensive oral and/or written examination at the completion of the course work and their master's research report/project.

The M.E. Rinker Sr. School reserves the right to retain student work for purposes of record, exhibition, or instruction.

**Research facilities:** The Shimberg Center for Housing Studies, operating within the School, researches the problems and possible solutions associated with developing and producing affordable housing. The Powell Center for Construction and the Environment conducts research on implementing sustainability in creating, operating, and constructing a built environment. The Fluor Program for Construction Safety researches and disseminates information on matters related to construction safety and health. The Center for Advanced Construction Information Modeling educates members of the AECO industry about new and emerging technologies in virtual design and construction.

**Combined program:** The School offers a combined bachelor's/master's degree program. Contact the Director of Master's Programs for information.

For more information, please see our website: [http://www.bcn.ufl.edu](http://www.bcn.ufl.edu).

**BCN 5470: Construction Methods Improvements**

**BCN 5618C: Comprehensive Estimating**

**BCN 5625: Construction Cost Analysis**

**BCN 5705C: Project Management for Construction**

**BCN 5715: Advanced Construction Labor Problems**

**BCN 5722: Advanced Construction Planning and Control**

**BCN 5729: Design-Build Delivery Methods**

**BCN 5737: Advanced Issues in Construction Safety and Health**

**BCN 5754C: Site Development**

**BCN 5776: International Construction Business Management**

**BCN 5778: Facilities Operation and Maintenance**

**BCN 5789C: Construction Project Delivery**

**BCN 5905: Special Studies in Construction**

**BCN 5949: Graduate Construction Management Internship**

**BCN 5957: Advanced International Studies in Construction**

**BCN 6036: Research Methods in Construction**

**BCN 6580: High-Performance Green Building Delivery Systems**

**BCN 6585: Sustainable Construction**
BCN 6586: Construction Ecology and Metabolism
BCN 6621: Bidding Strategy
BCN 6641: Construction Value Engineering
BCN 6748: Construction Law
BCN 6755: Construction Financial Management
BCN 6756: Housing Economics and Policy
BCN 6777: Construction Management Processes
BCN 6785: Construction Information Systems
BCN 6905: Directed Independent Study in Construction
BCN 6910: Supervised Research
BCN 6933: Advanced Construction Management
BCN 6934: Construction Research
BCN 6940: Supervised Teaching
BCN 6971: Research for Master’s Thesis
FES 6705: Communications in Emergency Management
FES 6724: Fire and Emergency Services Response Planning
FES 6726: Hazard Mitigation and Preparedness
FES 6735: International Emergency/Disaster Management
FES 6736: Homeland Security and Emergency Management
FES 6786: Research Methods in FES
FES 6806: Disaster Response and Recovery
FES 6826: Emergency Services - Disaster Planning
FES 6827: Business Continuity and Disaster Planning
FES 6836: Impacts of Natural and Man-made Disasters on Buildings
FES 6916: Research for Master’s Report
FES 6940: Practicum in FES
ICM 5905: Special Studies
ICM 6420: Commercial Management and Cost Control
ICM 6440: Construction Value Management
ICM 6680: Principles of International Sustainable Construction
ICM 6682: Construction Ecology and Metabolism
ICM 6684: High-Performance Green Building Delivery Systems
ICM 6710: Construction Human Resource Management
ICM 6750: Managing Construction Information Technology
ICM 6751: International Construction Management
ICM 6752: Construction Finance and Investment
ICM 6761: Advanced Planning, Scheduling, and Logistics
ICM 6762: Construction Risk Management
ICM 6770: Advanced Project Safety Management
ICM 6772: International Strategic Management
ICM 6905: Directed Independent Study in International Construction
ICM 6910: Supervised Research
ICM 6930: Construction Communication and Research
ICM 6934: International Construction Research

Management Department

Warrington College of Business Administration
Chair: Robert E. Thomas
Graduate Coordinator: Amir Erez

Complete faculty listing: Follow this link.

The Management Department offers graduate work leading to a Ph.D. degree with a major in Business Administration and a concentration in Management; a Master of Business Administration degree with a concentration in Management; a Master of Science degree with a major in Management; and a Master of International Business (M.I.B.). Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees Section of this catalog.

The Department participates in combined bachelor's/master's degree programs for the Master of International Business (M.I.B.) and Master of Science (M.S.) with a major in management. The Master of International Business is open to students pursuing a bachelor's degree in a business discipline or minor in business administration. The M.S. with a major in management program is only open to non-business majors. Contact the graduate coordinator for information.

For more information, please see the program pages below and our website: http://warrington.ufl.edu/departments/mgt.

BUL 5445: Ethical Role of the Manager
BUL 5810: Legal Environment of Business
BUL 5811: Managers and Legal Environment of Business
BUL 5831: Commercial Law
BUL 5832: Commercial Law for Accountants
BUL 6440: Business Ethics and Corporation Social Responsibility
BUL 6441: Business Ethics and Corporate Social Responsibility
BUL 6516: Law of Real Estate Transactions
BUL 6652: Law and Ethics of Corporate Governance
BUL 6656: Law for Entrepreneurs
BUL 6821: Cyberlaw and Ethics
BUL 6841: Employment Law
BUL 6851: International Business Law
BUL 6852: International Business Law
BUL 6891: Legal Aspects of Technology Management
BUL 6905: Individual Work
BUL 6930: Special Topics
ENT 6706: Global Entrepreneurship
MAN 5141: Leadership Skills
MAN 5245: Organizational Behavior
MAN 5246: Organizational Behavior
MAN 5265: Managing Groups and Teams
MAN 6107: Motivation in Organizational Setting
MAN 6128: Management Skills and Personal Development
MAN 6149: Developing Leadership Skills
MAN 6257: Power and Politics in Organizations
MAN 6266: Managing Groups and Teams in Organizations
MAN 6286: Managing Strategic Processes and Change in Organizations
MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management
MAN 6331: Compensation in Organizations
MAN 6351: Training and Development in Organizations
MAN 6365: Organizational Staffing
MAN 6366: Organizational Staffing
MAN 6385: Strategic Human Resource Management
MAN 6446: Negotiations
MAN 6447: Art and Science of Negotiation
MAN 6537: Managing Technology in Organizations
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Marketing Department

Chair: Joseph W. Alba
Graduate Coordinator: Lyle A. Brenner
Complete faculty listing Follow this link.

The Marketing Department at the University of Florida is a recognized leader in the discipline of marketing. For over a decade, our faculty has ranked as one of the most productive and influential in the field. Our faculty is known for conducting provocative, cutting-edge research that contributes both to the scientific understanding and practice of marketing. Our Ph.D. program has produced many leading researchers in the discipline. And the David F. Miller Center for Retailing Education and Research is known as one of the foremost centers for developing the science of retailing.

The Marketing Department offers graduate work leading to the Ph.D. degree in business administration, the M.S. degree in business administration, and a concentration in the Master of Business Administration (M.B.A.) program. Requirements for the M.B.A., M.S., and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

For more information, please see our website: http://warrington.ufl.edu/departments/mkt.

MAR 5805: Problems and Methods in Marketing Management
MAR 5806: Problems and Methods in Marketing Management
MAR 6157: International Marketing
MAR 6158: International Marketing
MAR 6237: The Art and Science of Pricing
MAR 6256: Strategy and Tactics of Pricing
MAR 6335: Building and Managing Brand Equity
MAR 6456: Business-to-Business Marketing
MAR 6508: Customer Analysis
MAR 6646: Marketing Research for Managerial Decision Making
MAR 6648: Marketing Research for Managerial Decision Making
MAR 6722: Web-Based Marketing
MAR 6725: Introduction to Electronic Commerce
MAR 6816: Advanced Marketing Management (MBA)
MAR 6818: Advanced Marketing Management
MAR 6833: Product Development and Management
MAR 6834: Marketing of Science and Technology
MAR 6835: Marketing of Science and Technology
MAR 6837: Consumer-Centered Product Design
MAR 6861: Customer Relationship Management
MAR 6862: Customer Relationship Management
MAR 6905: Individual Work
MAR 6910: Supervised Research
MAR 6930: Special Topics in Marketing
MAR 6940: Supervised Teaching
MAR 6957: International Studies in Marketing
MAR 6971: Research for Master's Thesis
MAR 6973: Project in Lieu of Thesis
MAR 7507: Perspectives on Consumer Behavior
MAR 7588: Consumer Information Processing and Decision Making
MAR 7589: Judgment and Decision Making
MAR 7626: Multivariate Statistical Methods in Marketing
MAR 7636: Research Methods in Marketing
MAR 7666: Marketing Decision Models
MAR 7786: Marketing Literature
MAR 7925: Workshop in Marketing Research
MAR 7979: Advanced Research
MAR 7980: Research for Doctoral Dissertation

Materials Science and Engineering Department
The Department of Materials Science and Engineering offers the Master of Science and Doctor of Philosophy degrees in Materials Science & Engineering (MSE) and Nuclear Engineering (NE). Requirements for these degrees are described in the General Information section of this catalog.

Degrees in MSE include specific areas of research and study in biomaterials, ceramics, composites, computational materials science, electronic materials, metals, polymers, nanomaterials, and nuclear materials. Degrees in NE include specific areas of research and study in advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security.

Nontraditional Degree Programs: The Department offers combined bachelor/master’s degree programs: MSE BS/MS, NE BS/MS, and students may also combine the MSE BS with the MS awarded through the Dept. of Biomedical Engineering (BME). The combined bachelor/master’s program allows qualified students to earn both degrees in materials science and engineering with savings of a tangible number of credit hours. Qualified students are allowed to begin master’s course work in their junior years and double count specific graduate courses for both degrees. The master’s degree may be completed within 2 to 3 semesters after completing the bachelor’s degree. Program admission requirements are (1) satisfaction of Graduate School admission requirements prior to the beginning of the senior year, (2) an upper division GPA of at least 3.5 in MSE and 3.4 in NE, (3) for MSE, completion of a minimum of 18 credit hours of courses, (4) admission by the Department’s Graduate Admission Committee and approval by the College of Engineering and the Graduate School. For more information, contact the Department.

The J.D./M.S. in MSE (thesis/nonthesis) is a joint degree program culminating in both the Juris Doctor degree, awarded by the College of Law, and the Master of Science (thesis/nonthesis), awarded by the College of Engineering. Under this program, a student can earn both degrees in approximately 1 year less than it would take to attain both degrees if pursued consecutively.

Concurrent M.D./Ph.D. degrees are offered through a collaborative program between the College of Medicine and Materials Science and Engineering. For more information, please contact the Department.

To be eligible for regular admission to the graduate program within the Department, the student must hold a B.S. in an appropriate major. Because of the breadth of MSE graduate programs, students with degrees in materials, ceramics, metallurgy, other engineering, mathematics, or science areas (such as biology, chemistry, or physics) have found ample opportunities to pursue their research and training areas of interest.

The faculties of the Department of Materials Science and Engineering (MSE) of the University of Florida (UF) and the University of Roma Tor Vergata (URTV) have approved a cooperative degree program in Materials Science and Engineering culminating in a Doctor of Philosophy degree, awarded by both universities. Contact the Department for details.

EMA 5008: Particle Science and Technology: Theory and Practice

EMA 5095: Critical Analysis of Research in Materials Science & Engineering

EMA 5108: Vacuum Science and Technology

EMA 5365: Biomimetic Synthesis

EMA 6001: Properties of Materials - A Survey

EMA 6005: Thin and Thick Films

EMA 6105: Fundamentals and Applications of Surface Science

EMA 6106: Advanced Phase Diagrams

EMA 6107: High Temperature Materials

EMA 6109: Physical Chemistry of High Temperature Materials

EMA 6110: Electron Theory of Solids for Materials Scientists I

EMA 6111: Electron Theory of Solids for Materials Scientists II

EMA 6114: Advanced Materials Principles 2

EMA 6128: Materials Microstructures

EMA 6136: Diffusion, Kinetics, and Transport Phenomena

EMA 6165: Polymer Physical Science

EMA 6166: Polymer Composites

EMA 6226: Synthesis and Properties of Metallic Nanostructures

EMA 6227: Advanced Mechanical Metallurgy II
EMA 6265: Mechanical Properties of Polymers
EMA 6313: Advanced Materials Principles I
EMA 6315: Colloidal Hydrodynamics
EMA 6316: Materials Thermodynamics
EMA 6319: Applied Colloid and Interfacial Chemistry for Engineers
EMA 6412: Synthesis and Characterization of Electronic Materials
EMA 6416: Organic Electronics
EMA 6445: Electroceramics
EMA 6446: Solid State Ionics
EMA 6448: Ceramic Processing
EMA 6461: Polymer Characterization
EMA 6507: Scanning Electron Microscopy and Microanalysis
EMA 6507L: Scanning Electron Microscopy and Microanalysis Lab
EMA 6510: Survey of Materials Analysis Techniques
EMA 6512C: X-ray Scattering for Thin Film Analysis
EMA 6518: Transmission Electron Microscopy
EMA 6518L: Transmission Electron Microscopy Laboratory
EMA 6519L: Specialized Research Techniques in Materials Science
EMA 6540: Fundamentals of Crystallography
EMA 6541: Applied Crystallography and Powder Diffraction
EMA 6580: Science of Biomaterials I
EMA 6581C: Polymeric Biomaterials
EMA 6589: Mechanical Behavior of Biomaterials
EMA 6590: Advances in Biomaterials and Tissue Engineering for Healthcare
EMA 6591: Clinical Applications of Biomaterials and Tissue Engineering
EMA 6616: Advanced Electronic Materials Processing
EMA 6625: Advanced Metals Processing
EMA 6667: Polymer Processing
EMA 6715: Fracture of Brittle Materials
EMA 6803: Classical Methods in Computational Materials Science
EMA 6804: Quantum Methods in Computational Materials Science
EMA 6805: Mathematical Methods in Materials Science I
EMA 6806: Mathematical Methods in Materials Science II
MAA 6407: Complex Analysis II

MAA 6406: Complex Analysis I

MAA 6236: Mathematical Analysis for Statisticians

MAA 5404: Introduction to Complex Variables for Engineers and Physical Scientists

MAA 5229: Modern Analysis II

MAA 5228: Modern Analysis I

Mathematics Department

Chair: D. Cenzer
Graduate Coordinator: J. A. Larson

Complete faculty listing: Follow this link.

The Department of Mathematics offers the degrees of Doctor of Philosophy, Master of Science and Master of Arts, and the Master of Arts in Teaching and Master of Science in Teaching, each with a major in mathematics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

Interdisciplinary Programs — The Department offers a co-major program in conjunction with the Statistics Department leading to the Doctor of Philosophy degree in mathematics and statistics. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Statistics, Industrial and Systems Engineering, and Finance, Insurance, and Real Estate Departments.

Combined Program — The Department has an accelerated bachelor's/master's program designed for superior undergraduate students who have the ability to pursue such a plan of study leading to the Master of Science or Master of Arts degree. The main feature of the program is that up to 12 semester hours of approved graduate level mathematics courses may be used as dual credit for both the undergraduate and the graduate degree. All other requirements for both the bachelor's degree and the master's degree must be met. For admission requirements for this program, see the undergraduate coordinator.

There are opportunities for concentrated study in a number of specific areas of pure and applied mathematics at both the master's and doctoral levels. The faculty directs studies and research in algebra, number theory, analysis, geometry, topology, logic, differential equations, dynamical systems, probability theory, numerical analysis, numerical optimization, approximation theory, combinatorial analysis, graph theory, computer applications, biomathematics, mathematical physics, inverse problems, and medical imaging. In addition to the requirements of the Graduate School, the minimum prerequisite for admission to the program of graduate studies in mathematics is the completion, with an average grade of B or better, of at least 24 credits of undergraduate mathematics, including a full year of calculus and three semesters of appropriate work beyond the calculus. The most appropriate courses for this purpose are advanced calculus, linear algebra and abstract algebra. Students lacking part of the requirements will be required to make up the deficiency early in their graduate work. Prerequisites to individual courses should be determined before registration by consultation with the instructor concerned. Some of the courses listed are offered only as needed. Since times of offering courses are estimated a year in advance, certain changes may be made if needs are known by the Department. The courses MAA 5228, MAA 5229, MAS 5311, and MAS 5312 are required for all advanced degree programs in mathematics. The requirements for the master's degree nonthesis option include a minimum of 32 semester hours of course work. Students pursuing the master's degree in mathematics must pass two comprehensive written examinations, one in algebra and one in analysis. Students pursuing the master's degree with a specialization in applied mathematics have two options: the examination option requires passage of the algebra and analysis examinations; the thesis option requires instead the preparation and oral defense of a thesis on original research conducted under the supervision of a faculty adviser. Students pursuing the Master of Arts in Teaching or the Master of Science in Teaching degree must prepare a teaching portfolio and pass an oral examination. Each of these programs normally requires two years for completion. The requirements for a doctoral degree include 60 hours of 6000-level course work in mathematics; no hours of teaching, colloquium, dissertation, or individual work will count toward this requirement. To become a candidate for the doctoral degree, the student must pass a comprehensive preliminary examination with written and oral components administered by the Department. The doctoral student must also pass a reading knowledge examination in one of the following foreign languages: French, German, or Russian. The dissertation is an important requirement for the doctoral degree in mathematics. The topic for the dissertation may be chosen from a number of areas of current research in pure and applied mathematics. Every graduate student is expected to attend the regular colloquium. Details concerning all requirements for graduate degrees in mathematics may be obtained by writing the Mathematics Department Graduate Selection Committee or consulting the Department website, http://www.math.ufl.edu.

MAA 5104: Advanced Calculus for Engineers and Physical Scientists I

MAA 5105: Advanced Calculus for Engineers and Physical Scientists II

MAA 5228: Modern Analysis I

MAA 5229: Modern Analysis II

MAA 5404: Introduction to Complex Variables for Engineers and Physical Scientists

MAA 6236: Mathematical Analysis for Statisticians

MAA 6406: Complex Analysis I

MAA 6407: Complex Analysis II
MAA 6616: Analysis I
MAA 6617: Analysis II
MAA 7526: Advanced Topics in Functional Analysis I
MAA 7527: Advanced Topics in Functional Analysis II
MAD 6206: Combinatorial Theory I
MAD 6207: Combinatorial Theory II
MAD 6406: Numerical Linear Algebra
MAD 6407: Numerical Analysis
MAD 7396: Topics in Combinatorial Theory I
MAD 7397: Topics in Combinatorial Theory II
MAE 6940: Supervised Teaching
MAE 6943: Internship in College Teaching
MAP 5304: Intermediate Differential Equations for Engineers and Physical Scientists
MAP 5345: Introduction to Partial Differential Equations
MAP 5489: Modeling in Mathematical Biology
MAP 6208: Numerical Optimization
MAP 6327: Applied Differential Equations I
MAP 6356: Partial Differential Equations I
MAP 6357: Partial Differential Equations II
MAP 6375: Numerical Partial Differential Equations
MAP 6376: Finite Element Method
MAP 6467: Stochastic Differential Equations and Filtering Theory I
MAP 6468: Stochastic Differential Equations and Filtering Theory II
MAP 6472: Probability and Potential Theory I
MAP 6473: Probability and Potential Theory II
MAP 6487: Biomathematics Seminar I
MAP 6488: Biomathematics Seminar II
MAP 6505: Mathematical Methods of Physics and Engineering
MAP 6506: Mathematical Methods of Physics and Engineering II
MAP 6941: Internship in Applied Mathematics
MAP 7436: Seminar in Applied Mathematics I
MAP 7437: Seminar in Applied Mathematics II
MAS 5311: Introductory Algebra I
MAS 5312: Introductory Algebra II
MAS 6331: Algebra I
MAS 6332: Algebra II
MAS 7215: Theory of Numbers I
MAS 7216: Theory of Numbers II
MAS 7396: Advanced Topics in Algebra I
MAS 7397: Topics in Algebra II
MAT 6905: Individual Work
MAT 6910: Supervised Research
MAT 6932: Special Topics in Mathematics
MAT 6971: Research for Master’s Thesis
MAT 7979: Advanced Research
MAT 7980: Research for Doctoral Dissertation
MHF 5107: Introduction to Set Theory
MHF 5207: Foundations of Mathematics
MHF 6306: Mathematical Logic I
MHF 6307: Mathematical Logic II
MTG 5316: Introduction to Topology I
MTG 5317: Introduction to Topology II
MTG 5411: Introduction to Fractal Geometry
MTG 5412: Introduction to Dynamical Systems and Chaos
MTG 6256: Differential Geometry I
MTG 6257: Differential Geometry II
MTG 6346: Topology I
MTG 6347: Topology II
MTG 6401: Ergodic Theory and Dynamical Systems I
MTG 6402: Ergodic Theory and Dynamical Systems II
MTG 7396: Advanced Topics in Topology I
MTG 7397: Advanced Topics in Topology II

Mechanical and Aerospace Engineering Department

Chair: David W. Hahn
Graduate Coordinator: D. W. Mikolaitis

Complete faculty listing by department: Follow this link.
The Department of Mechanical and Aerospace Engineering offers the degrees of Master of Science (thesis or nonthesis), Master of Engineering (thesis or nonthesis), Engineer, and Doctor of Philosophy in aerospace engineering and mechanical engineering. Minimum requirements for these degrees are given in the General Information section of this catalog. Additional information can be found at [http://www.mae.ufl.edu/graduate](http://www.mae.ufl.edu/graduate). Prospective students are expected to have strong backgrounds in engineering. For the first year of study, each student is generally required to take a minimum of three regular courses each semester. There are three areas of specialization available for graduate studies: dynamics, systems, and control; solid mechanics, design, and manufacturing; thermal science and fluid dynamics. Within a specialization there are unique opportunities to conduct analytical, experimental, and/or numerical study in a wide variety of challenging problems. The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

BME 5580: Introduction to Microfluidics and BioMEMS

EAS 5938: Special Topics in Aerospace Engineering

EAS 6135: Molecular Theory of Fluid Flows

EAS 6138: Gasdynamics

EAS 6242: Advanced Structural Composites

EAS 6415: Guidance and Control of Aerospace Vehicles

EAS 6905: Aerospace Research

EAS 6910: Supervised Research

EAS 6935: Graduate Seminar

EAS 6939: Special Topics in Aerospace Engineering

EAS 6971: Research for Master's Thesis

EAS 7979: Advanced Research

EAS 7980: Research for Doctoral Dissertation

EGM 5005: Laser Principles and Applications

EGM 5111L: Experimental Stress Analysis

EGM 5121C: Data Measurement and Analysis

EGM 5533: Applied Elasticity and Advanced Mechanics of Solids

EGM 5584: Biomechanics of Soft Tissue

EGM 5816: Intermediate Fluid Dynamics

EGM 5933: Special Topics in Engineering Science and Mechanics

EGM 6006: Laser-Based Diagnostics

EGM 6321: Principles of Engineering Analysis I

EGM 6322: Principles of Engineering Analysis II

EGM 6323: Principles of Engineering Analysis III

EGM 6341: Numerical Methods of Engineering Analysis I

EGM 6342: Fundamentals of Computational Fluid Dynamics

EGM 6352: Advanced Finite Element Methods

EGM 6365: Structural Optimization

EGM 6570: Principles of Fracture Mechanics
EGM 6611: Continuum Mechanics
EGM 6671: Inelastic Materials
EGM 6812: Fluid Mechanics I
EGM 6813: Fluid Mechanics II
EGM 6855: Bio-Fluid Mechanics and Bio-Heat Transfer
EGM 6905: Individual Study
EGM 6910: Supervised Research
EGM 6934: Special Topics in Engineering Mechanics
EGM 6936: Graduate Seminar
EGM 6971: Research for Master's Thesis
EGM 7819: Computational Fluid Dynamics
EGM 7845: Turbulent Fluid Flow
EGM 7979: Advanced Research
EGM 7980: Research for Doctoral Dissertation
EML 5045: Computational Methods for Design and Manufacturing
EML 5104: Classical and Statistical Thermodynamics
EML 5124: Two-Phase Flow and Boiling Heat Transfer
EML 5131: Combustion
EML 5215: Analytical Dynamics I
EML 5223: Structural Dynamics
EML 5224: Acoustics
EML 5233: Failure of Materials in Mechanical Design
EML 5311: Control System Theory
EML 5318: Computer Control of Machines and Processes
EML 5455: Clean Combustion Technology
EML 5465: Energy Management for Mechanical Engineers
EML 5515: Gas Turbines and Jet Engines
EML 5516: Design of Thermal Systems
EML 5526: Finite Element Analysis and Application
EML 5595: Mechanics of the Human Locomotor System
EML 5598: Orthopedic Biomechanics
EML 5605: Advanced Refrigeration
EML 5714: Introduction to Compressible Flow
EML 6146: Microscale Heat Transfer
EML 6154: Conduction Heat Transfer
EML 6155: Convective Heat Transfer I
EML 6156: Multiphase Convection Heat Transfer
EML 6157: Radiation Heat Transfer
EML 6216: Analytical Dynamics II
EML 6229: Introduction to Random Dynamical Systems
EML 6267: Structural Dynamics of Production Machinery
EML 6278: Advanced Rotor Dynamics
EML 6281: Geometry of Mechanisms and Robots I
EML 6282: Geometry of Mechanisms and Robots II
EML 6323: Nontraditional Manufacturing
EML 6324: Fundamentals of Production Engineering
EML 6350: Introduction to Nonlinear Control
EML 6351: Nonlinear Control II: Adaptive Control
EML 6352: Optimal Estimation
EML 6365: Robust Control Synthesis
EML 6417: Solar Energy Utilization
EML 6451: Energy Conversion
EML 6606: Advanced Air Conditioning
EML 6905: Individual Projects in Mechanical Engineering
EML 6934: Special Topics in Mechanical Engineering
EML 6936: Nonthesis Project
EML 6971: Research for Master's Thesis
EML 7979: Advanced Research
EML 7980: Research for Doctoral Dissertation

Medicinal Chemistry Department

College of Pharmacy
Chair: M. O. James
Graduate Coordinator: H. Luesch

Complete faculty listing by department: [Follow this link](#)

The College of Pharmacy offers the Doctor of Philosophy degree in pharmaceutical sciences with a concentration in medicinal chemistry. Medicinal chemistry is a unique blend of the physical and biological sciences. The scope of the field is sufficiently broad to give students with many different science backgrounds a rewarding and challenging program of study. Areas of active research include organic synthesis of medicinal agents, metal chelate design, prodrugs and topical drug delivery, drug metabolism, molecular toxicology, molecular biology, combinatorial chemistry, neurochemistry, analytical chemistry, molecular modeling, natural products, and drug discovery.
The applicant should have an undergraduate degree in pharmacy, chemistry, biology, or premedical sciences. A background in calculus and physical and organic chemistry is required. In addition to graduate medicinal chemistry courses in the College of Pharmacy, graduate courses in chemistry and biochemistry are required for the program. The College also offers the Master of Science in Pharmacy degree in pharmaceutical sciences (nonthesis option) with concentrations in both forensic drug chemistry and forensic serology and DNA in a distance learning format. Minimum requirements for the M.S.P. and Ph.D. degrees are described in the General Information section of this catalog. The Department participates in the interdisciplinary concentration in toxicology. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

PHA 5475: Synthesis of Prodrugs
PHA 6354: Natural Medicinal Products
PHA 6356: Structure Determination of Complex Natural Products
PHA 6357: Herbal & Dietary Supplements
PHA 6417: Pharmaceutical Analysis II
PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
PHA 6432: Fundamentals of Pharmaceutical Chemistry
PHA 6444: Pharmaceutical Chemistry I
PHA 6447: Drug Design
PHA 6448: High Throughput Drug Discovery
PHA 6471: Synthetic Medicinal Chemistry
PHA 6534: Toxicology of Chemical Weapons
PHA 6535: Principles of Nucleotide Activity
PHA 6543: Pharmaceutical Chemistry II
PHA 6556: Introduction to Clinical Toxicology
PHA 6557: Clinical Toxicology 1
PHA 6840: Medicinal Chemistry of Drugs of Abuse
PHA 6850: Principles of Forensic Science
PHA 6851: Forensic Analysis of DNA
PHA 6852: Mammalian Molecular Biology
PHA 6853: Biological Evidence and Serology
PHA 6854: Forensic Immunology
PHA 6855: Forensic Genetics
PHA 6856: Blood Spatter and Distribution
PHA 6905C: Research Procedures in Medicinal Chemistry
PHA 6934: Seminar in Medicinal Chemistry

Microbiology and Cell Science Department

Chair: E. Triplett.
Graduate Coordinator: Tony Romeo.

Complete faculty listing by department: Follow this link.
Graduate study is offered leading to the Master of Science and Doctor of Philosophy degrees in microbiology and cell science, with emphasis in one or more of the disciplines of biochemistry, cell biology, and microbiology.

Requirements for these degrees are provided in the Graduate Degrees section of this catalog and also at the Department webpage: http://microcell.ufl.edu.

Instruction and guidance are collaborative among faculty in the Colleges of Agricultural and Life Sciences, Liberal Arts and Sciences, and Medicine.

Research spans broad areas in the cellular and molecular aspects of bacterial, plant, and animal life functions: Areas of research include microbial biochemistry, biotechnology; biomass conversion; genetic and metabolic regulation; environmental microbiology; cell biology; molecular biology; molecular genetics; genomics and bioinformatics; immunology; virology; parasitology; host-pathogen interactions; cellular ultrastructure.

Prerequisites for admission to graduate study, in addition to those of the Graduate School, are a broad educational background including mathematics, physics, and chemistry through organic, analytical, and physical chemistry; basic courses in biology, botany, and/or zoology; and at least one course in microbiology and biochemistry. An undergraduate major in biochemistry, physical or chemical science, engineering, or general biology may be an acceptable alternative to a degree in microbiology or cell science. Receipt of an advanced degree requires detailed knowledge in microbiology, biochemistry, and chemistry; undergraduate deficiencies may necessitate additional course work prior to entry into the graduate program.

In addition, the Microbiology and Cell Science Department also offers a combined B.S./M.S. program that allows qualified students to earn both the Bachelor's and Master's degrees with 12 credit hours of jointly counted course work. This program is considered a "4/1" because students may be awarded both degrees within a five-year period. For further information on this program, follow this link: http://microcell.ufl.edu/graduate-program/combined-degree-program.

MCB 5205: Microbiology of Human Pathogens

MCB 5252: Microbiology, Immunology, and Immunotherapeutics

MCB 5305L: Microbial Genetics and Biotechnology Laboratory

MCB 5408: Anaerobic Microbiology and Biotechnology

MCB 5458: Energy Transformation in Microorganisms

MCB 5505: General Virology

MCB 6317: Molecular Biology of Gene Expression

MCB 6318: Comparative Microbial Genomics

MCB 6355: Microbial/Host Defense

MCB 6409: Microbial Cell Structure and Function

MCB 6417: Microbial Metabolism and Energetics

MCB 6457: Metabolic Regulation

MCB 6465: Microbial Metabolic Engineering

MCB 6485: Advanced Techniques in Microbiology and Cell Science

MCB 6772: Advanced Topics in Cell Biology

MCB 6905: Experimental Microbiology

MCB 6910: Supervised Research

MCB 6930: Seminar

MCB 6937: Special Topics in Microbiology

MCB 6940: Supervised Teaching

MCB 6971: Research for Master's Thesis

MCB 7922: Journal Colloquy

MCB 7979: Advanced Research

MCB 7980: Research for Doctoral Dissertation

Molecular Genetics and Microbiology Department
Chair: H. V. Baker.
Graduate Coordinator: A. S. Lewin.

Complete faculty listing by department: Follow this link.

The Graduate Faculty of the Department of Molecular Genetics and Microbiology participate in the interdisciplinary program (IDP) in medical sciences, leading to the Doctor of Philosophy degree, with specialization in one of the six advanced concentration areas of the IDP (see Medical Sciences). Departmental areas of research associated with the IDP focus on topical problems in molecular genetics, viral genetics, and viral and bacterial pathogenesis. Faculty in the Department of Molecular Genetics and Microbiology also participate in the M.S. programs (see Medical Sciences). In addition to courses associated with the IDP, the Department of Molecular Genetics and Microbiology maintains the courses listed below.

**Biotechnology:** This Master of Science program is for students seeking careers in the biomedical industry as research or managerial associates; students seeking careers as teachers or educators at any level, but primarily high school or junior college; or students seeking an in-depth understanding of modern biology and scientific research as an end in itself or in preparation for further graduate study. The foundation of the M.S. program is a basic understanding of molecular and cell biology and the performance of a high-quality research project, culminating in a thesis, under the direction of a skilled mentor, with supervision by a committee composed of members of the Graduate Faculty. Specialization may be in any of the fields of research being pursued at the College of Medicine including but not limited to molecular genetics, gene therapy, bacterial or viral pathogenesis, protein structure, toxicology, mammalian genetics, wound healing, and congenital eye diseases.

For more information contact the Master's Program Coordinator, Molecular Genetics and Microbiology, P.O. Box 100266, College of Medicine, Gainesville, FL 32610, Telephone (352)392-3314.

**BME 5704: Advanced Computational Methods for Biomedical Engineering**

**GMS 6153: Advanced Bacterial Genetics**

**GMS 6169: Antimicrobial Strategies**

**GMS 6190: Seminar**

**GMS 6221: Ethics in Genetics**

**GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics**

**GMS 6251: Molecular Therapy I – Vectors and Molecular Mechanisms**

**GMS 6252: Molecular Therapy II – Disease Targets and Applications**

**GMS 6253: Molecular Therapy III – Immunology of Gene Transfer**

**GMS 6338: Recent Advances in Cancer Metastasis**

**GMS 6943: Master's Translational Biotechnology Internship**

**GMS 7093: Introduction to Clinical and Translational Research**

**GMS 7191: Research Conference**

**GMS 7194: Biotechnology Seminar**

**PCB 5235L: Experiments in Immunology**

**Music Department**

College of the Arts

Director: J. A. Duff.
Graduate Coordinator: L. S. Odom.

Complete faculty listing by department: Follow this link.

The School of Music offers programs leading to the Master of Music degree in music and music education. Program concentrations in music include choral conducting, composition, instrumental conducting, musicology, ethnomusicology, music theory, performance, and sacred music. In addition, the School of Music offers the Doctor of Philosophy degree in music and in music education.

The Ph.D. program in music education emphasizes college music teaching. The Ph.D. program in music includes concentrations in:

- Music history and literature, with options in traditional musicology and ethnomusicology
- Composition, with options in acoustic and electroacoustic specialization

All Ph.D. students are encouraged to find opportunities to teach and lecture in their specializations; and with the assistance of their principal professors, to prepare papers, workshops, and clinics for presentation at professional conferences, in the public schools, and at colleges and universities. Students also are encouraged to publish their research in appropriate journals. Minimum requirements for the M.M. and Ph.D. degrees are given in the General Information section of this catalog. The week before classes begin, students must take placement examinations in music history and in music theory. Students wanting to study privately in a performance studio must be auditioned and accepted by the appropriate area faculty. Voice students must demonstrate appropriate skills in language and diction. All deficiencies must be remedied.

For more information, please see the program pages below and our website: http://www.arts.ufl.edu/welcome/music.
DIG 6288: Music and Sound Design for Digital Media
MUC 5315: Introduction to Electroacoustic Music
MUC 6444: Composition of Electronic Music
MUC 6445: Electroacoustic Music Composition: Digital I
MUC 6446: Electroacoustic Music Composition--Digital II
MUC 6900: Secondary Graduate Composition
MUC 6930: Graduate Composition
MUC 6932: Composition Seminar
MUC 7447: Advanced Seminar in Electroacoustic Music
MUC 7931: Advanced Graduate Composition
MUC 7938: Seminar in Digital Sound Processing, Control, and Composition
MUE 6080: Historical and Philosophical Foundations of Music Education
MUE 6385: Music in Higher Education
MUE 6399: Creative Thinking in Music
MUE 6444: Materials and Methods of String Class Teaching
MUE 6497: Public School Orchestral Literature
MUE 6647: Trends in Teaching and Learning Music
MUE 6696: Technology Assisted Music Learning
MUE 6747: Assessing Music Learning
MUE 6785: Research in Music Education
MUE 6790: Capstone Project for Music Education
MUE 6931: Instructional Design in Music Education
MUE 7746: Measurement and Evaluation of Music
MUE 7938: Music Education Seminar
MUG 6105: Graduate Conducting
MUG 7106: Advanced Graduate Conducting
MUH 5219: Graduate Music History Review
MUH 5505: Introduction to Ethnomusicology
MUH 5684: Introduction to Historical Musicology
MUH 6526: American Vernacular Music
MUH 6545: The Guitar in Latin American Culture
MUH 6548: Seminar in Caribbean Music
MUH 6549: Seminar in Brazilian Music
MUH 6635: Seminar in American Music
MUH 6665: History of Opera
MUH 6671: Seminar in Renaissance Music
MUH 6672: Seminar in Baroque Music
MUH 6673: Seminar in Classical Music
MUH 6674: Seminar in Nineteenth-Century Music
MUH 6675: Seminar in Twentieth-Century Music
MUH 6931: Nationalism in Music
MUH 6935: Special Topics in Music History
MUH 7411: Medieval and Renaissance Notation
MUH 7938: Musicology Seminar
MUL 6435: String Literature
MUL 6486: Piano Literature
MUL 6495: Graduate Organ Literature
MUL 6555: Survey of Wind Literature
MUL 6565: Chamber Music Literature
MUL 6645: Choral Literature
MUN 6010: Graduate Ensemble
MUN 6125: Concert Band
MUN 6135: Symphonic Band
MUN 6145: Symphonic Wind Ensemble
MUN 6215: University Orchestra
MUN 6315: University Choir
MUN 6325: Women's Chorale
MUN 6335: Men's Glee Club
MUN 6445: Percussion Ensemble
MUN 6495: Steel Drum Ensemble
MUN 6496: World Music Ensemble
MUN 6497: New Music Ensemble
MUN 6715: Jazz Band
MUR 6206: Survey of Hymnody
MUR 6705: Sacred Music Literature
MUS 5911: Directed Study
MUS 6685: Psychology of Music
MUS 6716: Methods of Musical Research and Bibliography
MUS 6905: Projects and Problems
MUS 6910: Supervised Research
MUS 6940: Supervised Teaching
MUS 6971: Research for Master's Thesis
MUS 6973: Individual Project
MUS 7656: Teaching Music and the Creative Process
MUS 7905: Projects and Problems
MUS 7979: Advanced Research
MUS 7980: Research for Doctoral Dissertation
MUT 6051: Graduate Music Theory Review
MUT 6445: Advanced Counterpoint
MUT 6531: Figured Bass and Continuo Performance
MUT 6565: Late Nineteenth- and Twentieth-Century Styles
MUT 6576: Contemporary Styles
MUT 6617: Approaches to Theoretical Analysis in Music Education
MUT 6624: Seminar in Set Theory
MUT 6627: Seminar in Reductive Analysis
MUT 6629: Analytical Techniques
MUT 6751: Pedagogy of Music Theory
MUT 6936: Music Theory Seminar
MUT 7316: Advanced Orchestration
MUT 7585: Seminar in Musical Style
MUT 7760: History of Music Theory
MVK 5156: Improvisational Keyboard Skills and Related Technology
MVK 6605: Organ Pedagogy
MVK 6651: Piano Pedagogy
MVK 6661: Advanced Piano Pedagogy
MVO 6250: Secondary Music Performance
MVO 6460: Music Performance
MVO 7460: Music Performance

MVS 6651: String Pedagogy I

MVV 6651: Vocal Pedagogy

Nuclear and Radiological Engineering Department

Chair: D. Hintenlang
Graduate Coordinator: W. Bolch

Complete faculty listing: Follow this link.

The Department offers the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy in nuclear engineering sciences with emphases in nuclear power engineering, medical physics, and health physics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The medical physics and health physics options are offered through interdepartmental programs in cooperation with the College of Medicine (see the Health Physics and Medical Physics description under Interdisciplinary Graduate Studies).

Combined Program — The Department also offers a B.S.N.E./M.S. degree program. This program allows qualified students to earn a bachelor's degree and a master's degree with a savings of one semester. Qualified students may begin their master's program while seniors counting 12 hours of specified nuclear engineering sciences graduate courses for both the bachelor's and master's degree requirements. Seniors admitted to the combined program are eligible for teaching and research assistantships. Program admission requirements are (1) satisfaction of Graduate School admission requirements for a master's degree, (2) an upper-division (undergraduate) GPA of at least 3.6, and (3) completion of specified bachelor's degree requirements.

The graduate program has two major programs, Nuclear Engineering and Medical Physics. Specific areas of research and study in Nuclear Engineering include advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security. The Medical Physics program is a CAMPEP accredited program designed to meet the professional requirements for a career in clinical service or research and development. Areas of Medical Physics study and research include diagnostic medical imaging, radiation therapy, nuclear medicine imaging, and radiation dosimetry.

The requirement for admission to the graduate program in nuclear engineering sciences is a bachelor's degree in an approved program in engineering or in the sciences. Students applying to the Medical Physics program should have completed the equivalent of at least a minor in physics. If the student's background is considered deficient for the planned course of study, an articulation program of background courses will be required.

Depending on professional objectives, the student may select a non-thesis option for the MS degree and substitute 8 credits of graduate-level course work, of which at least 6 credits are in nuclear engineering sciences, including a 4-credit (minimum) special project, ENU 6936. Completion of 32 credits will meet the minimum requirements for the non-thesis MS degree.

Normally, the requirements for a master's degree can be completed in 12 months. Students in the medical physics option usually take 21 to 24 months to complete the master's degree, which requires 40-42 credit hours. For a master's degree in health physics, a student must complete 42 hours of credit. If articulation work is required, it may take longer, depending upon the extent of the student's deficiency.

ENU 5142: Reliability and Risk Analysis for Nuclear Facilities

ENU 5176L: Principles of Nuclear Reactor Operations Laboratory

ENU 5186: Nuclear Fuel Cycles

ENU 5196: Nuclear Reactor Power Plant System Dynamics and Control

ENU 5516L: Nuclear Engineering Laboratory II

ENU 5615C: Nuclear Radiation Detection and Instrumentation

ENU 5615L: Nuclear Radiation Detection and Instrumentation Lab

ENU 5626: Radiation Biology

ENU 5658: Imaging System Analysis with Medical Physics Applications

ENU 5705: Advanced Concepts for Nuclear Energy

ENU 6051: Radiation Interaction Basics and Applications I

ENU 6052: Radiation Transport Basics and Applications

ENU 6053: Radiation Interaction Basics and Applications II

ENU 6061: Survey of Medical Radiological Physics

ENU 6106: Nuclear Reactor Analysis I

ENU 6107: Nuclear Reactor Analysis II
The Department of Occupational Therapy offers graduate programs in occupational therapy leading to the Master of Health Science (M.H.S.) degree (on-campus nonthesis and thesis options and distance learning nonthesis option) and the entry-level Master of Occupational Therapy (M.O.T.) degree. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

**Master of Health Science:** This program is designed for students who have earned an undergraduate degree in Occupational therapy. The thesis option requires four semesters of course work and a formal research thesis, while the nonthesis option requires three semesters of course work and a research project. The program emphasizes research and advanced theories related to occupational therapy practice. Preparation for teaching, administrative, and other occupational therapy roles is supplemented through elective courses. A coherent series of elective courses related to occupational therapy must be approved by the supervisory committee chairperson before the second semester of work.

In addition to the requirements of the Graduate School, admission requires the candidate to have completed a curriculum in occupational therapy accredited by the American Occupational Therapy Association or by the World Federation of Occupational Therapists.

The distance learning degree option for the Master of Health Science is specifically intended to meet the needs of the working professional. The nonthesis program is designed to improve the knowledge and skills of working occupational therapists for practice in a complex and challenging health care system. It provides preparation for new practice areas, leadership roles, and independent practice and is delivered through the Internet. In addition to the departmental requirements listed above, applicants to the distance learning program must have basic personal computer competency and access to a computer that meets minimal configuration requirements.

Additional information about the Master of Health Science is available at [http://www.hp.ufl.edu](http://www.hp.ufl.edu) or [http://gradschool.rgp.ufl.edu](http://gradschool.rgp.ufl.edu) or by telephone at (352)273-6817. For distance learning, see [http://otdlm.phhp.ufl.edu/](http://otdlm.phhp.ufl.edu/) or call toll free (866)878-3297.

**Master of Occupational Therapy:** This entry-level degree program is designed for students who do not have an undergraduate degree in occupational therapy. The program provides students with a holistic perspective, including an understanding of the philosophical and theoretical bases for practice in the current health care environment. The M.O.T. program provides a strong background in theory, assessment, and therapeutic interventions. Before their professional preparation in the M.O.T. program, students receive a liberal education in their pre-professional baccalaureate studies, including several courses specifically focused for students planning to enter the M.O.T. program. Students may enroll in courses in the Bachelor of Health Science degree program at the bachelor's level, or they may complete these courses on a postbaccalaureate level before starting the M.O.T. program. Students are only admitted into the M.O.T. program in summer term and graduate at the end of the fall term after 1.33 years of full-time study (5 semesters) and 58 credits.

Admission requirements include completion of an undergraduate degree and the prerequisite course work. Three letters of reference and a letter of application are required by the Department. Additional information is available at [http://www.phhp.ufl.edu/ot/](http://www.phhp.ufl.edu/ot/) and [http://gradschool.rgp.ufl.edu](http://gradschool.rgp.ufl.edu) or by telephone (352)273-6817.

This program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association. The address for ACOTE is 4720
Montgomery Lane, Box 31220, Bethesda, MD, 20814-1220. The phone number is (301) 652-2632. Graduates of the program are eligible to sit for the national certification exam administered by the National Board for Certification in Occupational Therapy (NBCOT). The website address of NBCOT is www.nbcot.org.

OTH 5002: Foundations of Occupational Therapy
OTH 5115C: Therapeutic Skills II: Areas of Occupation
OTH 5324: Psychosocial Intervention
OTH 5435: Therapeutic Skills I
OTH 5722: Professional Development in Occupational Therapy
OTH 5726C: Service Delivery and OT Management
OTH 5770C: Research for Occupational Therapy
OTH 5812: Practicum I
OTH 5816: Practicum II
OTH 5848: Internship I
OTH 5849: Internship II
OTH 6008: Neuroscience of Human Occupation
OTH 6106: Assistive Technology and Occupational Performance
OTH 6539: Occupational Therapy Theory
OTH 6635: Principles of Occupational Therapy Screening and Evaluation I
OTH 6636: Principles of Occupational Therapy Screening and Evaluation II
OTH 6641: Occupational Therapy Interventions I
OTH 6642: Occupational Therapy Interventions II
OTH 6707: OT Manager
OTH 6708: Issues in Occupational Therapy Practice I
OTH 6709: Issues in Occupational Therapy Practice II
OTH 6720: Trends and Issues in Health Care
OTH 6763: Evidence Based Practice
OTH 6861: Specialty Internship
OTH 6905: Individual Work
OTH 6907: Professional Development Project
OTH 6933: Special Topics in Occupational Therapy
OTH 6971: Research for Master’s Thesis

Pharmaceutical Outcomes and Policy Department

Chair: R. Segal
Graduate Coordinator: A. Winterstein

Complete faculty listing by department: Follow this link.
The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree. Complete descriptions of the requirements for these degrees are provided in the Graduate Degrees section of this catalog.

PHA 5270: Health Care and Patient Safety

PHA 5271: Health Care Risk Management

PHA 5272: Risk Management, Liability and Compliance

PHA 6206: Introduction to Pharmaceutical Microeconomics

PHA 6227: Institutional Pharmacy Leadership I

PHA 6228: Institutional Pharmacy Leadership II

PHA 6236: Health Sciences Liability Law

PHA 6250: Patient Responsibility in Health Care

PHA 6264: Pharmacoeconomics and Health Technology Assessment

PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I

PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II

PHA 6268: Pharmacoepidemiology and Patient Safety

PHA 6269: Pharmaceutical Products and Public Policy

PHA 6273: Structure, Process, and Outcomes of Regulation

PHA 6274: Federal Regulations of Drugs and Pharmacy

PHA 6275: Federal Regulations of Controlled Substances

PHA 6276: Regulating Pharmaceutical Access and Costs

PHA 6277: Ethics in Drug Development Production and Use

PHA 6278: State Regulation of Drugs and Pharmacy

PHA 6279: Pharmaceutical Outcomes and Policy Seminar

PHA 6280: Medicare and Medicaid

PHA 6281: Practices and Procedures of Administrative Agencies

PHA 6282: Pharmaceutical Policy Process

PHA 6283: Commercial Applications of Pharmacoeconomics

PHA 6286: Pharmaceutical Microeconomics

PHA 6287: Pharmaceutical Health Economics

PHA 6288: Critical Review of Research Methods

PHA 6289: Regulating Clinical Research

PHA 6290: Pharmaceutical Fraud and Abuse

PHA 6291: Pharmaceutical Health Care Systems

PHA 6717: Measurement in Pharmacy Administration Research
The Department of Pharmaceutics offers the Doctor of Philosophy in pharmaceutical sciences. Pharmaceutics is the scientific endeavor concerned with the design, formulation, evaluation, and use of drug delivery systems. A foundation in physical chemistry, chemistry, mathematics, and in the life sciences, is necessary. Its domain extends from studies of the physiochemical properties of drugs and related molecules to investigations of the mechanisms of physiological processes affecting drug delivery and therapeutic effectiveness. The Department's general focus involves studying the design and evaluation of traditional and novel dosage forms for delivering drug molecules and macromolecules. The design involves physical chemical studies and development of analytical techniques involving spectroscopy and chromatography. Evaluation includes development of sensitive analytical techniques for the drug in biological fluids and subsequent biopharmaceutical and clinical pharmacokinetic studies.

**Pharmacienics Department**

*Chair:* H. C. Derendorf.  
*Graduate Coordinator:* A. Palmieri III.

Complete faculty listing by department: [Follow this link](#).

The Department of Pharmaceutics offers the Doctor of Philosophy in pharmaceutical sciences. Pharmaceutics is the scientific endeavor concerned with the design, formulation, evaluation, and use of drug delivery systems. A foundation in physical chemistry, chemistry, mathematics, and in the life sciences, is necessary. Its domain extends from studies of the physiochemical properties of drugs and related molecules to investigations of the mechanisms of physiological processes affecting drug delivery and therapeutic effectiveness. The Department's general focus involves studying the design and evaluation of traditional and novel dosage forms for delivering drug molecules and macromolecules. The design involves physical chemical studies and development of analytical techniques involving spectroscopy and chromatography. Evaluation includes development of sensitive analytical techniques for the drug in biological fluids and subsequent biopharmaceutical and clinical pharmacokinetic studies.

**PHA 6116: In Vivo and In Vitro Stability of Drugs**

**PHA 6118: Molecular Diversity**

**PHA 6125: Pharmacokinetics and Biopharmaceutics**

**PHA 6170C: Pharmaceutical Product Formulation**

**PHA 6183: Pharmaceutical Gene Delivery**

**PHA 6185: Pharmaceutical Drug Development**

**PHA 6416: Pharmaceutical Analysis I**

**PHA 6427: Pharmacogenetics of Drug Metabolism**

**PHA 6440: Seminar in Drug Discovery**

**PHA 6449: Pharmacogenomics**

**PHA 6630: Medication Therapy Management: A Hematologic Focus**

**PHA 6631: Foundations of Medication Therapy Management I**

**PHA 6632: Foundations of Medication Therapy Management II**

**PHA 6633: Medication Therapy Management: A Cardiovascular Focus**

**PHA 6793: Evidentiary Basis of Pharmaceutical Use**

**PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research**

**PHA 6798: The Use and Abuse of Statistics in Drug Regulation**

**PHA 6799: Patient Safety Program Evaluation**

**PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy**

**PHA 6806: Pharmacoeconomic Modeling**

**PHA 6889: Introduction to Pharmacoepidemiology**

**PHA 6892: Practices and Procedures of the IRB**

**PHA 6893: Research Ethics**

**PHA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology**

**PHA 6937: Topics in Pharmaceutical Administration**
PHARMACODYNAMICS DEPARTMENT

Chair: M. Keller-Wood.
Interim Graduate Coordinator: Joanna Peris.

Complete faculty listing by department: Follow this link.

The Department of Pharmacodynamics offers the Doctor of Philosophy in the pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the interdisciplinary toxicology concentration (see Interdisciplinary Graduate Studies in this catalog). Pharmacodynamics is an integrated field of study involving pharmacology, physiology, and toxicology in a holistic approach to drug action in living systems. The Department focuses on neuroendocrinology, cardiovascular pharmacology, and neuropharmacology with diverse research interests in aging, hypertension, reproduction, glaucoma, neurotoxicity, and environmental physiology.

An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.

PHA 5531: Neurotoxicology

PHA 6508: Systems Physiology and Pathophysiology I

PHA 6509: Systems Physiology and Pathophysiology II

PHA 6512L: Experiential Research Training in Pharmacodynamics

PHA 6521C: Research Techniques in Pharmacodynamics

PHA 6522L: ICBR Molecular Techniques Laboratory

PHA 6540: Neurochemical Foundation of Pharmacodynamics

PHA 7939: Journal Colloquy in Pharmacodynamics

PHARMACOTHERAPY AND TRANSLATIONAL RESEARCH DEPARTMENT

For a full list of faculty, please follow this link.

Description to be added.

PHA 7979: Advanced Research

PHA 7980: Research for Doctoral Dissertation

PHILOSOPHY DEPARTMENT

Chair: G. Witmer.
Graduate Coordinator: C. Liu.

Complete faculty listing by department: Follow this link.

The Department offers the Master of Arts and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog.

Admission to the program requires a bachelor’s degree in philosophy or sufficient course work in philosophy, as determined by the department. Applicants are evaluated on the basis of academic achievement, GRE scores, three letters of recommendation, a statement of purpose, and a sample essay in philosophy. Students may be admitted as for a terminal M.A. degree or for the Ph.D. Program.
The M.A. degree requires two years (36 hours) of course work. All graduate students take foundational courses in their first four semesters: the graduate Proseminar (PHI 5935), Graduate Logic (PHI 5135), a course in Ancient Philosophy (PHP 5005 or PHP 5015), a course in Modern Philosophy (PHI 5405 or PHI 5406), and either Foundations of Analytic Philosophy (PHP 5785) or Epistemology (PHIL 5365).

The Ph.D. requires 90 credit hours, which may include 36 used as credit for the M.A. In addition to the foundational courses required for the M.A., the Ph.D. requires Ethical Theory (PHI 5665) and both of PHP 5785 and PHI 5365. It also requires six courses at the advanced 6000-level, 3 proposal research hours and 12 doctoral research hours, and of course the successful completion and defense of a dissertation.

Further information about the department's programs and admissions can be obtained on the department's website web.phil.ufl.edu or by contacting the Graduate Coordinator, 330 Griffin-Floyd Hall, (352)392-2084 or gradcoord@phil.ufl.edu.

**PHH 5405: Modern Philosophy I**

**PHH 5406: Modern Philosophy II**

**PHH 5605: Studies in Continental Philosophy**

**PHH 6105: Seminar in Ancient Philosophy**

**PHH 6425: Seminar in Modern Philosophy**

**PHI 5135: Graduate Logic**

**PHI 5225: Philosophy of Language**

**PHI 5325: Philosophy of Mind**

**PHI 5365: Epistemology**

**PHI 5405: Philosophy of Science**

**PHI 5425: Philosophy of Social Science**

**PHI 5505: Metaphysics**

**PHI 5665: Ethical Theory**

**PHI 5905: Individual Work**

**PHI 5934: Topics in Philosophy**

**PHI 5935: Proseminar**

**PHI 6105: Seminar in Logic**

**PHI 6226: Seminar in Philosophy of Language**

**PHI 6306: Seminar in Epistemology**

**PHI 6326: Seminar in Philosophy of Mind**

**PHI 6406: Seminar in Philosophy of Science**

**PHI 6506: Seminar in Metaphysics**

**PHI 6667: Seminar in Ethics**

**PHI 6787: Seminar in Continental Philosophy**

**PHI 6905: Individual Work**

**PHI 6910: Supervised Research**

**PHI 6934: Special Topics**

**PHI 6940: Supervised Teaching**
The Department of Physics offers the Master of Science (thesis or nonthesis) and the Doctor of Philosophy degrees. The nonthesis Master of Science in Teaching is also offered. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Areas of specialization for graduate research include astrophysics and cosmology, atomic and molecular physics, biological physics, chemical physics, condensed matter physics (theory and experiment), nuclear physics, particle physics (theory and experiment), statistical physics, and low temperature physics.

Special interdisciplinary research programs include the Institute for Fundamental Theory (carried out jointly with the Department of Mathematics), the Institute for Theoretical and Computational Studies in Molecular and Materials Science (carried out jointly with the Department of Chemistry), the Institute of High Energy and Particle Astrophysics, and Microfabritech (jointly with the College of Engineering). A curriculum is offered by the Center for Chemical Physics for students interested in research related to chemistry or chemical engineering. The Center for Condensed Matter Sciences provides opportunities for investigations in a diverse range of subjects and fields, including the Microkelvin Research Laboratory. The University of Florida operates the National High Magnetic Field Laboratory jointly with Florida State University and Los Alamos National Laboratory.

The core curriculum is designed to provide a thorough foundation for all physics graduate students. It consists of PHY 6246, PHY 6346, PHY 6347, PHY 6536, PHY 6645, and PHY 6646. Doctoral students must achieve a 3.30 GPA in the core curriculum. All students must pass a preliminary examination at the undergraduate level. All degree candidates are required, as part of their graduate education, to participate continuously in the research and/or teaching programs of the Department.

For more information, please see the program page below, and visit our website: http://www.phys.ufl.edu.

PHY 5277: Physics of Accident Reconstruction and Biomechanics

PHY 5905: Individual Work

PHY 6246: Classical Mechanics

PHY 6346: Electromagnetic Theory I

PHY 6347: Electromagnetic Theory II

PHY 6536: Statistical Mechanics I

PHY 6555C: Cryogenics

PHY 6645: Quantum Mechanics I

PHY 6646: Quantum Mechanics II

PHY 6648: Quantum Field Theory I

PHY 6905: Individual Work

PHY 6910: Supervised Research

PHY 6920: Departmental Colloquium
PHY 6932: Seminar in Molecular and Computational Physics
PHY 6943: Internship in College Teaching
PHY 6971: Research for Master's Thesis
PHY 7097: Advanced Topics in Theoretical Physics
PHY 7669: Quantum Field Theory II
PHY 7939: Special Topics
PHY 7979: Advanced Research
PHY 7980: Research for Doctoral Dissertation
PHZ 5155C: Physical Modeling and Simulation
PHZ 5245: Introduction to Magnetic Resonance
PHZ 5354: Introduction to Particle Physics
PHZ 5405: Introduction to Solid-State Physics
PHZ 6156: Computer Methods in Physics
PHZ 6166: Qualitative Methods of Theoretical Physics
PHZ 6355: Elementary Particle Physics I
PHZ 6358: Standard Model of Elementary Particles I
PHZ 6391: Seminar in Astrophysics
PHZ 6392: Seminar in Particle Physics
PHZ 6426: Solid State I
PHZ 6493: Seminar in Condensed Matter Physics
PHZ 6607: Special and General Relativity
PHZ 7357: Elementary Particle Physics II
PHZ 7359: Standard Model of Elementary Particles II
PHZ 7427: Solid State II
PHZ 7428: Modern Condensed Matter Physics
PHZ 7429: Phases of Condensed Matter
PHZ 7608: Special and General Relativity II

Plant Molecular and Cellular Biology Department

Complete faculty listing by department: Follow this link.
Plant Molecular and Cellular Biology Department

College of Agricultural and Life Sciences
College of Liberal Arts and Sciences
College of Medicine

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology within the colleges of Agriculture and Life Sciences, Medicine, and Liberal Arts and Sciences.

Plant Pathology Department

Chair: R. Loria
Graduate Coordinators: J. Jones

Complete faculty listing by department: Follow this link

The Department of Plant Pathology offers graduate studies leading to the Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees. The Department also participates in the Doctor of Plant Medicine interdisciplinary professional degree.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

PLP 5005C: General Plant Pathology
PLP 5102: Theory and Practice of Plant Disease Control
PLP 5115C: Citrus Pathology
PLP 5155: Microbiological Control of Plant Diseases and Weeds
PLP 6223C: Viral Pathogens of Plants
PLP 6241C: Bacterial Plant Pathogens
PLP 6262C: Fungal Plant Pathogens
PLP 6291: Plant Disease Diagnosis
PLP 6303: Host-Parasite Interactions II
PLP 6404: Epidemiology of Plant Disease
PLP 6502: Host-Parasite Interactions I
PLP 6621C: Pop Genetics Microbes
PLP 6656C: Fungal Biology
PLP 6905: Problems in Plant Pathology
PLP 6910: Supervised Research

PLP 6921: Colloquium in Principles of Plant Pathology

PLP 6932: Seminar in Plant Pathology

PLP 6940: Supervised Teaching

PLP 6942: Professional Internship in Plant Disease Clinic

PLP 6971: Research for Master's Thesis

PLP 7946: Plant Pathology Internship

PLP 7979: Advanced Research

PLP 7980: Research for Doctoral Dissertation

Political Science Department

Chair: Ido Oren
Graduate Coordinator: Daniel Smith

Complete faculty listing: Follow this link.

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science–international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information, please contact the Political Science Department or follow the hyperlinks below to more information about the specific programs offered.

CPO 5935: Advanced Topics in Comparative Politics

CPO 6046: Politics in Advanced Industrial Societies

CPO 6059: Democracy and Its Competitors

CPO 6077: Social Movements in Comparative Perspective

CPO 6091: Introduction to Comparative Political Analysis

CPO 6206: Seminar in African Politics

CPO 6307: Latin American Politics I

CPO 6732: Democratization and Regime Transition

CPO 6736: Post-Communist politics

CPO 6756: Comparative Elections and Party Systems

CPO 6757: The European Union In Comparative Perspective

CPO 6786: Peasant Politics and Society

CPO 6795: Environmental Politics

CPO 6796: Water Politics

INR 5935: Advanced Topics in International Relations

INR 6036: Globalization, Regionalism, and Governance

INR 6039: International Political Economy

INR 6208: Advanced International Relations Theory

INR 6213: Seminar: Politics of the European Union
INR 6249: Inter-American Relations
INR 6305: Politics of American Foreign Policy Making
INR 6337: Survey of International Security
INR 6352: International Environmental Relations
INR 6507: International Organization
INR 6607: International Relations Theory
INR 6936: Seminar in Transnational and Global Studies
INR 6938: Seminar in Culture and World Politics
PAD 5935: Advanced Topics in Public Administration
PAD 6108: Public Administration Theory
PAD 6227: Public Budgeting and Finance
PAD 6434: Leadership and Ethics in Public Agencies
PAD 6946: Internship in Government
POS 5935: Advanced Topics in Political Science
POS 6045: Seminar in American Politics
POS 6048: American Political Development
POS 6127: State Government and Politics
POS 6146: Urban Politics
POS 6157: Community Analysis
POS 6196: Patrons, Clients, Corruption, and Accountability
POS 6207: Political Behavior
POS 6208: Empirical Political Research
POS 6272: Political Participation
POS 6274: Political Campaigning
POS 6278: Advanced Campaign Strategy
POS 6279: The Politics of Direct Democracy
POS 6292: Religion and Politics
POS 6427: Legislative Process
POS 6453: Political Parties and Interest Groups
POS 6458: Politics of Campaign Finance
POS 6476: Bureaucratic Politics in the U.S.
POS 6707: Qualitative Research Methods for Political Science
POS 6712: Empirical Theories of Politics
POS 6716: Scope and Epistemologies of Political Science
POS 6736: The Conduct of Inquiry
POS 6737: Political Data Analysis
POS 6747: Topics in Political Research Methodology
POS 6757: Survey Research
POS 6909: Individual Work
POS 6910: Supervised Research
POS 6933: Special Topics
POS 6940: Supervised Teaching
POS 6971: Research for Master’s Thesis
POS 7979: Advanced Research
POS 7980: Research for Doctoral Dissertation
POT 5935: Advanced Topics in Political Theory
POT 6016: Ancient Political Thought
POT 6056: Modern Political Thought
POT 6067: Contemporary Political Theory
POT 6306: Liberalism and Its Critics
POT 6314: Democratic Theory
POT 6416: The Marxist Tradition and its Critics
POT 6505: Politics and Theory
POT 6516: Political Judgment
PUP 5935: Advanced Topics in Public Policy
PUP 6006: Policy Evaluation
PUP 6007: Policy Process
PUP 6009: Public Policy Analysis
PUP 6315: Race, Gender, and Politics

Psychology Department

College of Liberal Arts and Sciences
Chair: Lise Abrams
Graduate Coordinator: Julia A. Graber

Complete faculty listing by department: Follow this link.

The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees section of this catalog. Students are not accepted for a terminal master's degree.

For more information, please see the program page below and our website: https://www.psych.ufl.edu.
CBH 6056: Comparative Psychology
CLP 6169: Seminar: Psychology and Deviant Behavior
CLP 7525: Best Methods for Studying Psychological Change
DEP 6057: Advanced Developmental Psychology I
DEP 6058: Advanced Developmental Psychology II
DEP 6059: Seminar: Special Topics in Developmental Psychology
DEP 6099: Survey of Developmental Psychology
DEP 6406: Advanced Adulthood and Aging
DEP 6409: Seminar: Adult Development and Aging
DEP 6799: Current Research Methods in Developmental Psychology
DEP 6936: Current Research in Developmental Psychology
DEP 7608: Theories of Developmental Psychology
EAB 5436: Behavioral Pharmacology
EAB 6099: Survey of Behavior Analysis
EAB 6118: Theoretical Foundations of Behavior Analysis
EAB 6707: Applied Behavior I
EAB 6712: Experimental Psychopathology
EAB 6716: Behavior Analysis in Developmental Disabilities
EAB 6719: Seminar: Strategies and Tactics of Human Behavioral Research
EAB 6750: Quantitative Methods
EAB 6780: Ethics and Professional Issues
EAB 6937C: Seminar: Special Topics in Experimental Analysis of Behavior
EAB 6939: Seminar: Special Topics in Applied Behavior Analysis
EAB 7089: Advanced Seminar: Experimental Analysis of Behavior
EAB 7090: Verbal Behavior
EXP 6099: Survey of Cognition and Sensory Processes
EXP 6609: Seminar: Cognition
EXP 6939: Seminar: Current Issues in Cognition and Sensory Processes
PCO 6057: Psychology of Counseling I
PCO 6058: Psychology of Counseling II
PCO 6059: Psychology of Counseling III
PCO 6278: Diversity and Multiculturalism in Counseling Psychology
PCO 6316C: Psychological Assessment I
PCO 6317C: Psychological Assessment II
PCO 6931: History and Contemporary Issues in Counseling Psychology
PCO 6939: Seminar: Current Topics in Counseling Psychology
PCO 7217: Professional Ethics and Skills in Counseling Psychology
PCO 7247: Group Counseling/Psychology
PCO 7537: Vocational Psychology
PCO 7944: Practicum in Counseling Psychology
PCO 7945: Advanced Practicum in Counseling Psychology
PCO 7949: Internship in Counseling Psychology
PPE 6059: Seminar in Personality
PSB 5445: Drug Use and Abuse
PSB 5935: Seminar in Physiological Psychology
PSB 6082: Neuroethology
PSB 6087: Advanced Physiological Psychology
PSB 6088L: Behavioral Neurobiology
PSB 6099: Survey of Physiological and Comparative Psychology
PSB 7248: Neurobehavioral Relations
PSB 7249: Seminar in Neural Mechanisms and Behavior
PSY 6608: History of Psychology
PSY 6905: Individual Work
PSY 6910: Supervised Research
PSY 6930: Topics in Psychology
PSY 6939: Seminar: The Teaching of Psychology
PSY 6940: Supervised Teaching
PSY 6971: Research for Master's Thesis
PSY 7979: Advanced Research
PSY 7980: Research for Doctoral Dissertation
SOP 6099: Survey of Social Psychology
SOP 6219C: Advanced Research Techniques in Social-Personality Psychology
SOP 6409: Seminar: Current Topics in Social-Personality Psychology
SOP 6419: Seminar: Attitudes and Social Cognition
SOP 6509: Seminar: Interpersonal Relations and Group Processes
SOP 8929: Colloquium on Research in Social-Personality Psychology

Religion Department

Chair: Manuel A. Vasquez.
Graduate Coordinator: David G. Hackett

Complete faculty listing by department: Follow this link.

The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asian
- Religion and nature.

Minimum requirements for these degrees are given in the General Information section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religions and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at [http://religion.ufl.edu/graduate-studies/](http://religion.ufl.edu/graduate-studies/) under "Graduate Program." In special instances, and with the agreement of the supervisory committee and two sponsoring faculty members, master's degree students may choose an area outside the three specialty fields.

In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest:

- Three references from persons competent to evaluate the applicant's potential for graduate work
- An essay of 3 to 5 double-spaced, typewritten pages identifying the applicant's goals and particular interests pertinent to the three available specialty fields (this essay is extremely important and applicants should attend to it carefully)
- A writing sample.

Beyond these requirements, applicants need to show clear evidence of solid preparation before admission. This usually includes formal study of the primary language in the specialty field. Acceptable scores on the GRE General Test are required. In addition to evidence of preparation and academic promise, the Department gives careful consideration to the fit between an applicant's central scholarly interests and the resources the Department and University have to offer.

Master of Arts: The M.A. degree provides a broad background in the study of religious traditions, theoretical orientations in the discipline, and an initial concentration in one of the three specialty fields. Course work culminates in a thesis and oral examination on the thesis and course work.

Total credits: Thirty credit hours are required. These include Method and Theory I and II, the core course(s) of the major field (or equivalent for those not in one of the three specialty fields), and 6 hours of thesis research credits. The additional hours shall consist of further courses in the specialty field, other graduate seminars, and up to 6 hours of research language study.

Language study: All M.A. students are required to demonstrate competency in a scholarly language other than English before beginning the thesis. Most languages are acceptable, though students should consult the individual field requirements. The chosen language must be approved by the student's mentor and the graduate coordinator.

Thesis: Each student, guided by a supervisory committee, will prepare a Master of Arts thesis, acceptable to the Department of Religion and the Graduate School, and undergo an oral examination.

Promotion to doctoral status: The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish that status to be changed. A review and decision will be made by the field faculty and the graduate committee.

Doctor of Philosophy: The Ph.D. program trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religion master's degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master's degree with additional religion course work. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

Course requirements: The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours credited toward the Ph.D. is at the discretion of department faculty. A minimum of 45 hours is devoted to course work at the doctoral level. The specific distribution of course work depends on the specialization but will include intensive work in the major area of specialization, 6 hours of method and theory (if not taken at the M.A. level) and 15 hours devoted to dissertation writing and research.

Language requirements: All doctoral students must demonstrate proficiency in at least one and in many cases two languages other than English. The chosen language(s) as well as how and when the student's competence will be judged must be approved by the student's supervisory committee chair. Frequently language competence is documented by 1) taking an appropriate course or courses in the language with a grade of "B" or better, or 2) passing a translation exam (usually administered by a department member or a language department at the University).

Basic course work for scholarly languages will not count toward the required 90 credit hours. However, students studying a scholarly language connected to their research needs (above and beyond basic competence) can receive 6 (or more) credit hours for such advanced courses toward the required 90 total credit hours, with approval of the student's supervisory committee chair.

Qualifying examinations: Qualifying examinations form a bridge between course work and dissertation research. Normally, students will take qualifying examinations during their third year in residence. The precise areas of questioning and the reading list are decided by the supervisory committee in consultation with the student, well in advance of the examinations, but no later than the beginning of the term in which the student intends to take the qualifying examinations.

Dissertation proposal: Each doctoral candidate submits a formal dissertation proposal to the candidate's supervisory committee chair at least 3 weeks before the end of the semester after the qualifying examination.

Admission to candidacy: On successfully completing the qualifying examination and the dissertation proposal, and all other course and language requirements, and with the approval of the supervisory committee, students make formal application to the Department and Graduate School for admission to Ph.D. candidacy.

Dissertation and its defense: The final years of the program are devoted to dissertation research and writing. The student is expected to present the completed dissertation and defend it at a public oral defense conducted by the supervisory committee.

Mentoring: Each student is assigned a faculty mentor on admission to the program, based on expressions of faculty interest and the student's intended area of concentration. The mentor and graduate coordinator answer questions and provide support for the student in choosing courses and planning a program. By the end of the second semester, all master's degree students must designate their supervisory committee chair and one additional department committee member. By the end of the second semester, all doctoral students must designate their committee chair. By no later than the end of the fourth semester of study, all doctoral students must designate a four-member supervisory committee including the chair and one member from outside the department. For details about the programs listed above, visit [http://religion.ufl.edu/graduate-studies/](http://religion.ufl.edu/graduate-studies/).

REL 6347: American Buddhism
REL 6368: Islam in Asia
REL 6397: Hindu Sacred Texts and Their Ritual Context
RLG 5143: Religion and Social Change
RLG 5195: Topics in Religion and Society
RLG 5297: Topics in Biblical Studies
RLG 5338: Topics in Asian Religions
RLG 5365: Studies in Islam
RLG 5396: Religion and Animals
RLG 5495: Topics in Religious Thought
RLG 5549: Studies in Christianity
RLG 5696: Topics in Jewish Thought
RLG 5906: Individual Work
RLG 5937: Topics in Religious Studies
RLG 6035: Method and Theory I
RLG 6036: Method and Theory II
RLG 6095: Utopias and Dystopias
RLG 6107: Core Seminar in Religion and Nature
RLG 6125: Religion and Politics in the Americas
RLG 6126: Religion in the Americas
RLG 6129: Hindu Traditions in America
RLG 6137: Religion in North America
RLG 6138: New Religious Movements
RLG 6167: Radical Environmentalism
RLG 6181: Ethics and the Natural Sciences
RLG 6183: Religion and Environmental Ethics
RLG 6187: Nature in Asian Religions
RLG 6196: Globalizing the Sacred
RLG 6310: Religion and Nature in South Asia
RLG 6319: Interpreting Asian Religions
RLG 6339: Women in the Hindu Tradition
RLG 6346: Buddhist Traditions
RLG 6385: Native Religions in the Americas
The School sponsors special curricula in architecture to enhance the academic program.

Master of Architecture: The School of Architecture offers graduate work leading to the first professional degree, Master of Architecture. During graduate studies, each student has the opportunity to focus on one or more areas, including design, history and theory, urban design, preservation, structures, and technology. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design. The student's overall college experience, both undergraduate and graduate programs, is intended to be a complete unit of professional education leading to practice in architecture or related fields.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board acknowledges two types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Florida School of Architecture offers the following NAAB-accredited degree programs:

Master of Architecture (pre-professional degree + 52 graduate credits) Master of Architecture (professional degree + 30 graduate credits) Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits)

Doctor of Philosophy: The college offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization in this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, Box 115701.

Master of Architecture: The School of Architecture offers graduate work leading to the first professional degree, Master of Architecture. During graduate studies, each student has the opportunity to focus on one or more areas, including design, history and theory, urban design, preservation, structures, and technology. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design. The student's overall college experience, both undergraduate and graduate programs, is intended to be a complete unit of professional education leading to practice in architecture or related fields.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board acknowledges two types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Florida School of Architecture offers the following NAAB-accredited degree programs:

Master of Architecture (pre-professional degree + 52 graduate credits) Master of Architecture (professional degree + 30 graduate credits) Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits)

Master of Architecture (pre-professional degree + 52 graduate credits): For those students who have a 4-year baccalaureate degree from an accredited architectural program, 2 years in residence (52 credits) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or master's project. Course sequences in history and theory, technology, structures, and practice must also be completed.

Master of Architecture (professional degree + 30 graduate credits): For students who have a baccalaureate degree with an architecture or related major (interior design, landscape architecture) and who have completed 4 or 6 architecture or design studies courses, three years of residence (83 credits, approximately) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or master's project. Undergraduate courses 3000 and 4000 level in the major do not count toward the minimum requirements for the graduate degree. Course sequences in history and theory, materials and methods, technology, structures, and practice must be completed.

Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits): For students with a baccalaureate degree in architecture or a nonrelated academic area and who have completed fewer than 4 design studies courses, 4 years of residence (112 credits, approximately) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 4071, ARC 4072, ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or project. Undergraduate courses 3000 and 4000 level in the major do not count toward the 52-hour minimum requirements for the graduate degree. Course sequences in history and theory, materials and methods, technology, structures, and practice must be completed.

Accredited 5-year professional base: For students with a baccalaureate degree in architecture from an accredited 5-year professional degree program, a 1-year degree program is available. In these cases, a specialized curriculum is developed that complements the needs of the applicant. Minimum registration is 30 credits; however, the minimum may increase if transcript reviews show that further course work is needed to meet registration and curriculum requirements. ARC 6356 is a prerequisite for the thesis or master's project.

Most states require individuals intending to become architects to hold an accredited degree. The National Architectural Accrediting Board acknowledges two types of degrees: the Bachelor of Architecture (minimum 5 years of study); and the Master of Architecture (minimum 3 years of study after an unrelated bachelor's degree, or 2 years after a related pre-professional baccalaureate degree). These professional degrees educate those who aspire to registration and licensure to practice as architects.

Student work: The College may retain student work for the purpose of record, exhibition, or instruction.

Master of Science in Architectural Studies: The M.S.A.S. is a nonprofessional degree for advanced investigations in specialized areas of architectural history, architectural pedagogy, theory, technology, design, preservation, or practice. Students with a bachelor's degree in any discipline from an accredited university are eligible to apply to this program; the proposed area of focus should be precisely defined in the application. This is a 3- to 4-semester program (32 hours minimum) that includes a thesis. (No more than 6 hours of ARC 6971 may be counted in the minimum credit hours for the degree.) Interdisciplinary study is encouraged. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design.

The School sponsors special curricula in architecture to enhance the academic program. Preservation Institute: Caribbean, Preservation Institute: Nantucket, and Vicenza Institute of...
Architecture (Italy) accepts students from the University of Florida, and also from academic circles throughout the United States and the world for year-round study. Any student in a graduate architecture program at the University of Florida may apply for one or more of these programs.

Requirements for the M.Arch., M.S.A.S., and Ph.D. degrees are described in the General Information section of this catalog.

The School also participates in a program granting an Interdisciplinary Concentration and Certificate in Sustainable Architecture. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

Applications: All applications for fall term graduate admission (including official transcripts, GRE scores, and TOEFL scores, if necessary) must be received by the Office of the Registrar by January 15. In addition to satisfying University requirements for admission, applicants are required to submit to the Graduate Program Assistant, School of Architecture, 231 ARCH, Box 115702, the following: a portfolio of their creative work; a scholarly statement of intent and objectives; and three letters of recommendation. This material must be received by January 15 to be considered for admission in the next fall term. Students may apply after the January 15 deadline but will only be considered if spaces become available. (Updates of portfolios are accepted after January 15; however, applications will not be considered until they are complete.)

The School reserves the right to retain student work for purposes of record, exhibition, or instruction. Field trips are required of all students; students should plan to have adequate funds available. It may be necessary to assess studio fees to defray costs of base maps and other generally used materials.

ARC 5791: Topics in Architectural History
ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
ARC 5810: Techniques of Architectural Documentation
ARC 6116: Drawing toward Architecture
ARC 6176: Advanced Computer-Aided Design
ARC 6212: Topics in Phenomena and Architecture
ARC 6226: Intercultural Perspectives in Architecture
ARC 6228: Film and Architecture
ARC 6241: Advanced Studio I
ARC 6242: Research Methods
ARC 6280: Advanced Topics in Architectural Practice
ARC 6281: Professional Practice
ARC 6311C: Building Information Modeling
ARC 6355: Advanced Studio II
ARC 6356: Advanced Studio III
ARC 6357: Advanced Topics in Architectural Design
ARC 6383: St. Augustine Interdisciplinary Design Studio
ARC 6391: Architecture, Energy, and Ecology
ARC 6393: Advanced Architectural Connections
ARC 6399: Advanced Topics in Urban Design
ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
ARC 6512: Structural Modeling
ARC 6576: Architectural Structures
ARC 6611: Advanced Topics in Architectural Technology
ARC 6621: Graduate Environmental Technology 2
ARC 6642: Architectural Acoustic Design Laboratory
ARC 6643: Architectural Acoustics

ARC 6685: Life Safety, Sanitation, and Plumbing Systems

ARC 6705: Graduate Architectural History 3

ARC 6711: Architecture of the Ancient World

ARC 6750: Architectural History: America

ARC 6773: Strains of Modernism

ARC 6793: Advanced Topics in Regional Architecture

ARC 6805: Architectural Conservation

ARC 6821: Preservation Problems and Processes

ARC 6822: Preservation Programming and Design

ARC 6851: Technology of Preservation: Materials and Methods I

ARC 6852: Technology of Preservation: Materials and Methods II

ARC 6883: Vernacular Architecture & Sustainability

ARC 6911: Architectural Research

ARC 6912: Architectural Research II

ARC 6913: Architectural Research III

ARC 6932: Advanced Topics in Architectural Methods

ARC 6933: Sustainable Site Design

ARC 6934: European Approach to Sustainable Design

ARC 6935: Seminar in Sustainable Design

ARC 6940: Supervised Teaching

ARC 6971: Research for Master’s Thesis

ARC 6979: Master’s Research Project

School of Art and Art History

College of the Arts

Director: Richard C. Heipp
Graduate Coordinator: Patrick Grigsby

Complete faculty listing Follow this link.

The School of Art and Art History offers the M.F.A. degree in art with specializations in art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. The school also offers Master of Arts degrees in art education, art history, and museology (museum studies) and the Doctor of Philosophy degree in art history. Requirements for these degrees can be found in the Graduate Degrees section of this catalog, and information about each of these graduate programs can be found at the links below.

For more information, please see our website: http://www.arts.ufl.edu/welcome/art

ARE 6049: History of Teaching Art

ARE 6148: Curriculum in Teaching Art

ARE 6246C: Principles of Teaching Art
ARE 6247C: Teaching Art: The Study of Practice
ARE 6386: Teaching Art in Higher Education
ARE 6641: Issues in Art Education
ARE 6746: Methods of Research in Art Education
ARE 6905: Individual Study
ARE 6910: Capstone Project
ARE 6933: Special Topics in Art Education
ARE 6944: Internship in Teaching Art
ARE 6971: Research for Master's Thesis
ARE 6973: Individual Project
ARH 5357: French Art of the Ancien Regime: 1680-1780
ARH 5420: Art in the Age of Revolution
ARH 5440: Beginnings of Modernism
ARH 5527: Arts of Central Africa
ARH 5528: Art of West Africa
ARH 5529: Clothing and Textiles in Africa
ARH 5655: Indigenous American Art
ARH 5667: Colonial Andean Art
ARH 5816: Methods of Research and Bibliography
ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
ARH 5905: Individual Study
ARH 6141: Greek Art Seminar
ARH 6292: Medieval Art Seminar
ARH 6394: Renaissance Art Seminar
ARH 6422: Beginnings of Modernism: Realism to Post-Impressionism 1848-1890
ARH 6477: Eighteenth-Century European Art Seminar
ARH 6481: Contemporary Art Seminar
ARH 6496: Modern Art Seminar
ARH 6596: Chinese Art Seminar
ARH 6597: African Art Seminar
ARH 6598: Pre-Columbian Art Seminar
ARH 6666: Colonial Latin American Art Seminar
ARH 6694: Nineteenth-Century Art–Seminar
ARH 6696: American Art Seminar
ARH 6797: Museum Education
ARH 6836: Exhibitions Seminar
ARH 6895: Collections Management Seminar
ARH 6900: Independent Study in Museology
ARH 6910: Supervised Research
ARH 6911: Advanced Study
ARH 6914: Independent Study in Ancient Art History
ARH 6915: Independent Study in Medieval Art History
ARH 6916: Independent Study in Renaissance and Baroque Art History
ARH 6917: Independent Study in Modern Art History
ARH 6918: Independent Study in Non-Western Art History
ARH 6930: Special Topics in Museology
ARH 6938: Seminar in Museum Studies
ARH 6941: Supervised Internship
ARH 6946: Museum Practicum
ARH 6948: Gallery Practicum
ARH 6971: Research for Master's Thesis
ARH 7979: Advanced Research
ARH 7980: Research for Doctoral Dissertation
ART 5674C: Digital Fabrication
ART 5905C: Directed Study
ART 5930C: Special Topics
ART 6410C: Printmaking Seminar: Mastering Process and Content
ART 6411C: Printmaking Seminar: Transformation and Change
ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
ART 6413C: Printmaking Seminar: Interdisciplinary Studio
ART 6671C: Advanced Experiments in Digital Art
ART 6672: Hypermedia
ART 6673C: Video Art
ART 6675C: Digital Art and Animation
ART 6691: Digital Art Studio
ART 6794C: Vessel Aesthetic 1
ART 6795C: Vessel Aesthetic 2
ART 6797C: Ceramic Sculpture 2
ART 6835C: Research in Methods and Materials of the Artist
ART 6849C: Reactive Environments
ART 6897: Professional Practices for the Visual Artist
ART 6910C: Supervised Research
ART 6925C: Art + Technology Workshop
ART 6926C: Advanced Study I
ART 6927C: Advanced Study II
ART 6928C: Advanced Study III
ART 6929C: Advanced Study IV
ART 6933: Area Methods: Rotating Topics
ART 6971: Research for Master's Thesis
ART 6973C: Individual Project
DIG 6746C: Graduate Seminar in Sensors and Electronics
IDC 6505C: Programming for Artists
PHC 7935: Critical Thinking in Environmental and Global Health

School of Forest Resources and Conservation

College of Agricultural and Life Sciences
Director: T. L. White.
Graduate Coordinator: T. V. Stein

Complete faculty listing by department: Follow this link.

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is comprised of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Joint program: Students may simultaneously earn a juris doctorate from the College of Law and a graduate degree (M.F.R.C., M.S., or Ph.D.) in Forest Resources and Conservation. Combined programs: The School offers a combined bachelor's/master's degree program, which allows qualified students to earn both a bachelor's degree and a master's degree with a savings of 1 semester. Ph.D. students may pursue a co-major with the Department of Statistics (see below).

Concentration in geomatics: Students completing 15 or more credits with an SUR designation, as part of an SFRC graduate degree, may earn the concentration in geomatics. Geomatics is the collection, analysis, and management of spatial information and includes such fields as surveying, mapping, land tenure, cadastral systems, geographic information systems, and remote sensing.

Concentration in ecological restoration: This concentration is available to M.S. non-thesis students. To earn this concentration a student must complete Ecosystem Restoration Principles and Practice and four of the following courses: Ecological Distribution and Management of Invasive Plants, Ecology and Restoration of Invasive Ecosystems, Ecology and Restoration of Longleaf Pine Ecosystem, Watershed Restoration and Management, Natural Resource Policy and Administration, or Agroforestry in the Southeastern U.S. Ecological restoration seeks to return ecosystems to a close approximation of condition before a disturbance.

Statistics co-major: Ph.D. students with the School may elect the co-major offered jointly with the Department of Statistics. Students focusing on forest genetics, tree improvement, and other statistics-intensive aspects of natural resource management are potential candidates for this option.

Certificates: The School administers the Graduate Certificate in Agroforestry, and SFRC students regularly earn certificates in Geographic Information Systems and in Environmental Education and Communication. Requirements are described under Interdisciplinary Graduate Certificates and Concentrations in this catalog.

For additional information, please visit the School's web page at http://sfrc.ufl.edu.
For details on what terms courses will be offered, please visit [http://sfrc.ufl.edu/gradcourses.html](http://sfrc.ufl.edu/gradcourses.html).

**FAS 5203C: Biology of Fishes**

**FAS 5255C: Diseases of Warmwater Fish**

**FAS 5276C: Field Ecology of Aquatic Organisms**

**FAS 5335C: Applied Fisheries Statistics**

**FAS 5901: Scientific Thinking in Ecology**

**FAS 6154: Aquatic Invertebrate Ecological Physiology**

**FAS 6171: Applied Phycology**

**FAS 6256: Fish and Aquatic Invertebrate Histology**

**FAS 6272: Marine Ecological Processes**

**FAS 6337C: Fish Population Dynamics**

**FAS 6339C: Advanced Quantitative Fisheries Assessment**

**FAS 6355C: Fisheries Management**

**FAS 6905: Individual Study**

**FAS 6910: Supervised Research**

**FAS 6932: Special Topics in Fisheries and Aquatic Sciences**

**FAS 6933: Graduate Symposium**

**FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences**

**FAS 6940: Supervised Teaching**

**FAS 6971: Research for Master's Thesis**

**FAS 7979: Advanced Research**

**FAS 7980: Research for Doctoral Dissertation**

**FNR 5072C: Environmental Education Program Development**

**FNR 5335: Agroforestry**

**FNR 5462: Spatial Models and Decision Analysis**

**FNR 5608: Research Planning**

**FNR 6564: Ecohydrology**

**FOR 5157: Ecosystem Restoration Principles and Practice**

**FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems**

**FOR 5161: Forest Productivity and Health**

**FOR 5435: Forest Information Systems**

**FOR 5615: Forest Conservation and Management Policies and Issues**

**FOR 5625: Forest Water Resources Management**
FOR 5756: Non-Timber Forest Products
FOR 6005: Conservation Behavior
FOR 6154: Analysis of Forest Ecosystems
FOR 6156: Simulation Analysis of Forest Ecosystems
FOR 6164: Silviculture: Concepts and Application
FOR 6170: Tropical Forestry
FOR 6172C: Tropical Forestry Field Course
FOR 6215: Fire Paradigms
FOR 6310: Forest Genetics and Tree Improvement
FOR 6340: Physiology of Forest Trees
FOR 6345C: Plant Water Relations Techniques
FOR 6543: Natural Resource Economics and Valuation
FOR 6628: Community Forest Management
FOR 6665: Landscape Planning for Ecotourism
FOR 6905: Research Problems in Forest Resources and Conservation
FOR 6910: Supervised Research
FOR 6933: Seminar
FOR 6934: Topics in Forest Resources and Conservation
FOR 6940: Supervised Teaching
FOR 6971: Research for Master's Thesis
FOR 7979: Advanced Research
FOR 7980: Research for Doctoral Dissertation
GIS 6103: GIS Programming and Customization
GIS 6116: Geographic Information Systems Analysis
PCB 6555: Introduction to Quantitative Genetics
SUR 5365: Digital Mapping
SUR 5385: Remote Sensing Applications
SUR 5386: Image Processing for Remote Sensing
SUR 5391C: Geomatics: Spatial Foundations of GIS
SUR 5425: Cadastral Information Systems
SUR 5525: Least Squares Adjustment Computations
SUR 6375: Terrain Analysis and Mapping
SUR 6395: Topics in Geographic Information Systems
SUR 6427: Land Tenure and Administration
SUR 6535: GPS-INS Integration
SUR 6905: Special Problems in Geomatics
SUR 6934: Topics in Geomatics

School of Natural Resources and Environment

Graduate coordinator: T. Frazer
Complete faculty listing by department: Follow this link.

The University of Florida School of Natural Resources and Environment offers interdisciplinary coursework in the basic and applied science of ecology, the related social sciences, and sustainability, leading to M.S. and Ph.D. degrees. Choose from about 450 courses, 280 faculty advisors, and 44 participating departments. Research areas of ecology graduate students range across natural resource ecology, environmental policy and management, and sustainable development.

Environmental problems are fundamentally human problems and should be understood in terms of human motivations and actions in a biophysical context. Their solution requires holistic thinking about dynamic ecological systems and the social, economic, and political forces driving human action. To this end, the goal of the Interdisciplinary Ecology graduate program is to provide advanced training in ecology thinking and the main theories and methodologies of the biophysical and social sciences to foster integrative approaches to complex real-world problems. Interdisciplinary Ecology students are intensely interested in the sustainability problem, and they welcome the challenge of addressing it through more than one traditional discipline.

EVR 5322: Scientific Processes in Conservation and Development
EVR 5705: Natural Resources and Innovation Systems
EVR 6320: Sustainable Natural Resource Management
EVR 6933: Seminar
EVR 6934: Internship
EVR 6979: Nonthesis Master's Project
PCB 6971: Research for Master's Thesis
PCB 7979: Advanced Research
PCB 7980: Research for Doctoral Dissertation

School of Teaching and Learning

Director: E. Bondy
Graduate Coordinator: S. G. Terzian
Complete faculty listing by department: Follow this link.

The School of Teaching and Learning (http://education.ufl.edu/school) offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis or project in lieu of thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees in curriculum and instruction. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 10 areas of specialization: curriculum, teaching, and teacher education; educational technology; elementary education; mathematics education; language and literacy education (including children's literature, English education, ESOL/bilingual education, language arts, and reading education); science and environmental education; social foundations of education; social studies education; and teacher leadership for school improvement.

The nationally recognized Proteach graduate program leads to the M.Ed. degree and state certification as a classroom teacher. Unified Elementary Pro Teach admits undergraduates who complete the five-year program with a master's degree. Secondary Pro Teach (English, Science, Social Studies) prepares teachers who have completed a bachelor's degree in the discipline they will teach. Prospective elementary teachers who already hold a bachelor's degree in a non-education field may want to consider the School's SITE program (Site-based Implementation of Teacher Education), which leads to the M.Ed. degree in curriculum and instruction. Students may apply to the state for alternative certification.

Beyond the Graduate School and College of Education admission requirements, students should have academic preparation and teaching experience appropriate to the program being pursued. Students having deficiencies in their preparation will be required to follow a program to remove such deficiencies. A limited amount of support is available for graduate studies through fellowships, scholarships, research assistantships, and teaching assistantships.

EDE 5940: Integrated Teaching and Learning
EDE 6225: Practices in Childhood Education
EDE 6266: Teaching and Learning in Elementary Classrooms
EDE 6325: Teacher Inquiry/Action Research
EDE 6905: Individual Work
EDE 6910: Supervised Research
EDE 6932: Special Topics
EDE 6948: Internship in Elementary Schools
EDE 7047: Issues in Teacher Education
EDE 7935: Seminar in Curriculum & Instruction
EDF 5552: Role of School in Democratic Society
EDF 6520: History of Education
EDF 6544: Philosophical Foundations of Education
EDF 6606: Socioeconomic Foundations of Education
EDF 6616: Education and American Culture
EDF 6630: Educational Sociology
EDF 6812: Comparative Education
EDF 6820: Education in Latin America
EDF 7555: Values and Ethics in Education
EDF 7934: Seminar in Educational Foundations
EDG 5666: Knowing and Learning in STEM
EDG 6017: Writing for Academic Purposes
EDG 6047: Teacher Leadership for Educational Change
EDG 6207: Transforming the Curriculum
EDG 6225: Global Studies Methods in K-12 Education
EDG 6226: Foundations of Research in Curriculum & Instruction
EDG 6348: Instructional Coaching for Enhanced Student Learning
EDG 6415: Culturally Responsive Classroom Management
EDG 6445: Meeting the Educational Needs of Students Living in Poverty
EDG 6953: TLSI Online Portfolio Preparation
EDG 7224: Critical Pedagogy
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7359: Professional Development and Teacher Learning
EDG 7982: Practitioner Research: Theory & Practice
EDM 6005: The Emergent Middle School
EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
EME 5054: Foundations of Educational Technology
EME 5207: Designing Technology-Rich Curricula
EME 5315: Communicating with Technology
EME 5316: Educational Technology Management Issues
EME 5403: Instructional Computing I
EME 5404: Instructional Computing II
EME 5405: Internet in K-12 Instruction
EME 5431: Integrating Technology in the Mathematics Classroom
EME 5432: Integrating Technology into Social Science Classroom
EME 5433: Integrating Technology into Science Classroom
EME 6059: Blended Learning Environments
EME 6066: Issues and Trends in Educational Technology Research
EME 6076: Virtual School Philosophy and Pedagogy
EME 6156: Games and Simulations for Teaching and Learning
EME 6205: Digital Photography and Visual Literacy
EME 6208: Designing Integrated Media Environments I
EME 6209: Designing Integrated Media Environments II
EME 6235: Managing Educational Projects
EME 6236: Distance Education Leadership and Management
EME 6405: Educational Technology and Teaching
EME 6458: Distance Teaching and Learning
EME 6505: Educational Television Design and Production
EME 6602: Human-Computer Interactivity and the Learner
EME 6606: Advanced Instructional Design
EME 6609: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design
ESE 6215: The Secondary School Curriculum
ESE 6344: Classroom Practices and Assessment in Secondary Education

ESE 6345: Effective Teaching and Classroom Management

ESE 6905: Individual Work

ESE 6939: Special Topics

ESE 6945: Student Teaching in Secondary School

FLE 6165: Bilingual-Bicultural Education

FLE 6167: Cross-Cultural Communication for Teachers

FLE 6336: Teaching Foreign Languages in Elementary Schools

FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School

FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level

LAE 6298: Literacy & Language Instruction

LAE 6319: Language Arts in the Elementary School

LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts

LAE 6348: Teaching Multiliteracies

LAE 6365: Language Arts: Language and Composition

LAE 6366: Language Arts: Literature

LAE 6407: Early Childhood Children's Literature

LAE 6446: Multicultural Literature for Children and Adolescents

LAE 6447: Immigrant Experiences in Children's and Adolescent Literature

LAE 6455: International Children's Literature

LAE 6616: Seminar in Children's Literature

LAE 6635: Teaching Adolescent Literature in the Secondary School

LAE 6714: Children's Literature in the Childhood Curriculum

LAE 6861: Technology and Media Literacy

LAE 6865: Teaching Media Literacy with the Internet

LAE 6869: Teaching Digital Storytelling

LAE 6939: Literacy, Family, and Culture

LAE 6945: Practicum and Assessment for Teachers of Secondary School English

LAE 6946: Children's Literature in Educational Settings

LAE 7006: Language Acquisition and Education

LAE 7519: Language and Inquiry

LAE 7715: Research in Children's Literature
LAE 7934: Seminar in Composition Theory and Practice
LAE 7936: Seminar in English Language Arts
MAE 5327: Middle School Mathematics Methods
MAE 5332: Secondary School Mathematics Methods and Assessment
MAE 5347: Teaching K-8 Mathematics for Understanding
MAE 5395: Multicultural Mathematics Methods
MAE 5396: Using Formative Assessment to Improve Mathematical Learning
MAE 5945: Secondary School Mathematics Practicum
MAE 6313: Problem Solving in School Mathematics
MAE 6615: Individualizing Instruction in Mathematics
MAE 6641: Readings and Research in Mathematics Education
MAE 6916: Inquiry in Mathematics Teaching
MAE 7899: Mathematics Education Seminar
RED 5046: Foundations of Reading in Grades PreK-12
RED 5316: Reading in the Primary Grades
RED 5337: Reading in the Secondary School
RED 5355: Reading Instruction in the Intermediate Grades
RED 5399: Practices in Beginning Reading Instruction
RED 6346: Seminar in Reading
RED 6520: Classroom Literacy Assessment and Instruction
RED 6546C: Diagnosis of Reading Difficulties
RED 6548C: Remediation of Reading Difficulties
RED 6647: Trends in Reading
RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
RED 7019: Foundations of Literacy
RED 7817: Understanding Reading Difficulties
SCE 5316: Inquiry-Based Science Teaching
SCE 5355: Foundations of Science Teaching
SCE 5695: Diversity and Equity in Science Teaching
SCE 5765: Data-Driven Science Instruction
SCE 6045: Environmental Education Methods and Materials
SCE 6117: Science Education in the Elementary School
SCE 6246: Science Instruction in Informal Settings
SCE 6338: Secondary Science Methods and Assessment

SCE 6647: Global Studies Methods in Science Education

SCE 6947: Practicum in Secondary Science Teaching and Assessment

SSE 5320: Middle School Social Studies Methods

SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment

SSE 6046: Perspectives in Social Studies Education

SSE 6117: Social Studies Education—Elementary School

SSE 6133: Secondary School Social Studies Methods and Assessment

SSE 6478: Global Studies Methods in Social Studies

TSL 5142: ESOL Curriculum, Methods, and Assessment

TSL 5325: Secondary ESOL Teaching Strategies

TSL 6145: Curriculum and Materials Development for ESOL K-12

TSL 6245: Language Principles for ESOL Teachers

TSL 6373: Methods of Teaching ESOL K-12

TSL 6440: Testing and Evaluation of ESOL

TSL 6700: Issues in ESOL for School Counselors and Psychologists

School of Theatre and Dance

Director: J. Dickey
Graduate Performance Program Coordinator: Ralf Remshardt
Graduate Design Program Coordinator: S. Kaye

Complete faculty listing by department: Follow this link.

The graduate program offered by the School of Theatre and Dance leads to the degree of Master of Fine Arts in Theatre. Minimum requirements for this degree are given in the General Information section of this catalog.

The M.F.A. degree prepares students for professional entry in acting, production, or teaching. Placement in the M.F.A. program is determined by audition/portfolio review, academic credentials, and personal interview. Candidates for admission should have adequate training in theatre. Deficiencies may be corrected before beginning graduate study.

The program emphasizes the study and practice of theatre as an art and discipline. Students of acting and design study concepts of theatre together while working in their areas of specialization. Focus is on the collaboration and synthesis of theatre artistry. Each incoming class is composed of approximately 12 to 18 students in acting and all design areas.

The student's artistic and academic progress will be reviewed at the end of each semester. The School of Theatre Handbook gives details on the form and focus of each review. This information is online at http://www.arts.ufl.edu/theatrendance/pages/whatyouneedtoknow/downloads/downloads.asp.

During the final year of study, each student must successfully complete the comprehensive examination and oral defense. The project in lieu of thesis includes research, analysis, rehearsal process, and evaluation. Development and execution of the project includes public performance (acting or design). The written document and oral defense of the project which follow must demonstrate the ability to communicate the creative process.

Graduate acting students audition for all departmental productions.

ARC 6670: Lighting Design Seminar

DAA 6757: Pilates Technique for the Dancer

DAA 6905: Graduate Dance Project

DAN 6436: Laban Movement Analysis

DAN 6949: Dance Clinical Practice

THE 5238: African-American Theatre History and Practice
THE 5287: History of Decor and Architecture for the Stage
THE 5910: Introduction to Graduate Study in Theatre
THE 6265: Costume History
THE 6525: History, Literature, and Criticism I
THE 6526: History, Literature, and Criticism II
THE 6565: Seminar in Creative Process
THE 6905: Individual Study
THE 6940: Supervised Teaching
THE 6941: Internship
THE 6950: Applied Theatre
THE 6955: Summer Repertory Theatre
THE 6971: Research for Master's Thesis
THE 6973C: Project in Lieu of Thesis
TPA 5025: Lighting Design I
TPA 5047: Costume Design I
TPA 5067: Scene Design I
TPA 5072: Drawing and Rendering
TPA 5079: Graduate Scene Painting
TPA 5082: Advanced Theatre Graphics
TPA 5236: Costume Technologies Workshop
TPA 6005: Design I
TPA 6006: Design II
TPA 6009: Design Studio
TPA 6026: Lighting Design II
TPA 6048: Costume Design II
TPA 6054: Detail Design for Costume Designers
TPA 6069: Scene Design II
TPA 6235: Costume Construction
TPA 6237: Pattern Making: Flat Patterning
TPA 6243: Pattern Making: Draping
TPA 6258: Computer Drafting 2D
TPA 6357: Programming and Presentation for the Lighting Designer
Sociology and Criminology & Law Department

Chair: Barbara Zsembik
Graduate Coordinator: Barbara Zsembik

Complete faculty listing by department: Follow this link.

The Department of Sociology and Criminology & Law offers several programs of graduate study leading to the Ph.D. in Sociology, the Ph.D. in Criminology, Law and Society, the MA in Sociology, the MA in Criminology, Law and Society, and a Joint MA in Criminology/JD degree. The department also partners with the School of Natural Resources and Environment Department to offer the Ph.D. or MA in Interdisciplinary Ecology. Advanced undergraduate majors may complete a combined BA/MA degree in Sociology or a combined BA/MA degree in Criminology, Law and Society.

CCJ 5934: Contemporary Issues in Criminology and Law
CCJ 6063: Communities and Crime
CCJ 6285: Criminal Justice Process
CCJ 6619: Crime and the Life Course
CCJ 6643: White Collar Crime
CCJ 6658: Drugs, Crime, and Policy
CCJ 6705: Research Methods in Crime, Law, and Justice
CCJ 6708: Research Issues in Crime and Deviance
CCJ 6712: Evaluation Research
CCJ 6905: Independent Study
CCJ 6910: Supervised Research
CCJ 6920: Seminar in Criminological Theory
CCJ 6936: Proseminar in Crime, Law, and Justice
CCJ 6971: Research for Master’s Thesis
CCJ 7742: Research Methods in Crime, Law, and Justice II
CCJ 7921: Professional Development in Criminology, Law, and Society
CCJ 7979: Advanced Research
CCJ 7980: Research for Doctoral Dissertation
CJC 6120: Corrections and Public Policy
CJL 6039: Law and Society
CJL 6089: Humanitarian Law
CJL 6090: Law and Social Science
CJL 6091: Anthropology of Law
CJL 6095: Human Rights in Cultural Context
SYA 6018: Classical Social Theories
SYA 6126: Contemporary Sociological Theory
SYA 6305: Methods in Social Research I
SYA 6306: Methods in Social Research II
SYA 6315: Qualitative Research Methods
SYA 6327: Research Problems in Deviance
SYA 6407: Quantitative Research Methods
SYA 6905: Individual Work
SYA 6910: Supervised Research
SYA 6942: Applied Social Research Project
SYA 6971: Research for Master’s Thesis
SYA 7933: Special Study in Sociology
SYA 7979: Advanced Research
SYA 7980: Research for Doctoral Dissertation
SYA 6436: Metropolitan Growth and Development
SYD 6517: Seminar in Environment and Society
SYD 6518: Core Issues in Environmental and Resource Sociology
SYD 6706: Racial and Ethnic Relations
SYD 6707: Black and White Americans: Sociological Perspectives
SYD 6806: Gender and Society
SYD 6807: Sociology of Gender
SYD 6825: Men and Masculinities
SYD 7808: Reproduction and Gender
SYO 6107: American Families
SYO 6126: Family Theories
SYO 6175: Topics in Family Research
SYO 6407: Health Disparities
SYO 6427: Health and Aging
SYO 6535: Social Inequality
SYP 6115: Seminar in Symbolic Interaction
SYP 6517: Theories of Crime and Deviance
SYP 6545: Sociology of Law
SYP 6735: Sociology of Aging and the Life Course
SYP 6736: Sociology of the Aged
SYP 6745: Aging and End-of-Life Issues

Soil and Water Science Department

Chair: K. Ramesh Reddy
Graduate Coordinator: Max Teplitski

Complete faculty listing by department: Follow this link.

The Soil and Water Science Department offers Master of Science (thesis or professional non-thesis option) and Doctor of Philosophy degrees in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The Department also offers Master of Science (thesis or professional option) specialization in environmental science via distance education for place bound students (http://soils.ifas.ufl.edu/distance). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Soil and Water are vital resources in urban, agricultural, and natural ecosystems. The Soil and Water Science Department (SWSD) provides highly visible leadership in teaching, research, and extension/outreach programs as related to improving the productivity of agriculture with environmentally sound management practices, improving water quality, and protection and conservation of natural resources. Our department is one of the few in the nation that offers a comprehensive research and educational programs (molecular to landscape level) involving terrestrial, wetlands and aquatic ecosystems of the landscape. In addition to traditional on-campus educational programs, we use innovative e-technologies to offer educational programs to place-bound students. Our graduates and postdoctoral fellows are well placed at universities, state and federal agencies, and private industry.

The SWSD programs are designed to meet the changing needs of our clientele at state, national and international levels. To meet new challenges and explore new opportunities, the SWSD's research, teaching, and extension programs are focused in five areas, with broader implication to water quality, carbon sequestration, greenhouse gasses, and climate change:

- **Nutrient, Pesticide, and Waste Management**
- **Soil, Water, and Aquifer Remediation**
- **Carbon Dynamics and Ecosystem Services**
- **Landscape Analysis and Modeling**
- **Wetlands and Aquatic Ecosystems**

The Department offers graduate level certificates in Biodegradation and Remediation, Sustainable Land Resource and Nutrient Management, Soil Ecosystem Services, and Wetland and Water Resource Management for both on-campus students and via distance education for place bound students (http://soils.ifas.ufl.edu/academics/degree-certificates.shtml).

An additional option offered by the Department is a combined bachelor's/master's degree program that permits a B.S in Soil and Water Science or Interdisciplinary Studies – Environmental
Management in Agriculture and Natural Resources and M.S. Degree to be completed in five years. Contact the graduate coordinator for more information.

For more information, please see the program page below and our website: http://soils.ifas.ufl.edu.

ALS 5027: Reusable Learning Objects
ALS 5155: Global Agroecosystems
SWS 5050: Soils for Environmental Professionals
SWS 5050L: Soils for Environmental Professionals Laboratory
SWS 5115: Environmental Nutrient Management
SWS 5132: Tropical Soil Management
SWS 5182: Earth System Analysis
SWS 5208: Sustainable Agricultural and Urban Land Management
SWS 5224: Environmental Biogeochemistry
SWS 5234: Environmental Soil, Water, and Land Use
SWS 5235: South Florida Ecosystems
SWS 5246: Water Resource Sustainability
SWS 5247: Hydric Soils
SWS 5248: Wetlands and Water Quality
SWS 5305C: Soil Microbial Ecology
SWS 5308: Ecology of Waterborne Pathogens
SWS 5406: Soil and Water Chemistry
SWS 5424C: Soil Chemical Analysis
SWS 5551: Soils, Water, and Public Health
SWS 5605C: Environmental Soil Physics
SWS 5716C: Environmental Pedology
SWS 5721C: GIS in Land Resource Management
SWS 5805: Environmental Soil and Water Monitoring Techniques
SWS 6134: Soil Quality
SWS 6136: Soil Fertility
SWS 6161: Bioavailability of Soil Nutrients
SWS 6262: Soil Contamination and Remediation
SWS 6323: Advanced Microbial Ecology
SWS 6325: Rhizosphere Biochemistry
SWS 6366: Biodegradation and Bioremediation
SWS 6448: Biogeochemistry of Wetlands and Aquatic Systems
The Department of Spanish and Portuguese Studies offers a Master of Arts degree (M.A.) in Spanish (thesis and non-thesis options) and a Doctor of Philosophy degree (Ph.D.) in Romance Languages and Literatures, with a concentration in Spanish. Descriptions of the minimum requirements for both degrees are provided in the General Information section of this catalog. For specific information about the program, please visit the graduate section of the departmental webpage:

http://www.spanishandportuguese.ufl.edu/spanish/graduate.html

Candidates for graduate degrees (both M.A. and Ph.D.) in Spanish can choose between two specializations—literature/culture or linguistics. In conjunction with their master’s or doctoral work, students may also earn a Certificate in Latin American Studies. Though a graduate degree is not offered in Portuguese, extensive course offerings at the graduate level permit students to develop a strong specialization in Portuguese language and Luso-Brazilian literature, film and culture.

The main prerequisite for admission to the M.A. program is an undergraduate major in Spanish, ideally including advanced courses in the proposed area of specialization. Applicants for the Ph.D. should hold an M.A. or equivalent degree in Spanish. At the discretion of the Graduate Studies Committee, candidates from related fields of study (History, Sociology…) may be offered a conditional admission into the Ph.D. program pending the passing of the M.A. Comprehensive Examination within the first year of study.

All M.A. and Ph.D. students in Spanish who are appointed as teaching assistants must take Romance Language Teaching Methods (FOL/FOL 6943). Besides, all M.A. and Ph.D. students specializing in literature and culture must take Introduction to Graduate Study and Research (SPW 6806). Other requirements vary with degree and specialization. For details, consult the graduate section of the departmental webpage (see above).

The Department is able to offer most students a teaching assistantship that provides a maintenance stipend and includes a tuition waiver. Contingent on positive performance in teaching and graduate work, M.A. students are guaranteed four semesters of support, and Ph.D. students are guaranteed eight semesters of support beyond the M.A. In addition, there are several fellowships, supplements and stipends for which students may apply, and summer teaching may be available.

Prospective students are encouraged to review the departmental webpage in order to familiarize themselves with the program and the application process. Only those applications including all required materials and submitted by the advertised deadlines will be considered. For any questions about the program or how to apply, please contact the graduate coordinator: lacastro@ufl.edu.

Highly qualified UF undergraduate students majoring in Spanish may apply for a combined B.A./M.A. program in Spanish that allows up to 12 graduate credits to be counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details.

FOL 6326: Technology in Foreign Language Education
FOL 6943: Romance Language Teaching Methods
FOW 6930: Special Study in Romance Languages and Literatures
POW 6276: Twentieth-Century Brazilian Novel
POW 6385: Brazilian Lyric
POW 6386: Brazilian Drama
POW 6905: Individual Work
POW 6930: Rotating Topics in Brazilian or Portuguese Literature
SPN 6166: Teaching Spanish for the Professions
SPN 6315: Advanced Composition and Syntax
SPN 6425: Writing for the Profession
SPN 6705: Foundations of Hispanic Linguistics
SPN 6715: Formal Instruction and Acquisition of Spanish
SPN 6735: Special Study in Spanish Linguistics
SPN 6785: Advanced Spanish Phonetics
SPN 6827: Sociolinguistics of the Spanish-Speaking World
SPN 6835: Spanish and Spanish-American Dialectology
SPN 6845: History of the Spanish Language
SPN 6848: Medieval Spanish Linguistics
SPN 6855: Structure of Spanish
SPN 6856: Spanish in Contact: Issues in Bilingualism
SPN 6900: Directed Readings in Spanish
SPN 6940: Supervised Teaching
SPN 6945: Practicum in Advanced College Teaching
SPW 6209: Colonial Spanish-American Literature
SPW 6216: Spanish Prose Fiction of the Golden Age
SPW 6236: Spanish-American Narrative from the origins to Criollismo
SPW 6269: Spanish Novel of the Nineteenth Century
SPW 6278: Postwar Spanish Fiction
SPW 6285: Contemporary Spanish-American Narrative I
SPW 6286: Contemporary Spanish-American Narrative II
SPW 6306: Spanish-American Theater
SPW 6315: Spanish Drama of the Golden Age
SPW 6337: Golden Age Poetry
SPW 6345: Twentieth-Century Spanish Poetry
SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
SPW 6357: Contemporary Spanish-American Poetry
SPW 6366: Spanish-American Essay
SPW 6535: Spanish Romanticism

SPW 6545: Spanish Romanticism

SPW 6606: Cervantes

SPW 6729: The Generation of 1898

SPW 6806: Introduction to Graduate Study and Research

SPW 6902: Special Study in Spanish or Spanish-American Literature

SPW 6905: Individual Work

SPW 6910: Supervised Research

SPW 6934: Seminar in Spanish American Literature and Culture

SPW 6938: Seminar in Spanish Literature and Culture

SPW 6971: Research for Master’s Thesis

SPW 7979: Advanced Research

SPW 7980: Research for Doctoral Dissertation

Special Education, School Psychology and Early Childhood Studies Department

Director: Jean Crockett

Complete faculty listing by department: Follow this link.

The School of Special Education, School Psychology, and Early Childhood Studies offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 3 areas of specialization: Special Education; School Psychology; and Early Childhood Studies. Programs are accredited by the Florida Department of Education and approved by the National Council for Accreditation of Teacher Education (NCATE). The School Psychology program is approved by the NCATE and the National Association of School Psychologists (NASP). The Ph.D. program in School Psychology is accredited by the American Psychological Association (APA).

EDF 7482: Quasi-experimental Design and Analysis in Educational Research

EEC 6205: Early Childhood Curriculum

EEC 6304: Creativity in the Early Childhood Curriculum

EEC 6525: Issues in Child Care Administration

EEC 6615: Early Childhood Education: Background and Concepts

EEC 6905: Individual Work

EEC 6910: Supervised Research

EEC 6933: Special Topics

EEC 6940: Supervised Teaching

EEC 6946: Practicum in Early Childhood Education

EEC 7056: Early Childhood Policy and Advocacy

EEC 7617: Early Childhood Assessment & Evaluation
EEC 7666: Theory and Research in Early Childhood Studies
EEC 7979: Advanced Research
EEX 5940: Supervised Student Teaching in Special Education
EEX 6053: Foundations of Special Education
EEX 6072: Accessing Academic and Social Communities for Students with Disabilities
EEX 6098: Students with Disabilities in Higher Education
EEX 6125: Interventions for Language and Learning Disabilities
EEX 6219: Reading Assessment and Intervention for Students with Disabilities
EEX 6222: Evaluation in Special Education
EEX 6233: Designing Instruction for Inclusive Classrooms
EEX 6234: Assessment, Curriculum, and Instruction for Students with Severe Disabilities
EEX 6249: Advanced Strategies for Teaching Students with Disabilities
EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
EEX 6296: Differentiated Instruction
EEX 6299: Understanding Assessment for Postsecondary Students with Disabilities
EEX 6661: Teaching and Managing Behavior for Student Learning
EEX 6750: Families and Transition for Students with Disabilities
EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
EEX 6785: Introduction to Education-Healthcare Transition
EEX 6786: Transdisciplinary and Transition Services in Special Education
EEX 6788: Methods for Integrating Education-Health Care Transition
EEX 6789: Legal Aspects and Policy in Education-Healthcare Transition
EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
EEX 6835: Practicum in Special Education: Severe Disabilities
EEX 6841: Practicum in Special Education: Mild Disabilities
EEX 6863: Supervised Practice in Special Education
EEX 6905: Individual Work
EEX 6910: Supervised Research
EEX 6936: Special Topics
EEX 6940: Supervised Teaching
EEX 6971: Research for Master’s Thesis
EEX 6973: Project in Lieu of Thesis
EEX 7303: Inquiry in Special Education: Analysis of the Literature
EEX 7304: Introduction to Field of Inquiry in Special Education
EEX 7428: Teacher Education in Special Education
EEX 7526: Grant Writing Seminar in Education
EEX 7709: Social-Emotional Learning & Play in Early Childhood
EEX 7787: School Improvement for All Students
EEX 7865: Internship: Special Education
EEX 7934: Seminar: Trends in Special Education
EEX 7979: Advanced Research
EEX 7980: Research for Doctoral Dissertation
EGI 6051: Education of the Gifted Child
EGI 6245: Program Development for the Gifted
SPS 6052: Issues and Problems in School Psychology
SPS 6191: Psychoeducational Assessment I
SPS 6192: Psychoeducational Assessment II
SPS 6193: Academic Assessment & Intervention
SPS 6195: Developmental Psychopathology
SPS 6197: Psychoeducational Assessment III
SPS 6410: Direct Interventions I: Applied Behavior Analysis for School Psychologists
SPS 6707: Interventions in School Psychology II: Cognitive Behavioral Interventions
SPS 6708: Interventions in School Psychology III: System Level Interventions for Children and Youths
SPS 6815: Law and Ethics in Psychology
SPS 6905: Individual Study
SPS 6910: Supervised Research
SPS 6937: Special Topics in School Psychology
SPS 6940: Supervised Teaching
SPS 6941: Practicum in School Psychology
SPS 6942: School Psychology Practicum II
SPS 6945: Advanced Practicum in School Psychology
SPS 7205: School Psychology Consultation
SPS 7931: Seminar in School Psychology
SPS 7949: Internship in School Psychology
SPS 7979: Advanced Research
SPS 7980: Research for Doctoral Dissertation

Speech, Language and Hearing Sciences Department

Chair: Scott K. Griffiths
Graduate Coordinators: Kenneth J. Logan and Alice Holmes

Complete faculty listing by department: Follow this link.

Graduate programs in the Department lead to Master of Arts and Doctor of Philosophy degrees in Communication Sciences and Disorders and to the Doctor of Audiology degree. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate specializations and programs in speech-language pathology and audiology are accredited by the Council on Academic Accreditation/American Speech-Language-Hearing Association.

The Doctor of Audiology (Au.D.) Program in the Department of Speech, Language, and Hearing Sciences is a four-year graduate degree. Graduate students take course work in theoretical and applied audiologic sciences and research. There are no specific undergraduate courses required for admission to the Au.D. degree program, although applicants with a strong science background are encouraged to apply. Graduates of this program are eligible for the Certificate of Clinical Competence in Audiology (CCC-A) administered by the American Speech-Language-Hearing Association, Board Certification in Audiology administered by the American Academy of Audiology, and for state licensure in audiology. For more information, contact Alice Holmes, Ph.D. (aholmes@ufl.edu).

The Ph.D. Program in Communication Sciences and Disorders provides a state-of-the-art education in research practices in speech-language pathology and audiology with a strong interdisciplinary focus. Our goal is to prepare the next generation of researchers who are specialized in basic and/or applied science that relates to a range of speech, language, hearing, and swallowing functions. The program is designed to develop researchers who are skilled at independently designing and conducting original research that adds to the body of knowledge in the field. Students are individually mentored and pursue individually designed programs of study tailored to their interests and needs, which incorporate training in appropriate adjacent fields such as engineering, dentistry, gerontology, linguistics, psychology, medicine, and special education. For more information, contact Lori Altmann, Ph.D. (laltmann@ufl.edu).

The Master of Arts (MA) Program offers comprehensive academic training and clinical experience for students who are interested in a career in speech-language pathology. The five-semester program culminates in the completion of either a clinical externship or a Master's thesis, and it provides graduates with a solid foundation for obtaining employment in a variety of work settings. Students have the opportunity to complete clinical practica at sites within the University of Florida's Health Science Center and at other medical, rehabilitative, and educational facilities on or near the campus. These sites allow students to gain experience with providing clinical services to a range of patient populations. Applicants to the Master's program must demonstrate successful completion of pre-requisite coursework in both normal bases of communication and introductory concepts in communication disorders. Additional information about these pre-requisites is available on the Department website. Graduates of the program are eligible for the Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP) from the American Speech-Language-Hearing Association as well as state licensure in speech-language pathology. For more information, contact Kenneth J. Logan, Ph.D. (klogan@ufl.edu).

The Department of Speech, Language, and Hearing Sciences is committed to providing its students with a high-quality educational experience that will prepare them for rewarding employment in the areas of speech-language pathology and audiology, as well as an eagerness for life-long learning and professional development. The department strives to enroll a diverse group of students who possess both high ethical standards and strong academic skills. The application deadlines are January 15 for fall admission to the Ph.D. program, and February 1 for fall admission to the Master's and Au.D. programs.

For more information, please see the program pages below and our website: http://slhs.phhp.ufl.edu.

ASL 5406: Manual Communication with the Hearing Impaired

LAE 6505: Applied Preschool Language Disorders: Diagnosis and Treatment

SPA 5051: Clinical Observation in Audiology

SPA 5102: Auditory Anatomy and Physiology

SPA 5128: Speech Perception

SPA 5204: Phonological Disorders

SPA 5211: Voice Disorders

SPA 5225: Principles of Speech Pathology: Stuttering

SPA 5245: Communicative Disorders Related to Cleft Palate

SPA 5254: Neurocognitive Language Disorders

SPA 5304: Principles of Audiological Evaluation

SPA 5315: Peripheral and Central Auditory Disorders

SPA 5401: Speech Pathology Language Disorder

SPA 5405: Language Disorders II

SPA 5533: Instrumentation and Diagnosis in Speech-Language Pathology

SPA 5563: Psychosocial Aspects of Hearing Loss
SPA 5646: Speech and Language of the Deaf and Hard of Hearing
SPA 6008: Medical Aspects of Speech-Language Pathology
SPA 6010: Basic Auditory Sciences
SPA 6117: Science of Singing
SPA 6133L: Hearing Aid Analysis Laboratory
SPA 6207: Applied Phonological Disorders: Diagnosis and Treatment
SPA 6211: Applied Voice Disorders: Diagnosis and Treatment
SPA 6217: Vocal Health and Habilitation
SPA 6229: Applied Fluency Disorders: Diagnosis and Treatment
SPA 6233: Speech Motor Control Disorders
SPA 6270: Auditory Processing Disorders
SPA 6305: Pediatric Audiology
SPA 6311: Medical Audiology
SPA 6312: Advanced Audiology and Neuro-Otology
SPA 6317: Vestibular Disorders
SPA 6323: Audiologic Rehabilitation for Adults
SPA 6324: Audiologic Rehabilitation for Children
SPA 6340: Amplification I
SPA 6341: Amplification II
SPA 6342: Amplification III
SPA 6390: Proseminar: Speech-Language Pathology and Audiology
SPA 6410: Adult Language Disorders
SPA 6416: Applied Neurogenic Disorders: Diagnosis and Treatment
SPA 6430: Applied Developmental Disorders: Diagnosis and Treatment in Speech and Language
SPA 6436: Issues in Autism Spectrum Disorders
SPA 6506: Clinical Clerkship in Audiology
SPA 6507: Applied Augmentative and Alternative Communication
SPA 6521: Practicum in Speech-Language Diagnostics: UFSHC
SPA 6524: Practicum in Speech-Language Therapy: UFSHC
SPA 6531: Clinical Practice in Hearing Assessment
SPA 6533: Clinical Practice in Aural Rehabilitation
SPA 6559: Alternative and Augmentative Communication
SPA 6564: Communication and Aging
SPA 6565: Seminar in Dysphagia
SPA 6568: Clinical Evaluation in Medical Speech-Language Pathology
SPA 6570: Seminar: Professional Aspects of Speech-Language Pathology
SPA 6581: Special Clinical
SPA 6805: Introduction to Graduate Research
SPA 6830: Communication Disorders in Medically Complex Pediatric Populations
SPA 6905: Individual Study
SPA 6910: Supervised Research
SPA 6930: Proseminar in Speech-Language Pathology and Audiology
SPA 6935: Applied Reading Disabilities: Diagnosis and Treatment
SPA 6936: Special Topics
SPA 6940: Supervised Teaching
SPA 6942: Externship in Speech-Language Pathology
SPA 6971: Research for Master's Thesis
SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
SPA 7306: Audiologic Assessment in a Medical Setting
SPA 7318: Clinical Auditory Electrophysiology
SPA 7319: Balance Disorders: Evaluation and Treatment
SPA 7325: Audiologic Rehabilitation
SPA 7343: Cochlear Implants and Assistive Devices
SPA 7348: Principles of Amplification
SPA 7353: Environmental Hearing Conservation
SPA 7354: Seminar in Audiology: Hearing Conservation and Noise Control
SPA 7391: Business and Professional Issues in Audiology
SPA 7415: Neurolinguistics of Adult Language Disorders
SPA 7500: Public School Practicum
SPA 7523: Practicum in Speech Pathology in a Medical/Dental Setting
SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
SPA 7566: Counseling Individuals with Hearing Losses
SPA 7833: Audiology Research Project
SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
SPA 7945: Graduate Practicum in Audiology
SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology

SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology

SPA 7958: Clinical Externship

SPA 7979: Advanced Research

SPA 7980: Research for Doctoral Dissertation

Statistics Department

Chair: M. J. Daniels
Graduate Coordinator: J. P. Hobert

Complete faculty listing [Follow this link].

Graduate programs are available leading to Master of Science in Statistics, Master of Statistics, and Doctor of Philosophy degrees. Minimum requirements for these degrees are described in the General Information section of this catalog.

Both master's programs usually require 2 years of course work including material covered in STA 6208, STA 6326, STA 6327, STA 6246, and STA 6329. In addition to earning a "Ph.D. pass" on the first-year evaluation, requirements for the Ph.D. degree include STA 6466, STA 7249, and STA 7346.

Interdisciplinary programs: The Department offers a co-major program in conjunction with the Fisher School of Accounting leading to the Doctor of Philosophy degree in statistics and business administration accounting. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Departments of Mathematics, Industrial and Systems Engineering and Finance, Insurance, and Real Estate. For information on these programs, consult the departmental graduate coordinator.

Combined program: The Department offers a bachelor's/master's degree program. Contact the graduate coordinator for information.

STA 5106: Computer Programs in Statistical Analysis

STA 5507: Applied Nonparametric Methods

STA 5823: Stochastic Process Methods

STA 5856: Applied Time Series Methods

STA 6126: Statistical Methods in Social Research I

STA 6127: Statistical Methods in Social Research II

STA 6167: Statistical Methods in Research II

STA 6177: Applied Survival Analysis

STA 6178: Genetic Data Analysis

STA 6207: Regression Analysis

STA 6208: Basic Design and Analysis of Experiments

STA 6209: Design and Analysis of Experiments

STA 6226: Sampling Theory and Application

STA 6246: Theory of Linear Models

STA 6326: Introduction to Theoretical Statistics I

STA 6327: Introduction to Theoretical Statistics II

STA 6329: Matrix Algebra and Statistical Computing

STA 6505: Analysis of Categorical Data

STA 6526: Nonparametric Statistics
STA6707: Analysis of Multivariate Data

STA6826: Stochastic Processes

STA6857: Time Series Analysis

STA6866: Monte Carlo Statistical Methods

STA6905: Individual Work

STA6910: Supervised Research

STA6938: Seminar

STA6940: Supervised Teaching

STA6942: Internship

STA6971: Research for Master's Thesis

STA7179: Survival Analysis

STA7334: Limit Theory

STA7347: Advanced Inference

STA7348: Bayesian Theory

STA7466: Probability Theory I

STA7467: Probability Theory II

STA7527: Theory of Nonparametric Statistics

STA7828: Topics in Stochastic Processes

STA7934: Special Topics in Statistics

STA7979: Advanced Research

STA7980: Research for Doctoral Dissertation

(*taxation_department*)

**Chair and Graduate Coordinator:** M. K. Friel.

*Complete faculty listing by department:* [Follow this link](#).

Graduate study in the field of taxation leading to the Master of Laws in Taxation degree or to the Master of Laws in International Tax degree is available in the College of Law.

Applicants for admission to the Graduate School for these degrees must hold a law degree from an accredited law school or in the case of international students, from a recognized foreign university but need not submit scores on the Graduate Record Examination. For further information concerning admission consult the [Graduate Tax Program Catalog](#), or write the Tax Office, 320 Holland Law Center.

**LAW 7602:** Taxation of Property Transactions

**LAW 7604:** Timing Issues in Taxation

**LAW 7611:** Corporate Taxation I

**LAW 7613:** Corporate Taxation II

**LAW 7614:** U.S. International Tax I

**LAW 7615:** U.S. International Tax II
Tourism, Recreation, and Sport Management Department

College of Health and Human Performance

Chair: Michael Sagas.
Graduate Coordinator: Stephen Holland.

Complete faculty listing: Follow this link.

The degree Master of Science is offered by the Department of Tourism, Recreation, and Sport Management with programs in sport management and in recreation, parks, and tourism. Both programs offer thesis and non-thesis formats. The Department participates in the Ph.D. program in Health and Human Performance. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Master's program provides advanced preparation of tourism, recreation, and parks and sport management professionals for positions of leadership in planning, developing, administering, and marketing of programs in a variety of employment settings, public and private. Concentrations of study may be developed in a number of areas, such as:

- Natural resource recreation management
- Tourism and commercial recreation
- Campus recreation
- Recreation administration and supervision
- Sport management

The Doctoral program is offered through the College of Health and Human Performance with concentrations in tourism; natural resource recreation and sport management. These interdisciplinary specializations blend course work and research. The curriculum is individualized, and applicants with degrees from unrelated fields can be accepted into the program. However, their previous work will be evaluated and their programs planned according to their individual needs, interests, and career objectives.

Combined program: The Department offers a combined bachelor's/master's degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of approximately one semester. Up to 12 approved graduate credit hours can be utilized toward both degrees.

MS/MSM Concurrent Degree Program: This joint degree program is offered through the College of Business Administration (Master of Science in Business Management [MSM]) and the College of Health and Human Performance’s, Department of Tourism, Recreation and Sport Management (Master of Science in Sport Management [MS]). Applicants must apply to both programs and be admitted to both to participate. The MS/MSM is a non-thesis degree. The MS/MSM is designed for students who seek a graduate business degree and who lack the work experience necessary for admission to the MBA program. The MS/MSM curriculum is similar to the first year of the MBA program, giving students a good foundation in business principles. Concurrent degree students can share up to 9 credit hours of the same coursework towards both degree programs. They do not have to graduate during the same semester. Students admitted into the concurrent program must work closely with both departments to verify all requirements are being met during their course of study.

MS/J.D. joint program: This 98-credit-hour joint degree program culminates in the Master of Science and the Juris Doctor degrees. Applicants must meet the entrance requirements for the Department of Tourism, Recreation, and Sport Management and the College of Law. Admission to the second degree program is required no later than the end of the fourth consecutive semester after beginning one of the degree programs. The student's supervisory committee comprises faculty members from both the Department of Tourism, Recreation, and Sport Management and the College of Law. Students admitted into the joint program are permitted to share up to 12 credit hours of the same coursework towards both degree programs. Students must graduate during the same semester from both programs.
HLP 6535: Research Methods in Health and Human Performance
HLP 7979: Advanced Research in Health and Human Performance
HLP 7980: Research for Doctoral Dissertation
HMG 6076: Introduction to Hospitality and Tourism
HMG 6608: Hospitality Law and Risk Management
HMG 6747: Marketing in Hospitality/Tourism
LEI 5121: Outdoor Recreation and Park Management
LEI 5188: Trends in Leisure Studies
LEI 6108: Contemporary Theories of Recreation and Leisure
LEI 6325: Ecotourism
LEI 6326: Sport Tourism
LEI 6336: Tourism Planning and Development
LEI 6351: Heritage Tourism
LEI 6439: Campus Recreation Administration and Programming
LEI 6513: Administrative Procedures in Leisure Services
LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
LEI 6557: Recreation Management/Development in the Coastal Zone
LEI 6562: Advanced Marketing for Recreation, Parks, and Tourism
LEI 6895: Tourism Theory and Concepts
LEI 6903: Readings in Recreation, Parks, and Tourism
LEI 6905: Directed Independent Study
LEI 6910: Supervised Research
LEI 6931: Special Topics in Recreation, Parks, and Tourism
LEI 6935: Seminar in Recreation, Parks, and Tourism
LEI 6940: Supervised Teaching
LEI 6944: Practicum in Leisure Studies
LEI 6971: Research for Master's Thesis
LEI 7170: Foundations of Leisure Behavior
LEI 7901: Recreation, Parks, and Tourism in Higher Education
LEI 7904: Advanced Readings in Recreation, Parks, and Tourism
LEI 7905: Advanced Independent Study in Recreation, Parks and Tourism
LEI 7910: Advanced Supervised Research
LEI 7933: Advanced Special Topics in Recreation, Parks, and Tourism
LEI 7936: Advanced Seminar in Recreation, Parks, and Tourism
SPM 5016: Sport Sociology
SPM 5206: Sport Ethics
SPM 5309: Sport Marketing
SPM 5506: Sport Finance
SPM 5936: Current Topics in Sport Management
SPM 6006: Contemporary Sport Industry
SPM 6036: Research Seminar in Sport Management
SPM 6106: Management and Planning of Sport and Physical Activity Facilities
SPM 6158: Management and Leadership in Sport
SPM 6308: Study of Sport Consumer Behaviors
SPM 6726: Issues in Sport Law
SPM 6905: Directed Independent Study
SPM 6910: Supervised Research
SPM 6947: Graduate Internship in Sport Management
SPM 6948: Advanced Practicum in Sport Management
SPM 6971: Research for Master's Thesis

Urban and Regional Planning Department

Director of School of Landscape Architecture and Planning: Kristin Larsen
Chair: Joseli Macedo
Graduate Coordinator: Stanley Latimer
Graduate Coordinator of Online Degree program: Ferdinand Lewis

Complete faculty listing by department: [Follow this link.]

Doctor of Philosophy: The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in Design, Construction, and Planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

Master of Arts in Urban and Regional Planning: The Department of Urban and Regional Planning offers graduate work leading to the degree of Master of Arts in Urban and Regional Planning (M.A.U.R.P.). Students are encouraged to enter the program in the fall semester. The program is usually completed in two academic years. The student entering with an undergraduate degree and no graduate study must complete 52 hours of credit for the M.A.U.R.P. degree. Students who have a master's degree in a related field may transfer up to 18 graduate semester hours toward the 52 hour requirement. Such a transfer of credit requires the approval of the Department. The Department encourages students with any undergraduate degree who are interested in the field of planning to apply for admission.

Complete descriptions of the requirements for the M.A.U.R.P. and Ph.D. degrees are provided in the General Information section of this catalog.

The urban and regional planning curriculum is designed to provide a set of core studies and contextual projects which prepare the graduate for the practice of planning in public or private agencies at both national and international levels. The core studies include history and theory of planning, planning methods, growth management at local, regional, and state levels, and related studies in community and regional social, natural, and economic systems. Contextual projects include, among many subject areas, urban design, transportation, regional planning, community redevelopment and preservation, housing, real estate, and economic development. The program emphasizes planning, policies, and design for the physical environment. Current specializations include growth management and transportation, urban design, housing, community and economic development, information technologies for planning, and environmental planning. Students are also encouraged to take advantage of the extensive faculty, course offerings, and other resources available in the College of Design, Construction, and Planning and throughout the University.

The Department has two research centers: The Geo-facilities Planning and Information Center (GeoPlan), the Center for Building Better Communities (CBBC), and the Center for Health and the Built Environment (CHBE).

The curriculum is supported by an extensive GIS laboratory, and a visual aid library. Variation from the core studies may be approved by the Department if the student can demonstrate education and experience to the faculty that would support such an alternative. The M.A.U.R.P. degree is accredited by the Planning Accreditation Board, a joint undertaking of the American Institute of Certified Planners and the Association of Collegiate Schools of Planning, for having achieved the highest applicable standards for graduate education in the field of planning.
Graduates of the Department are prepared to practice urban and regional planning.

The Department of Urban and Regional Planning and the College of Law offer a joint degree program (see Requirements for Master's Degrees in the General Information section of this catalog). Areas of concentration with other programs in the Graduate School may be developed to meet the individual needs of students. In addition to course work the student is required to complete an internship with a public or private planning office and the student must complete a thesis.

The Department reserves the right to retain student work for purposes of record, exhibition, or instruction.

**URP 6042: Urban Economy**

**URP 6061: Planning Administration and Ethics**

**URP 6100: Planning Theory and History**

**URP 6122: Alternative Conflict Management**

**URP 6131: Growth Management Powers I**

**URP 6132: Growth Management Seminar**

**URP 6203: Planning Research Design**

**URP 6231: Quantitative Data Analysis for Planners**

**URP 6270: Survey of Planning Information Systems**

**URP 6271: Planning Information Systems**

**URP 6272: Advanced Planning Information Systems**

**URP 6274: GPS for Planners: Introduction to Global Positioning System**

**URP 6275: Spatial Database Design and Development**

**URP 6276: Internet Geographic Information Systems**

**URP 6277: Land Use Visioning and Analysis**

**URP 6312: Land Development Planning and Evaluation**

**URP 6341: Urban Planning Project**

**URP 6421: Environmental Impact Statements**

**URP 6424: Sustainable Urbanism in the Americas**

**URP 6428: Advanced Environmental Planning**

**URP 6429: Natural Resources Planning and Management**

**URP 6445: Planning for Climate Change**

**URP 6526: Health and the Built Environment**

**URP 6541: Economic Development Planning**

**URP 6542: Urban Land Economics**

**URP 6543: Seminar in Capital Improvement Finance**

**URP 6547: Local Public Finance for Urban Planners**

**URP 6601: State Planning**

**URP 6603: Development Review**

**URP 6610: International Development Planning**
URP 6711: Transportation and Land Use Coordination

URP 6716: Transportation Policy and Planning

URP 6718: Bikeways Planning and Design

URP 6743: Affordable Housing Law

URP 6745: Housing, Public Policy, and Planning

URP 6746: Topical Debates in Housing

URP 6821: Transportation and Land-Use Modeling

URP 6855: Urban Form in Cities throughout the Americas

URP 6871: Planning and Design I

URP 6872: Planning and Design II

URP 6880: Defensible Space and CPTED in Urban Design

URP 6884: Community Conservation and Revitalization

URP 6887: Advanced Defensible Space in Urban Design

URP 6905: Exploration and Directed Study

URP 6910: Supervised Research

URP 6920: Colloquium

URP 6931: Topical Seminar

URP 6933: Planning Information Seminar

URP 6940: Supervised Teaching

URP 6941: Urban Planning Internship

URP 6971: Research for Master's Thesis

URP 6979: Terminal Project

Wildlife Ecology and Conservation Department

College of Agricultural and Life Sciences

Chair: Eric C. Hellgren
Graduate Coordinator: Kathryn E. Sieving

Complete faculty listing by department: Follow this link.

The Department of Wildlife Ecology and Conservation offers Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees in wildlife ecology and conservation. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Program emphases include wildlife biology, ecology, and management; landscape ecology and restoration; human dimensions; tropical and international conservation; and conservation education. Graduate students should have appropriate undergraduate training in the biological, social, and physical sciences including physics, chemistry, and mathematics. Students with inadequate backgrounds may be required to take (without credit at the graduate level) remedial undergraduate courses pertinent to their fields of interest.

For more information, please see our website: http://www.wec.ufl.edu.

WIS 5496: Research Design in Wildlife Ecology

WIS 5521: Plant-Animal Interactions

WIS 5555C: Conservation Biology
Women's Studies Department

Director: Bonnie Moradi  
Graduate Coordinator: Kendal Broad

Complete faculty listing by department: Follow this link.

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as a two certificates. These options give students the opportunity to take advantage of scholarship in this dynamic field, and to become acquainted with different research perspectives and methodologies. Students become well grounded in theories of gender in cultural systems and in ways that gender intersects with other categories of difference such as race, ethnicity, religion, class, sexuality, nation, physical and mental ability, age, and economic and civil status. Faculty and students employ feminist and other appropriate theoretical approaches and methodologies.

The Center offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring. The Center in Ustler Hall houses archives, a small library, offices, and meeting space.

For more information about our program, please see the program page below or our website: http://web.wst.ufl.edu.

WST 5933: Proseminar in Women's Studies

WST 6348: Ecofeminism

WST 6508: Advanced Feminist Theory

WST 6905: Independent Study

WST 6935: Special Topics in Women's Studies

WST 6936: Feminist Challenges to Disciplinary Paradigms

WST 6946: Internship in Applied Women's Studies and Gender Research

WST 6957: International Studies in Women's Studies and Gender Research
WST 6971: Research for Master's Thesis

DCP Courses - filtered

College of Design, Construction, and Planning

Dean: C. Silver

Complete faculty listings: Follow this link.

DCP is home to five independent professional disciplines: architecture, construction management, interior design, landscape architecture and urban and regional planning. The college also is home to an interdisciplinary program in historic preservation, which allows graduate students to gain expertise in research and application of historic preservation in the United States and abroad.

Accreditation and Degrees

The academic programs in the college have an accreditation process from the professional organizations of each discipline.

- Architecture – National Architectural Accrediting Board
- Construction Management – American Council for Construction Education
- Interior Design – Foundation for Interior Design Education Research
- Landscape Architecture – American Society of Landscape Architects
- Urban and Regional Planning – Planning Accreditation Board

DCP offers both undergraduate and graduate degrees and programs. Through its academic units, the college offers doctoral, master's, and bachelor's degrees, as well as distance education programs, combined degrees, joint degrees, certificate programs, and academic minors.

College Institutes, Centers and Programs

Research and service projects conducted through the research centers and institutes often entail multidisciplinary, cross-campus student input and effort. Each division of the college is involved in on-going projects that advance both scholarly study and professional practice. The college contributes to community, state, regional and national efforts to conserve and improve the quality of the natural and built environments through its research centers. The college's teaching and research programs have national and international prominence.

For more information, please see our website: http://www.dcp.ufl.edu

Departments and Programs within the College of Design, Construction, and Planning

College of Design, Construction, and Planning Courses

BCN 5874: Equipment and Methods for Heavy Construction
BCN 5885: Methods and Management for Heavy Construction
DCP 6205: Ecological Issues in Sustainability and the Built Environment
DCP 6211: Preservation Topics, Issues, and Practice
DCP 6710: History and Theory of Historic Preservation
DCP 6711: History of the Built Environment for Preservation Practice
DCP 6712: Preservation Technology: Conserving Modern Buildings
DCP 6713: Historic Preservation: Principles, Practice, and Engineering
DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
DCP 6715: Preservation Building Technology
DCP 6716: Cultural Resource Management
DCP 6730: Preservation Policy
DCP 6905: Independent Study
DCP 6931: Special Topics in Design, Construction, and Planning
DCP 6943: Practicum in Historic Preservation
DCP 6971: Research for Master's Thesis
DCP 7790: Doctoral Core I
DCP 7792: Doctoral Core II

DCP 7794: Doctoral Seminar

DCP 7911: Advanced Design, Construction, and Planning Research I

DCP 7940: Supervised Teaching

DCP 7949: Professional Internship

DCP 7979: Advanced Research

DCP 7980: Research for Doctoral Dissertation

School of Architecture

Director: M. Gold.
Graduate Coordinator: N. M. Clark.

Complete faculty listing: Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization in this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning, School of Architecture, College of Design, Construction, and Planning, University of Florida, P.O. Box 115701, Gainesville, FL 32611.

Master of Architecture: The School of Architecture offers graduate work leading to the first professional degree, Master of Architecture. During graduate studies, each student has the opportunity to focus on one or more areas, including design, history and theory, urban design, preservation, structures, and technology. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design. The student's overall college experience, both undergraduate and graduate programs, is intended to be a complete unit of professional education leading to practice in architecture or related fields.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Florida School of Architecture offers the following NAAB-accredited degree programs:

Master of Architecture (pre-professional degree + 52 graduate credits)
Master of Architecture (professional degree + 30 graduate credits)
Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits)

Master of Architecture (pre-professional degree + 52 graduate credits): For those students who have a 4-year baccalaureate degree from an accredited architectural program, 2 years in residence (52 credits) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or master's project. Course sequences in history and theory, technology, structures, and practice must also be completed.

Master of Architecture (professional degree + 52 graduate credits): For students who have a baccalaureate degree with an architecture or related major (interior design, landscape architecture) and who have completed 4 or 6 architecture or design studies courses, three years of residence (83 credits, approximately) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 4071, ARC 4072, ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or master's project. Undergraduate courses 3000 and 4000 level in the major must not exceed toward the minimum requirements for the graduate degree. Course sequences in history and theory, materials and methods, technology, structures, and practice must be completed.

Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits): For students with a baccalaureate degree in a nonrelated academic area and have completed fewer than 4 design studies courses, 4 years of residence (112 credits, approximately) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 4071, ARC 4072, ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or project. Undergraduate courses 3000 and 4000 level in the major must not exceed toward the 52-hour minimum requirements for the graduate degree. Course sequences in history and theory, materials and methods, technology, structures, and practice must be completed.

Accredited 5-year professional base: For students with a baccalaureate degree in architecture from an accredited 5-year professional degree program, a 1-year degree program is available. In these cases, a specialized curriculum is developed that compliments the needs of the applicant. Minimum registration is 30 credits; however, the minimum may increase if transcript reviews show that further course work is needed to meet registration and curriculum requirements. ARC 6356 is a prerequisite for the thesis or master's project.

Most states require individuals intending to become architects to hold an accredited degree. The National Architectural Accrediting Board recognizes two types of degrees: the Bachelor of Architecture (minimum 5 years of study), and the Master of Architecture (minimum 3 years of study after an unrelated bachelor's degree, or 2 years after a related pre-professional bachelor's degree). These professional degrees educate those who aspire to registration and licensure to practice as architects.

Student work: The College may retain student work for the purpose of record, exhibition, or instruction.

Master of Science in Architectural Studies: The M.S.A.S. is a nonprofessional degree for advanced investigations in specialized areas of architectural history, architectural pedagogy, theory, technology, design, preservation, or practice. Students with a bachelor's degree in any discipline from an accredited university are eligible to apply to this program; the proposed area of focus should be clearly defined in the application. This is a 3- to 4-semester program (52 hours minimum) that includes a thesis. (No more than 4 hours of ARC 6971 may be counted in the minimum credit hours for the degree.) Interdisciplinary study is encouraged. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design.

The School sponsors special curricula in architecture to enhance the academic program. Preservation Institute: Caribbean, Preservation Institute: Nantucket, and Vicenza Institute of Architecture (Italy) accepts students from the University of Florida, and also from academic circles throughout the United States and the world for year-round study. Any student in a graduate architecture program at the University of Florida may apply for one or more of these programs.

Requirements for the M.Arch., M.S.A.S., and Ph.D. degrees are described in the General Information section of this catalog.
The School also participates in a program granting an Interdisciplinary Concentration and Certificate in Sustainable Architecture. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

Applications: All applications for full term graduate admission (including official transcripts, GRE scores, and TOEFL scores, if necessary) must be received by the Office of the Registrar by January 15. In addition to satisfying University requirements for admission, applicants are required to submit to the Graduate Program Assistant, School of Architecture, 231 ARCH, Box 115702, the following: a portfolio of their creative work; a scholarly statement of intent and objectives; and three letters of recommendation. This material must be received by January 15 to be considered for admission in the next fall term. Students may apply after the January 15 deadline but will only be considered if spaces become available. (Updates of portfolios are accepted after January 15; however, applications will not be considered until they are complete.)

The School reserves the right to retain student work for purposes of record, exhibition, or instruction. Field trips are required of all students; students should plan to have adequate funds available. It may be necessary to assess studio fees to defray costs of base maps and other generally used materials.

ARC 5791: Topics in Architectural History

ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction

ARC 5810: Techniques of Architectural Documentation

ARC 6116: Drawing toward Architecture

ARC 6176: Advanced Computer-Aided Design

ARC 6212: Topics in Phenomena and Architecture

ARC 6226: Intercultural Perspectives in Architecture

ARC 6228: Film and Architecture

ARC 6241: Advanced Studio I

ARC 6242: Research Methods

ARC 6280: Advanced Topics in Architectural Practice

ARC 6281: Professional Practice

ARC 6311C: Building Information Modeling

ARC 6355: Advanced Studio II

ARC 6356: Advanced Studio III

ARC 6357: Advanced Topics in Architectural Design

ARC 6383: St. Augustine Interdisciplinary Design Studio

ARC 6391: Architecture, Energy, and Ecology

ARC 6393: Advanced Architectural Connections

ARC 6399: Advanced Topics in Urban Design

ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete

ARC 6512: Structural Modeling

ARC 6576: Architectural Structures

ARC 6611: Advanced Topics in Architectural Technology

ARC 6621: Graduate Environmental Technology 2

ARC 6642: Architectural Acoustic Design Laboratory

ARC 6643: Architectural Acoustics

ARC 6685: Life Safety, Sanitation, and Plumbing Systems
ARC 6705: Graduate Architectural History 3

ARC 6711: Architecture of the Ancient World

ARC 6750: Architectural History: America

ARC 6773: Strains of Modernism

ARC 6793: Advanced Topics in Regional Architecture

ARC 6805: Architectural Conservation

ARC 6821: Preservation Problems and Processes

ARC 6822: Preservation Programming and Design

ARC 6851: Technology of Preservation: Materials and Methods I

ARC 6852: Technology of Preservation: Materials and Methods II

ARC 6883: Vernacular Architecture & Sustainability

ARC 6911: Architectural Research

ARC 6912: Architectural Research II

ARC 6913: Architectural Research III

ARC 6932: Advanced Topics in Architectural Methods

ARC 6933: Sustainable Site Design

ARC 6934: European Approach to Sustainable Design

ARC 6935: Seminar in Sustainable Design

ARC 6940: Supervised Teaching

ARC 6971: Research for Master's Thesis

ARC 6979: Master's Research Project

M.E. Rinker, Sr., School of Construction Management

Director: Robert Ries
Director of Master’s Programs: Robert E. Minchin

Complete faculty listing: Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary doctoral program in design, construction, and planning. Areas of specialization in the program include architecture, construction management, interior design, landscape architecture, and urban and regional planning. Within the area of construction management, specialization options include sustainable construction, information systems, construction safety, affordable housing productivity, and human resource management. These specializations prepare students to assume college-level faculty positions and industry research positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115703.

The M.E. Rinker Sr. School offers courses leading to the degrees of Master of Science in Construction Management (thesis), Master of Construction Management (nonthesis), and Master of International Construction Management (nonthesis distance education program for experienced professionals). An individual plan of study is prepared for each student to insure that the student's goals are achieved within the broad policy guidelines of the Rinker School. Specialization may be in such areas as construction management, sustainable construction, information systems, construction safety, and construction law. Requirements for the M.B.C., M.S.B.C., M.I.C.M., and Ph.D. degrees are given in the General Information section of this catalog.

Master of Construction Management (M.C.M.) or Master of Science in Construction Management (M.S.C.M.): To be eligible for admission to the M.C.M. or M.S.C. programs, a student must hold a 4-year undergraduate degree in building construction or its equivalent in related fields. "Equivalent in related fields" should include studies in construction materials and methods, structures, and management. Students with deficiencies in these related fields may need longer residence for the master's degree, as they will be required to take specified basic courses to provide a foundation for advanced courses. There is no foreign language requirement.

No more than 3 credits of BCN 6971 may be used to satisfy the credit requirements for the M.S.C.M. degree without written permission of the Director of Master's Programs.

Master of International Construction Management (M.I.C.M.): This program prepares students to assume upper-level management responsibilities in a multinational company. To be eligible for admission to the M.I.C.M. program, a student must have
A 4-year undergraduate degree
At least 5 years of meaningful, supervisory-level construction management experience
Acceptable GRE scores (verbal and quantitative)
A grade point average of 3.0 on a 4.0 scale
Employer sponsorship
International students must submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

No more than 3 credits of ICM 6934 may be used to satisfy the credit requirements for the M.I.C.M. without written permission of the Director. All candidates are required to take ICM 6930. In addition to these 6 research-oriented graduate credit hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses and special electives. All candidates are required to pass a comprehensive oral and/or written examination at the completion of the course work and their master's research report/project.

The M.E. Rinker Sr. School reserves the right to retain student work for purposes of record, exhibition, or instruction.

Research facilities:
The Shimberg Center for Housing Studies, operating within the School, researches the problems and possible solutions associated with developing and producing affordable housing. The Powell Center for Construction and the Environment conducts research on implementing sustainability in creating, operating, and constructing a built environment. The Fluor Program for Construction Safety researches and disseminates information on matters related to construction safety and health. The Center for Advanced Construction Information Modeling educates members of the AECO industry about new and emerging technologies in virtual design and construction.

Combined program:
The School offers a combined bachelor's/master's degree program. Contact the Director of Master's Programs for information.

For more information, please see our website: [http://www.bcn.ufl.edu](http://www.bcn.ufl.edu).

BCN 5470: Construction Methods Improvements
BCN 5618C: Comprehensive Estimating
BCN 5625: Construction Cost Analysis
BCN 5705C: Project Management for Construction
BCN 5715: Advanced Construction Labor Problems
BCN 5722: Advanced Construction Planning and Control
BCN 5729: Design-Build Delivery Methods
BCN 5737: Advanced Issues in Construction Safety and Health
BCN 5754C: Site Development
BCN 5776: International Construction Business Management
BCN 5778: Facilities Operation and Maintenance
BCN 5789C: Construction Project Delivery
BCN 5905: Special Studies in Construction
BCN 5949: Graduate Construction Management Internship
BCN 5957: Advanced International Studies in Construction
BCN 6036: Research Methods in Construction
BCN 6580: High-Performance Green Building Delivery Systems
BCN 6585: Sustainable Construction
BCN 6586: Construction Ecology and Metabolism
BCN 6621: Bidding Strategy
BCN 6641: Construction Value Engineering
BCN 6748: Construction Law
BCN 6755: Construction Financial Management
BCN 6756: Housing Economics and Policy
BCN 6777: Construction Management Processes
BCN 6785: Construction Information Systems
BCN 6905: Directed Independent Study in Construction
BCN 6910: Supervised Research
BCN 6933: Advanced Construction Management
BCN 6934: Construction Research
BCN 6940: Supervised Teaching
BCN 6971: Research for Master's Thesis
FES 6705: Communications in Emergency Management
FES 6724: Fire and Emergency Services Response Planning
FES 6726: Hazard Mitigation and Preparedness
FES 6735: International Emergency/Disaster Management
FES 6736: Homeland Security and Emergency Management
FES 6786: Research Methods in FES
FES 6806: Disaster Response and Recovery
FES 6826: Emergency Services - Disaster Planning
FES 6827: Business Continuity and Disaster Planning
FES 6836: Impacts of Natural and Man-made Disasters on Buildings
FES 6916: Research for Master's Report
FES 6940: Practicum in FES
ICM 5905: Special Studies
ICM 6420: Commercial Management and Cost Control
ICM 6440: Construction Value Management
ICM 6680: Principles of International Sustainable Construction
ICM 6682: Construction Ecology and Metabolism
ICM 6684: High-Performance Green Building Delivery Systems
ICM 6710: Construction Human Resource Management
ICM 6750: Managing Construction Information Technology
ICM 6751: International Construction Management
ICM 6752: Construction Finance and Investment
ICM 6761: Advanced Planning, Scheduling, and Logistics
ICM 6762: Construction Risk Management
ICM 6770: Advanced Project Safety Management

ICM 6772: International Strategic Management

ICM 6905: Directed Independent Study in International Construction

ICM 6910: Supervised Research

ICM 6930: Construction Communication and Research

ICM 6934: International Construction Research

Interior Design Department

Chair: M. Portillo.
Graduate Coordinator: N. Park

Complete faculty listing by department: Follow this link.

Doctor of Philosophy:
The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning, 331 ARCH, P.O. Box 115701.

Master of Interior Design:
The Master of Interior Design (M.I.D.) provides opportunities for students to direct their attention toward a variety of topics, including

- Design pedagogy and processes
- Sustainable, safe, and secure environments
- Creative performance and innovation
- Built heritage conservation.

Regardless of the study emphasis selected by the student, the M.I.D. program has a central focus with three categories of course work:

- Design studio
- Seminars in current interior design topics
- Theories and methods of research.

All M.I.D. students must complete an approved research topic with a written thesis. Requirements for the M.I.D. and Ph.D. degrees are given in the General Information section of this catalog.

Applications:
All applications must include acceptable GRE scores, transcripts for all previous academic work, and if the applicant's native language is not English, a satisfactory score on one of the following TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute. This information must be received in the Office of the Registrar by February 2. In addition to satisfying University requirements for admission, the applicants are required to submit to the Graduate Program Assistant, Department of Interior Design, 336 Architecture, P.O. Box 115705, University of Florida, Gainesville, FL 32611-5705, the following:

- A portfolio of your design work (if applicable). The portfolio must be accompanied by a self-addressed, stamped envelope.
- A written essay on your goals and aspirations related to graduate studies
- Three letters of recommendation.
- A personal interview is not required, but many applicants choose to visit the campus and Department as a part of the application process.

Students enrolled in the Bachelor of Interior Design program at the University of Florida may apply to the M.I.D. program during their junior year (see below).

The Department reserves the right to retain student course work for the purposes of record, exhibition, or instruction. Field trips are required for all students; students should plan to have adequate funds available. Students are required to purchase a computer for course work. It may be necessary to assess studio fees to defray costs of base maps, plans, and other generally used materials.

Admission: Applications are processed through February 2 for fall term and all applicants are encouraged to apply as soon as possible. Admission decisions are made between February and the end of April. All new students begin their studies in the fall to coincide with curriculum sequencing.

Graduate course requirements according to background: After assessment of previous design work, leveling courses may be required to prepare the student for the M.I.D. 36 hours of graduate course work. Therefore, each student entering the Master of Interior Design program works with the graduate coordinator to evaluate the student's unique background to determine the specific courses needed to facilitate interest and experience. Estimated credit hours and length of study time vary according to each student's individual baccalaureate degree and experience.

There are four options:

- For students enrolled in the Bachelor of Design program at the University of Florida, 12 hours of graduate-level course work in the senior year can be counted for both the undergraduate and the M.I.D. degrees. An additional 24 graduate credit hours are required. Expect at least 1 additional year to complete the M.I.D.
- For students who graduated from a Council of Interior Design Accreditation (CIDA) accredited first professional degree program within an architectural framework, the course of study is estimated to be 36 graduate credit hours. Expect 2 years to complete the M.I.D.
- For students who graduated from a design-related (architecture or interior design) baccalaureate degree program, the course of study is estimated to be a minimum of 59 graduate credit hours (includes the 36-hour M.I.D.). Expect 3 years to complete leveling courses and the master's degree.
- For students with a bachelor's degree in a field other than design, the course of study is estimated to be 86 undergraduate and graduate credit hours. Expect 3 to 4 years to complete leveling courses and the M.I.D.

Estimates of the number of credit hours and length of study time may be adjusted based on the individual student's previous preparation including experience as a practicing designer, architect, or other professional.

Program requirements: After leveling courses are completed and with approval of the graduate coordinator and supervisory committee chair, a student completes 24 hours of departmentally approved graduate work in the Department of Interior Design. In addition, with the graduate coordinator's approval, the student is required to take 3 hours of course work in graduate statistics and 9 hours of multidisciplinary graduate electives that reinforce and extend the research.
Courses from such academic units as Psychology, Anthropology, Sociology, Engineering, Education, and Business Administration provide possible electives. The College of Design, Construction and Planning offers the Certificate in Historic Preservation. If the focus of a student is the renovation and preservation of built environments, then historic preservation courses leading to a certificate would strengthen the research and design effort. Likewise, existing appropriate courses in Architecture, Landscape Architecture, Urban and Regional Planning, and Building Construction offer both collaborative study and research opportunities for M.I.D students.

Each student must select a two-member supervisory committee to guide course selection and to guide thesis selection, study, and production.

IND 5023: Introduction to Architectural Interiors
IND 5106: History of Interior Design I
IND 5136: History of Interior Design II
IND 5212C: Architectural Interiors I
IND 5213C: Introduction to Architectural Interiors Lab
IND 5227C: Advanced Architectural Interiors I
IND 5231C: Architectural Interiors II
IND 5232C: Advanced Architectural Interiors II
IND 5317C: Interior Design Communication Systems
IND 5326: Color Theory Planning and Practice
IND 5427C: Interior Design Construction Documents
IND 5428: Materials for Interior Design
IND 5434C: Interior Lighting
IND 5445C: Furniture Design
IND 5454C: Advanced Interior Design Detailing and Construction Documents
IND 5464C: Computer Applications in Three-Dimensional Design
IND 5466: Interior Environmental Technology
IND 5508: Business and Professional Practices for Interior Designers
IND 5638: Design Environments and Human Interaction
IND 5937: Current Topics in Interior Design
IND 6239: Advanced Topics in Interior Design Studio
IND 6639: Methods of Interior Design Research
IND 6906: Independent Studies and Readings
IND 6940: Supervised Teaching
IND 6941: Interior Design Internship
IND 6971: Research for Master's Thesis

Landscape Architecture Department

College of Design, Construction, and Planning

Chair: Gina Gurucharri
Graduate Coordinator: Kevin Thompson

Complete faculty listing by department: Follow this link
The mission of the Department of Landscape Architecture is to advance the ethical, creative, and skillful application of the art and the science of planning and designing urban, rural and natural environments. The Master of Landscape Architecture seeks excellence through professional practice and service, and through research and scholarly pursuit.

Interstate field trips are required as part of the normal program curriculum. Students should plan to have adequate funds for field trips and for studio materials. Students are also required to own a laptop computer meeting minimum department requirements. These specifications are available through the department of Landscape Architecture's website at URL: http://www.dep.ufl.edu/landscape.

The Graduate program in Landscape Architecture offers flexibility in meeting the needs of applicants with varied backgrounds. Students entering the graduate program in landscape architecture follow one of the four following tracks:

**Pre MLA Program**
Graduate students who do not possess an LAAB accredited professional degree in landscape architecture are invited to enroll in the Pre MLA program. The Pre MLA Program aids the development of basic analytical, design and graphic skills. Upon successful completion of the Pre MLA Summer term, students advance into a two-semester sequence of articulation courses that provide a foundation of applied landscape design and planning theory as well as competencies in landscape construction.

**MLA Advanced Graduate Studies Program**
Graduate students having completed the Pre MLA program or entering the MLA program with an LAAB accredited professional baccalaureate degree in Landscape Architecture commence a two year program of advanced graduate coursework towards the completion of the MLA degree.

**MLA Program + Construction**
Graduate students with a non-accredited or non-LAAB accredited degree in Landscape Architecture may apply directly to the MLA program but may be required to take additional coursework to develop core competencies required for advanced graduate study.

**MLA Research Degree**
Graduate students with an LAAB accredited professional degree in Landscape Architecture and a significant history of achievement in professional practice may tailor a program of advanced study to meet their specific needs. Proposals for the MLA Research Degree option are reviewed by the Graduate Coordinator and an approved course of study is determined through consultation with the Graduate Committee.

The normal tenure of advanced graduate study is five semesters which includes a summer semester internship. Students complete a minimum of 52 credit hours composed of lecture courses, seminars, design and construction studios, internship and individual study (special studies, supervised research and thesis or terminal project).

This time period would be extended should a student elect to expand the course work or seek a concurrent degree in a related field.

**Design studios:** Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio's selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

**Thesis or terminal project:** The Department recognizes that students have different professional goals and personal strengths and interests. A thesis is appropriate for students interested in further research or teaching, or in pursuing advanced degrees. A project (with a significant research component) is appropriate for students interested in design or project-oriented aspects of landscape architecture, or if their specific areas of interest suggest a nontraditional approach.

**Programs, centers, and institutes:** The College of Design, Construction, and Planning has several research centers and institutes. The course work and summer sessions afforded by these programs offer both required and elective course work for graduate students in landscape architecture.

The **Center for Landscape Conservation Planning:** The Center for Landscape Conservation Planning conducts applied research on the relationship between conservation and land use while providing learning opportunities for students.

The **Center for International Design and Planning:** The Center for International Design and Planning conducts interdisciplinary research with a focus on emerging design and planning trends in an era of globalization with a focus on resilient development systems and adaptive design and planning strategies.

The **Preservation Institute:** Nantucket gives students an opportunity to receive specialized educational experience in a broad range of preservation topics using Nantucket as a resource for case-study projects.

The Preservation Institute: Caribbean gives students an opportunity to conduct and apply research regarding the conservation of the rich cultural traditions of the Greater Caribbean basin.

The **GEOPLAN Center** is dedicated to the development of geographic and spatial information systems. Graduate students receive instruction in geographic information systems and are involved in a multidisciplinary studio that applies the tools and systems understanding afforded by GIS.

Graduate advisement: Students are initially advised by the Graduate Coordinator. He or she has guided the student's application through the acceptance process and is familiar with the student's background and needs. A plan of study is developed that includes required and optional courses. By the end of the second semester of study, each student is required to form a supervisory committee composed of two faculty members. The primary purpose of the graduate committee is to advise the student on educational objectives and the thesis or terminal project course work.

**Application Procedure**
Details of application procedure are found on the Department of Landscape Architecture's website. Applicants are encouraged to familiarize themselves with the details of the application procedures and the application requirements. Applications will only be considered for the track for which they have been submitted. Make certain you are applying to the correct track based on your background and credentials and the criteria detailed above.

**Application Dates**
Applications are to be completed and submitted prior to the deadline noted on the Department's website. Unless otherwise noted, international applications must be received by November 1st. Applications from within the US are to be received no later than February 1st. Early applications are encouraged.

**Application materials to be submitted online and to the Office of the Registrar**
Application materials include the online application form accompanied by official transcripts, Letters of Recommendation, GRE scores, and TOEFL scores (applicants with English as a second language) to Office of the Registrar: Admissions Section, Criser Hall, University of Florida, Gainesville, Florida 32611.

**Application Materials to be submitted directly to the Department**
In addition to the materials submitted to the registrar's office, applicants must also submit a letter of intention to the Department of Landscape Architecture (Graduate Program Assistant).

**Application Portfolio**
All applicants are encouraged to submit a portfolio of creative works.

Post professional degree applicants applying for either the Pre MLA Fall Start or MLA Advanced Graduate Study program are required to submit a portfolio that both exhibits creative work experience and shows evidence of acquired technical proficiencies in the practice of landscape architecture. All portfolio must be digital. PDF is preferred.

**Application Status**
Applications will be processed once all material has been received and must be complete prior to the application deadline. Applicants will be contacted by the Program Assistant if their application is incomplete. Please respond quickly if you have been contacted to increase the chances of your application being considered in the current review period. Only completed applications will be processed for review.

Once the application has been processed for review, applicants will receive written notification of their application status, generally sometime in the middle of March. Please do not contact the department with inquiries of your application status prior to the end of March.

Preparatory courses (see Undergraduate Catalog): LAA 2330, LAA 2350, LAA 2360, LAA 2370, LAA 3420, LAA 3350, LAA 3352, LAA 3421, LAA 3550, LAA 6716, and ORH 3513.

LAA 5331: Site Design Methodologies
LAA 5366: Principles of Landscape Architecture
LAA 6231: Landscape Architecture Theory
LAA 6322: Project Management for Landscape Architects
LAA 6342: Landscape Architecture Criticism
LAA 6349C: Design Communications for Landscape Architects
LAA 6382: Ecological and Environmental Policy
LAA 6525L: Advanced Landscape Construction Design
LAA 6536: Landscape Management
LAA 6656C: Advanced Landscape Architectural Design
LAA 6713: Cultural Landscapes
LAA 6716: History of Landscape Architecture
LAA 6905: Directed Study
LAA 6931: Water Conservation through Site Design and Green Roofs
LAA 6931C: Special Topics
LAA 6933: Topics in European Design: Paris, France
LAA 6935: Gardens of the World
LAA 6941: Supervised Internship
LAA 6952C: European Landscape Architecture Studio
LAA 6971: Research for Master’s Thesis
LAA 6979: Terminal Project

Urban and Regional Planning Department

Director of School of Landscape Architecture and Planning: Kristin Larsen
Chair: Joseli Macedo
Graduate Coordinator: Stanley Latimer
Graduate Coordinator of Online Degree program: Ferdinand Lewis

Doctor of Philosophy: The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in Design, Construction, and Planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

Master of Arts in Urban and Regional Planning: The Department of Urban and Regional Planning offers graduate work leading to the degree of Master of Arts in Urban and Regional Planning (M.A.U.R.P.). Students are encouraged to enter the program in the fall semester. The program is usually completed in two academic years. The student entering with an
undergraduate degree and no graduate study must complete 52 hours of credit for the M.A.U.R.P. degree. Students who have a master's degree in a related field may transfer up to 18 graduate semester hours toward the 52 hour requirement. Such a transfer of credit requires the approval of the Department. The Department encourages students with any undergraduate degree who are interested in the field of planning to apply for admission.

Complete descriptions of the requirements for the M.A.U.R.P. and Ph.D. degrees are provided in the General Information section of this catalog.

The urban and regional planning curriculum is designed to provide a set of core studies and contextual projects which prepare the graduate for the practice of planning in public or private agencies at both national and international levels. The core studies include history and theory of planning, planning methods, growth management at local, regional, and state levels, and related studies in community and regional social, natural, and economic systems. Contextual projects include, among many subject areas, urban design, transportation, regional planning, community redevelopment and preservation, housing, real estate, and economic development. The program emphasizes planning, policies, and design for the physical environment. Current specializations include growth management and transportation, urban design, housing, community and economic development, information technologies for planning, and environmental planning. Students are also encouraged to take advantage of the extensive faculty, course offerings, and other resources available in the College of Design, Construction, and Planning and throughout the University. The Department has two research centers: The Geo-facilities Planning and Information Center (GeoPlan), the Center for Building Better Communities (CBBC), and the Center for Health and the Built Environment (CHBE).

The curriculum is supported by an extensive GIS laboratory, and a visual aid library. Variation from the core studies may be approved by the Department if the student can demonstrate education and experience to the faculty that would support such an alternative. The M.A.U.R.P. degree is accredited by the Planning Accreditation Board, a joint undertaking of the American Institute of Certified Planners and the Association of Collegiate Schools of Planning, for having achieved the highest applicable standards for graduate education in the field of planning. Graduates of the Department are prepared to practice urban and regional planning.

The Department of Urban and Regional Planning and the College of Law offer a joint degree program (see Requirements for Master's Degrees in the General Information section of this catalog). Areas of concentration with other programs in the Graduate School may be developed to meet the individual needs of students. In addition to course work the student is required to complete an internship with a public or private planning office and the student must complete a thesis.

The Department reserves the right to retain student work for purposes of record, exhibition, or instruction.

**URP 6042: Urban Economy**

**URP 6061: Planning Administration and Ethics**

**URP 6100: Planning Theory and History**

**URP 6122: Alternative Conflict Management**

**URP 6131: Growth Management Powers I**

**URP 6132: Growth Management Seminar**

**URP 6203: Planning Research Design**

**URP 6231: Quantitative Data Analysis for Planners**

**URP 6270: Survey of Planning Information Systems**

**URP 6271: Planning Information Systems**

**URP 6272: Advanced Planning Information Systems**

**URP 6274: GPS for Planners: Introduction to Global Positioning System**

**URP 6275: Spatial Database Design and Development**

**URP 6276: Internet Geographic Information Systems**

**URP 6277: Land Use Visioning and Analysis**

**URP 6312: Land Development Planning and Evaluation**

**URP 6341: Urban Planning Project**

**URP 6421: Environmental Impact Statements**

**URP 6424: Sustainable Urbanism in the Americas**

**URP 6428: Advanced Environmental Planning**

**URP 6429: Natural Resources Planning and Management**

**URP 6445: Planning for Climate Change**

**URP 6526: Health and the Built Environment**
URP 6541: Economic Development Planning
URP 6542: Urban Land Economics
URP 6543: Seminar in Capital Improvement Finance
URP 6547: Local Public Finance for Urban Planners
URP 6601: State Planning
URP 6603: Development Review
URP 6610: International Development Planning
URP 6711: Transportation and Land Use Coordination
URP 6716: Transportation Policy and Planning
URP 6718: Bikeways Planning and Design
URP 6743: Affordable Housing Law
URP 6745: Housing, Public Policy, and Planning
URP 6746: Topical Debates in Housing
URP 6821: Transportation and Land-Use Modeling
URP 6855: Urban Form in Cities throughout the Americas
URP 6871: Planning and Design I
URP 6872: Planning and Design II
URP 6880: Defensible Space and CPTED in Urban Design
URP 6884: Community Conservation and Revitalization
URP 6887: Advanced Defensible Space in Urban Design
URP 6905: Exploration and Directed Study
URP 6910: Supervised Research
URP 6920: Colloquium
URP 6931: Topical Seminar
URP 6933: Planning Information Seminar
URP 6940: Supervised Teaching
URP 6941: Urban Planning Internship
URP 6971: Research for Master's Thesis
URP 6979: Terminal Project

Dentistry Courses - filtered

College of Dentistry
Advanced education has progressed over the years to be an integral component of the College of Dentistry, growing from six certificate residency programs, with an enrollment of only 36 students in 1979, to fourteen certificate programs and various fellowship programs. Enrollment is now over 140. In 1993, the college started master degree programs in endodontics, orthodontics, periodontics and prosthodontics, and continues today to grow.

For more information about UF's College of Dentistry graduate programs: [http://admissions.dental.ufl.edu/advanced-graduate-programs/programs-application-process/](http://admissions.dental.ufl.edu/advanced-graduate-programs/programs-application-process/)

### Dental Sciences Department

**College of Dentistry**

Endodontics Chair and Graduate Coordinator: Roberta Pileggi  
Orthodontics Chair and Graduate Coordinator: Calogero Dolce  
Periodontology Chair: Ikramuddin Aukhil; Graduate Coordinator: Rodrigo Neiva  
Restorative Dental Sciences Interim Chair: William Willis; Graduate Coordinator: Edgar O'Neill

For further information, see the Dental Science program link below.

#### College of Dentistry Courses

**DEN 6602:** Orthodontic Treatment–Appliance Management and Effect of Treatment Part 1: Class I Treatment  
**DEN 6603:** Orthodontic Treatment–Appliance Management and Effect of Treatment Part 2: Class II Treatment  
**DEN 6604:** Orthodontic Treatment–Appliance Management and Effect of Treatment Part 3: Class II Treatment and Overbite Treatments  
**DEN 6605:** Orthodontic Treatment–Appliance Management and Effect of Treatment Part 4: Class II Treatment and Overbite Treatments  
**DEN 6606:** Orthodontic Treatment–Appliance Management and Effect of Treatment Part 5: Class III and Crossbite Treatments and Soft Tissue Considerations  
**DEN 6607:** Orthodontic Treatment–Appliance Management and Effect of Treatment Part 6: Impactions, Transplantations and Stability  
**DEN 6608:** Analysis, Diagnosis, and Treatment Planning: Part I  
**DEN 6609:** Analysis, Diagnosis, and Treatment Planning: Part II  
**DEN 6610:** Biology of Tooth Movement: Part I  
**DEN 6612:** Orthodontic Biomechanics: Part I
DEN 6613: Orthodontic Biomechanics: Part II
DEN 6614: Ortho-Perio Relationships: Part I
DEN 6615: Ortho-Perio Relationships: Part II
DEN 6616: Orthognathic Surgery: Part I
DEN 6617: Orthognathic Surgery: Part II
DEN 6618: Postnatal Growth and Development
DEN 6622: Principles of Occlusion
DEN 6623: Maxillofacial Prosthetics
DEN 6624: Dental Implant Restoration
DEN 6625: Fixed Prosthodontic Ceramics
DEN 6626: Advanced Removable Partial Dentures
DEN 6627: Treatment Planning Seminar
DEN 6642: Introduction to Advanced Endodontics
DEN 6643: Treatment Planning/Cases Presentation
DEN 6644: Nonsurgical Endodontic Care I
DEN 6645: Nonsurgical Endodontic Care II
DEN 6646: Surgical Endodontics I
DEN 6647: Surgical Endodontics II
DEN 6652: Review of Periodontics Literature I
DEN 6653: Review of Periodontics Literature II
DEN 6654: Review of Periodontics Literature III
DEN 6655: Review of Periodontics Literature IV
DEN 6656: Introduction to Advanced Periodontology
DEN 6657: Periodontal Histology and Histopathology
DEN 6658: Treatment Planning in Periodontal Therapy
DEN 6670: Craniofacial Anomalies
DEN 6671: Prenatal Growth and Development
DEN 6672: Materials in Orthodontics
DEN 6674: Advanced Oral Pathology
DEN 6675: Craniofacial Pain
DEN 6678: Advanced Oral Medicine and Drug Interactions in Dentistry
DEN 6679: Advanced Radiology and Interpretation
DEN 6680: Principles and Craniofacial Biology and Emerging Therapies
DEN 6681: Craniofacial Pathobiology
DEN 6905: Individual Study
DEN 6910: Supervised Research
DEN 6934: Special Topics in Dentistry
DEN 6935: Special Topics in Dentistry
DEN 6936: Practice Management
DEN 6940: Supervised Teaching
DEN 6941: Clinical Teaching in Dentistry
DEN 6942: Grand Rounds
DEN 6971: Research for Master's Thesis
DEN 6973: Project in Lieu of Thesis

Departments

Agricultural and Biological Engineering Department

College of Agricultural and Life Sciences
Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

Agricultural and Biological Engineering Department

College of Agricultural and Life Sciences
Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

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For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

Agricultural production includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

Biological engineering includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

Information systems includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.
Land and water resources includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Agricultural Education and Communication Department

Chair: E. W. Osborne
Graduate Coordinator: B. E. Myers

Complete faculty listing by department: Follow this link.

The Department of Agricultural Education and Communication offers the degrees of Master of Science and Doctor of Philosophy. Graduate students who obtain a degree in Agricultural Education and Communication will focus their study in one of four areas of specialization. The areas of specialization are agricultural communication, agricultural education, extension education, and leadership development. These degree programs are individually tailored to meet the student's unique needs for professional development. The requirements for each degree are described in the Graduate Degrees section of this catalog. More information about our program can be found by following the link below.

Agronomy Department

Chair: R. A. Gilbert
Graduate Coordinator: L. E. Sollenberger

Complete faculty listing by department: Follow this link.

The Agronomy Department offers the degrees of Doctor of Philosophy and Master of Science (thesis and non-thesis options) in agronomy with specializations in plant physiology, ecology, management and nutrition, weed science (terrestrial and aquatic), and plant breeding and genetics. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate programs emphasize the development and subsequent application of basic principles in each specialization to the management of agricultural and natural ecosystems in Florida and throughout the world. The continuing need for increased plant production for food, fiber and energy to meet the demands of a rapidly escalating population is reflected in departmental research programs. When compatible with a student's program and permitted by prevailing circumstances, some thesis and dissertation research may be conducted wholly or in part in one or more of several countries.

Students seeking a graduate program in the Agronomy Department should hold a Bachelor of Science degree from an accredited college or university with a major in an area of plant science, or closely related discipline. A science background with basic courses in biology, botany, mathematics, chemistry, and physics is required of new graduate students.

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link.

For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
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Animal Molecular and Cellular Biology Department

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Animal Sciences Department

Chair: G. E. Dahl
Graduate Coordinator: G. Adesogan
Animal Sciences is an academic department of the College of Agriculture and Life Sciences (CALS), a unit of the Institute of Food and Agricultural Sciences (IFAS). Creating new solutions to tomorrow's problems underlies everything we do in the Animal Sciences Program. In the areas of teaching, research, and extension, our faculty integrates the most modern technologies available with personal expertise and attention to the needs of students and our industry. For more information about the Animal Sciences program, please follow the link below.

Anthropology Department

Chair: S. deFrance
Graduate Coordinator: P. Collings

The Anthropology Department takes pride in maintaining a holistic perspective, bridging the four traditional fields that have composed the discipline: sociocultural, archaeological, biological, and linguistic anthropology. Both graduate students and faculty conduct research that cut across the four-fields, and extend anthropological investigations into other disciplines.

The graduate program is a mentoring program emphasizing the PhD degree. Students are mentored by faculty advisors, together with supervisory committees chosen by students with the advice of advisors. Graduate students are expected to be in residence to attend classes and seminars, and receive individualized training. Distance-education graduate degrees are not offered. Students formally report on their progress each year, and the progress of each graduate student is evaluated by the faculty in their primary field.

Students receiving graduate degrees are well-prepared intellectually and professionally for success in a wide variety of careers, and become leaders in developing the next generation of anthropologists. The department offers teaching experience and resources for presenting conference papers, submitting grant proposals, conducting fieldwork, and other activities appropriate to their professionalization. Graduate students are welcome to contribute to discussions in departmental meetings, and serve on some departmental committees.

Applied Physiology and Kinesiology Department

Chair: S. Dodd
Graduate Coordinator: E. Christou

The Ph.D. program is offered with concentrations in biobehavioral science and exercise physiology. Students in the biobehavioral science concentration specialize in one of four areas: biomechanics, exercise/performace psychology, motor control/learning, or sports medicine. These interdisciplinary concentrations focus on preparing students as researchers with a blend of course work and research training.

A program leading to the Master of Science degree in applied physiology and kinesiology (thesis and non-thesis options) is also offered. Areas of concentration for the master's program include athletic training/sports medicine, biobehavioral science, clinical exercise physiology, exercise physiology, and human performance. The thesis option gives the student an opportunity to study, conduct research, and prepare a thesis in an area of special interest. The non-thesis option offers the student a specialization in a selected area of study, with additional work in other areas. A comprehensive written examination is required for this option, as is a capstone internship experience. Requirements for these degrees are given in the General Information section of this catalog.

Athletic training/sports medicine: This concentration provides comprehensive academic preparation, research, and clinical experience in the areas of injury prevention, assessment, treatment, rehabilitation, and therapeutic modalities.

Biobehavioral Science: This thesis mandatory concentration is multidisciplinary and flexible, permitting students to tailor their scholarly experience to the development of research skills in one of several related disciplines: biomechanics, motor control and learning, and exercise and performance psychology. Each area of specialization is briefly described below.

- **Biomechanics**: The specialization in biomechanics draws from the fields of neuroscience, engineering, and medicine. The course work and training include kinematics and kinetics of movement. Course work also includes anatomy/kinesiology, biomechanics, engineering, neuroscience, medicine, psychology, physical therapy, and statistics.
- **Motor learning control**: This interdisciplinary specialization draws on experiences and a knowledge base in the movement and sport sciences, cognitive sciences, and physical therapy. Students are prepared to conduct research and provide expertise in traditional motor performance and learning settings.
- **Exercise performance psychology**: This area of specialization provides the basis for understanding and influencing the underlying thought processes and attitudes that will ultimately determine the performance of individuals involved in sport, exercise, and other achievement-oriented activities. The primary emphasis is to develop the scientific background and skills necessary for doctoral training and research.

Clinical exercise physiology: The purpose of this non-thesis program is to give students the opportunity to develop advanced knowledge and competencies in Exercise Physiology. Clinical Exercise Physiologists typically practice in hospitals, clinics and wellness centers as part of a health care team that administers tests and develops programs of exercise, counseling, and education for patients with cardiopulmonary, metabolic, and musculoskeletal diseases.

Exercise physiology: This thesis mandatory area of concentration is concerned with the scientific study of how the various physiological systems of the human body respond to physical activity. It is a multidisciplinary field with strengths to the basic life sciences and medicine, and application to clinical, normal, and athletic populations.

Human performance: This non-thesis master's concentration merges a range of specializations within the Department into a curriculum that provides educational experiences to graduate students interested in studying the factors that determine human performance in both athletic and nonathletic domains. This flexible approach allows students to focus on specific applications that best meet their individual interests. Human performance incorporates components such as nutrition, psychology, motor behavior, and physiology that are applicable to athletic and clinical populations.

Astronomy Department

Chair: C. Telesco
Graduate Coordinator: V. Sarajedini

The University of Florida's Astronomy Department is one of the largest in the country. Research is an integral part of the graduate program. Students have opportunities to work with faculty...
Behavioral Science and Community Health Department

Chair: B. Carbow
Complete faculty listing by department: Follow this link.

The Department of Behavioral Science & Community Health (BSCH) is one of nine academic departments housed in the School of Public Health and Health Professions at the University of Florida. This department offers a Doctor of Philosophy (PhD) degree (SBH track). For more information about the program, please visit the link below.

Biochemistry and Molecular Biology Department

Chair: James B. Flanegan
Graduate Coordinator: Kevin Brown
Complete faculty listing by department: Follow this link.

Biochemistry and Molecular Biology Department faculty mentor Ph.D. students in the College of Medicine interdisciplinary program (IDP) in medical sciences. Students interested in pursuing a doctoral degree can view specific features of the biochemistry and molecular biology concentration at [http://biochem.med.ufl.edu/](http://biochem.med.ufl.edu/) and [http://idp.med.ufl.edu/](http://idp.med.ufl.edu/). For admission information, visit the IDP website. Department faculty also mentor Ph.D. students in other college programs and participate actively in the research and teaching functions of various centers such as the Center for Epigenetics and the Center for Structural Biology. The Department offers a wide variety of courses for graduate students studying in the life sciences. The research expertise of the faculty spans the areas from cell biology, metabolism, and molecular biology to physical biochemistry/structural biology. Current research interests include viral protease inhibitors, viral RNA replication, bioenergetics and proton translocation, X-chromosome structure and function, cytoskeletal assembly and dynamics, enzyme mechanism and control, chromatin structure, gene expression and regulation, mitochondrial biogenesis and evolution, the genetics of inherited disease, nutrient membrane transporters, protein site-directed mutagenesis, ribosome structure and function, signal transduction, structural biology and dynamics of macromolecules, protein-nucleic acid interactions, transgenic animal models, and virus crystal structure. Prospective graduate students should have adequate training in chemistry and biology. Minor deficiencies may be made up immediately after entering graduate school. Previous undergraduate experience in a research laboratory is highly recommended. Doctoral students are required to take a core IDP course in full term of their first year; and beginning in spring term, students take advanced classes in areas of interest. Specific advanced-level courses may be recommended by the student's supervisory chair and committee. The following courses are open to all graduate students and advanced undergraduates. Additional courses are listed in the Advanced Concentration in Biochemistry and Molecular Biology section under Medical Sciences.

Biology Department

College of Liberal Arts and Sciences

Chair: Craig W. Osenberg
Graduate Coordinator: W. Bradley Barbazuk
Complete faculty listing by department: Follow this link.

The Department of Biology offers two graduate programs: Botany and Zoology. Both programs offer graduate work leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

More information regarding these programs is available by following the links below and by visiting our departmental website: [http://www.biology.ufl.edu](http://www.biology.ufl.edu).

Biomedical Engineering Department

Chair: C. Schmidt
Graduate Coordinator: D. Hintenlang
Complete faculty listing by department: Follow this link.

The mission of the J. Crayton Pruitt Family Department of Biomedical Engineering (BME) is to educate students with strong engineering and science backgrounds for Master's and/or Ph.D. degrees in biomedical engineering. Graduates in BME typically apply their skills and training directly to engineering solutions to clinical problems in medicine. The BME mission is accomplished through a core program of study that has strong collaborations with faculty in the Colleges of Engineering and Medicine. The Biomedical Engineering Department faculty members work collaboratively with joint, affiliate, and adjunct faculty from many other departments in the College of Engineering, the College of Medicine, and local industry. This diversity ensures students the highest-quality education and varied opportunities for cutting-edge research. The BME Department currently focuses in: neural engineering, biomaterials, tissue engineering, biomechanics, nanomedicine, biomedical imaging and medical physics. A concentration in Medical Physics is available at both the M.S. and Ph.D. levels. Students interested in pursuing a doctoral degree can view specific features of the biochemistry and molecular biology concentration at [http://www.bme.ufl.edu](http://www.bme.ufl.edu). BME graduate students are admitted directly through the BME Department. The BME Graduate Academic Committee reviews and makes all decisions regarding admission. Each student’s research adviser must hold a Graduate Faculty appointment in the BME Department. Supervisory committees for BME students normally include at least one member from the College of Engineering and one from the College of Medicine to emphasize the need for a clinical focus in the research.

Biostatistics Department

College of Public Health and Health Professions
College of Medicine

Interim Chair: Samuel Wu
Graduate Coordinator: Babette Brunhake
Complete faculty listing by department: Follow this link.
The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions, careers in health agencies and health-related institutions, and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e., Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

All graduates of the program are expected to be able to:

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/](http://biostat.ufl.edu/education/phd-in-biostatistics/).

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/](http://biostat.ufl.edu/education/ms-in-biostatistics/).

Biostatistics Department

Complete faculty listing by department: [Follow this link](http://biostat.ufl.edu/)

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

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Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/](http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/).

Chemical Engineering Department

Chair: R. Dickinson.
Graduate Coordinator: A. Chauhan.
Clinical and Health Psychology Department

Chair: W. Dolbir
Graduate Coordinator: B. W. Smith

Complete faculty listing by department: Follow this link.

The Master of Latin degree is a non-thesis degree, designed for currently employed and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of classics, and enhance their professional qualifications through a program of summer course work and directed independent study and/or distance learning courses during the regular academic year. The Master of Latin degree is intended for students preparing to teach in community colleges or high schools. Both M.A. programs require 30 credit hours, including 6 credits of Latin and Roman studies (available via distance course work). Classical civilization (available via distance course work) Philology (prepares students for careers in colleges and universities) Latin and Roman studies (available via distance course work).

Requirements for the philology track of the doctoral degree include:

- A reading knowledge of two modern languages, one of which must be German
- Reading lists in Greek and Roman authors
- Supervised experience in teaching Latin, Greek, or civilization courses is advised
- Successful completion of a series of qualifying examinations appropriate to the chosen specialization (Greek reading; Latin reading; classical Greek literature in its historical context; classical Latin literature in its historical context; special author/topic)
- An oral preliminary examination, dissertation, and final examination

The M.A. degree in classical studies is recommended for students who plan to continue on to the doctoral level. The M.A. degree in Latin is recommended for students who plan to pursue a career in secondary teaching. Both M.A. programs require 30 credit hours, including 6 credits of GRW 6971 or HOC 6905, a thesis, and final examination.

The Master of Latin degree is a non-thesis degree, designed for currently employed and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of classics, and enhance their professional qualifications through a program of summer course work and directed independent study and/or distance learning courses during the regular academic year. The Master of Arts in Teaching, a non-thesis degree, is offered with a program in Latin and is intended for students preparing to teach in community colleges or high schools. Both M.A. programs require 30 credit hours, including 6 credits of GRW 6971 or HOC 6905, a thesis, and final examination.

Chemistry Department

Chair: W. Dolbir
Graduate Coordinator: B. W. Smith

Complete faculty listing by department: Follow this link.

The Department of Chemistry granted its first master's degree in 1909 and the first Ph.D. in 1930. Specializations in biochemistry, organic, physical, inorganic and analytical are offered with extensive interdisciplinary research opportunities (e.g., bio/nano-science, particle science, green chemistry, polymer chemistry, chemical physics, health related biochemistry, chemistry-engineering, and genomics).

The Department presently offers the Master of Science and Doctor of Philosophy degrees with a major in chemistry. The non-thesis Master of Science in Teaching degree is also offered with a major in chemistry.

Civil and Coastal Engineering Department

Chair: K. Hatfield
Graduate Coordinator: A. Drescher

Complete faculty listing by department: Follow this link.

The Department of Civil and Coastal Engineering offers two distinct graduate programs: civil engineering and coastal and oceanic engineering. All degrees except the Ph.D. are available in a thesis or nonthesis option. The nonthesis option has two formats: report and 30-hour non-report. Students who elect the nonthesis report must successfully complete a document of substantial engineering content for a minimum of two hours credit in CCN 6974 for civil engineering majors, or HOC 6905 for coastal and oceanic engineering majors.

Civil and Coastal Engineering degree programs include areas of specialization in construction, civil engineering management, geotechnical engineering, water resources and hydrology, public works, structural engineering, civil engineering materials, geosensing systems engineering, coastal engineering, oceanographic engineering and offshore structures, and transportation engineering.

Minor or supporting work is encouraged from a variety of related or allied fields of study. Ph.D. students are required to take a preliminary examination. Requirements for the M.S., M.E., and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Classics Department

Chair: Victoria Pagán.
Graduate Coordinator: Jennifer Rea.

Complete faculty listing: Follow this link.

The department offers the following degrees and programs: the Doctor of Philosophy in classical studies; the Master of Arts degree in classical studies or Latin; the Master of Latin degree, and the Master of Arts in Teaching degree in Latin. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Within the Ph.D. program are three tracks:

- Philology (prepares students for careers in colleges and universities)
- Classical civilization (available via distance course work)
- Latin and Roman studies (available via distance course work).

Requirements for the philology track of the doctoral degree include:

- 60 credit hours after the M.A. (or a total of 90 credit hours)
- Five additional seminars after the M.A. in classes at the 500 level or higher
- Three of the following seminars: CRW 6425, GRW 6105, LAT 6425, LNW 6105, and CLA 6805
- A reading knowledge of two modern languages, one of which must be German
- Reading lists in Greek and Roman authors
- Supervised experience in teaching Latin, Greek, or civilization courses is advised
- Successful completion of a series of qualifying examinations appropriate to the chosen specialization (Greek reading; Latin reading; classical Greek literature in its historical context; classical Latin literature in its historical context; special author/topic)
- An oral preliminary examination, dissertation, and final examination

The M.A. degree in classical studies is recommended for students who plan to continue on to the doctoral level. The M.A. degree in Latin is recommended for students who plan to pursue a career in secondary teaching. Both M.A. programs require 30 credit hours, including 6 credits of GRW 6971 or HOC 6905, a thesis, and final examination.

Clinical and Health Psychology Department
College of Public Health and Health Professions

Department Chair: William W. Latimer.
Graduate Coordinator: S.R. Boggs.

Complete faculty listing: Follow this link.

The Department of Clinical and Health Psychology is a unit of the College of Public Health and Health Professions. The department's programs are its doctoral clinical psychology studies leading to the Ph.D. degree in psychology; an American Psychological Association accredited doctoral internship program; and postdoctoral studies and research. Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

The clinical psychology doctoral curriculum adheres to the scientist-practitioner model of education and training. Program strengths include research, education, and professional training in health care psychology, with organized areas of concentration in clinical health psychology, clinical child/adolescent psychology, neuropsychology, neurorehabilitation and clinical neuroscience, and emotion neuroscience/psychopathology. Education and training experiences are also available in rural psychology. Interested students can apply for acceptance into the Public Health Program and obtain dual M.P.H./Ph.D. degrees.

Progress in the program is determined by departmental policies which are consistent with American Psychological Association accreditation standards. The curriculum has been continuously accredited by the American Psychological Association since 1953.

Admission to the Department is through appropriate application to the Department's admission committee. A bachelor's degree is generally adequate preparation for graduate admission. It should include undergraduate courses in both experimental psychology and statistics, along with at least three courses from the following psychology areas: developmental, learning, perception, personality, physiological, and social.

For more information, please see the program page below and our website: http://chp.phhp.ufl.edu.

Comparative Law Department

Director and Graduate Coordinator: P.A. Malavet.

Complete faculty listing by department: Follow this link.

The LL.M. in Comparative Law degree is designed for graduates of foreign law schools who want to enhance their understanding of the American legal system and the English common law system from which it evolved. Requirements for this degree are given in the General Information section of this catalog.

The program begins with Introduction to American Law, a 4-credit summer course that gives students a foundation in the American legal process. It also helps students acclimate to the College of Law and the University community before the start of the academic year. During the fall and spring terms, and with the director's approval, students choose their remaining 22 credits from more than 100 Juris Doctor and LL.M. in Taxation courses and seminars. For admission information consult the College of Law and the University community before to the start of the academic year. During the fall and spring terms, and with the director's approval, students choose their remaining 22 credits from more than 100 Juris Doctor and LL.M. in Taxation courses and seminars. For admission information consult the College of Law Prospectus or write to the Comparative Law Office P.O. Box 117643, University of Florida, Gainesville, FL 32611-7643 USA.

Computer and Information Science and Engineering Department

College of Liberal Arts and Sciences

Chair: Paul Gader
Graduate Coordinator: Jih-woon Peir.

Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, Engineer, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems:** computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies.
- **Database and information systems:** database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics.
- **High-performance computing/applied algorithms:** design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry.
- **Computer graphics, modeling, and art:** modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics.
- **Intelligent systems and computer vision:** artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases.
- **Computer networks and security:** wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either a thesis or project in lieu of a thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core.
- 6 letter-graded credits from either CISE or (with approval) from some other department.
Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis is for 6 credit hours of project/Performance credits. To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B, to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A maximum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: http://www.cise.ufl.edu

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**Computer and Information Science and Engineering Department**

**College of Engineering**

**Chair:** Paul Gader  
**Graduate Coordinator:** Ji-hunwon Peir

Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems:** computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems:** database management systems, database design, database theory and implementation, data mining, database processing, parallel and distributed databases, digital libraries, e-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms:** design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art:** modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision:** artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security:** wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either a thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The nonthesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/Performance credits. To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B, to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A maximum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: http://www.cise.ufl.edu

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**Dental Sciences Department**

**College of Dentistry**

For more information, please see the program pages below, or visit our website: http://www.cise.ufl.edu

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Endodontics Chair and Graduate Coordinator: Roberta Pileggi
Orthodontics Chair and Graduate Coordinator: Calogero Dolce
Periodontology Chair: Ilhamaddin Aukhil; Graduate Coordinator: Rodrigo Neiva
Restorative Dental Sciences Interim Chair: William Willis; Graduate Coordinator: Edgar O'Neill

Complete faculty listing: Follow this link.

The College of Dentistry offers the Master of Science degree in dental sciences with concentrations in endodontics, orthodontics, periodontics, and prosthodontics. These concentrations include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include

- Satisfactory completion of all course work
- Meeting the requirements for clinical certification in the respective dental specialty
- Thesis or project based on research.

Prerequisites for admission, in addition to those of the Graduate School, include

- D.D.S. or D.M.D. degree
- Completion of Parts I and II of the American Dental Association's National Board of Dental Examinations.

The application deadline for Endodontics, Periodontics, and Prosthodontics is August 1
The application deadline for Orthodontics is September 2

Send applications to:

Master of Science Program,
College of Dentistry,
P.O. Box 100402,
Health Science Center,
University of Florida,
Gainesville, FL 32610-0402

Requirements for the M.S. degree are provided in the Graduate Degrees section of this catalog.

For further information, see the Dental Science program link below.

Department of Health Education & Behavior

Chair: Julie A. Tucker
Graduate Coordinator: Christine B. Stopka

Complete faculty listing by department: Follow this link.

The Department of Health Education & Behavior offers a Doctor of Philosophy (Ph.D.) in Health and Human Performance with a concentration in Health Behavior, a non-thesis 30-credit hour Master of Science and a 36-credit Master of Science (M.S.) in Health Education and Behavior. Requirements for the Ph.D. and M.S. degrees are given in the General Information section of this catalog.

The Ph.D. degree program trains health behavior researchers for academic positions in federal health agencies such as the Centers for Disease Control and Prevention and the National Institutes of Health for postdoctoral research fellowships and for the private sector.

The 30-credit hour, non-thesis M.S. degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector. Full-time students can complete this M.S. option in one year. This degree may also give students unique and distinguishing training experiences when applying to professional schools such as law, medicine, physician assistant, dentistry, chiropractic, osteopathy, nursing, occupational therapy, and physical therapy.

The 36-credit hour project in lieu of thesis, and the 36-credit hour thesis options are designed for students interested in developing research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically can complete these options in about 4 semesters.

The Department also offers an accelerated B.S./M.S. program in health education and behavior to enable students to receive both B.S. and M.S. degrees with a reduction of 12 credits (about one semester of course work).

Students who complete a graduate degree program in the Department of Health Education & Behavior acquire a range of skills required to research, plan, implement, and evaluate health promotion policies and programs aimed at improving the health and well-being of individuals, families, and communities. Specific skills include:

- Conducting needs and capacity assessments to identify health priorities
- Planning, implementing, and evaluating health promotion policies and programs
- Conducting research on questions associated with health problems and their determinants and health promotion policies and programs
- Administering and managing health promotion programs
- Advocating for health promotion policies and programs in schools, communities, health care facilities, and work sites
- Developing social marketing and health communication messages and campaigns
- Researching and developing social media and new media-based health promotion applications
- Serving as a resource person for health information and referrals
- Using a variety of teaching-learning strategies appropriate to the target audience and setting
- Writing scholarly and professional articles
- Working collaboratively with public and private agencies, nongovernmental organizations (NGOs) and the private sector to achieve the goal of a healthier population.

This degree prepares the health promotion specialists and health behavior scientists to work in:

- Local, state, and federal health, education and social agencies
- Nongovernmental health organizations
- Schools and universities
- Healthcare settings
- Private sector

Simple position titles for individuals with this degree include:

- Health education specialist
• Health promotion specialist
• Public health advisor or public health analyst
• Health promotion coordinator or health promotion consultant
• Campus health educator or patient health educator,
• Health communication specialist
• Wellness specialist
• Wellness promotion coordinator
• Prevention specialist

For additional information, visit [http://www.hhp.ufl.edu/hhp](http://www.hhp.ufl.edu/hhp).

Department of Languages, Literatures and Cultures

Complete faculty listing by department: [Follow this link](http://www.hhp.ufl.edu/hhp).

Digital Worlds Institute

College of the Arts

Director: James C. Oliverio
Graduate Coordinator: Marko Savajdziec

Complete faculty listing: [Follow this link](http://www.hhp.ufl.edu/hhp).

The Digital Worlds Institute exists to nurture leading-edge education between the arts, communications, engineering and the sciences, utilizing advanced media systems and digital culture. By bringing together the diverse talents of University of Florida faculty, students, and staff in a multifaceted collaborative environment, the Institute serves as a platform for interdisciplinary research and teaching that would not have occurred within the confines of any one college or department. Through the use of interactive tools and technologies, the Institute promotes transdisciplinary creativity across classrooms, continents and cultures.

For more information, please see the program page below and our website: [http://www.digitalworlds.ufl.edu](http://www.digitalworlds.ufl.edu).

Economics Department

Chair: R. D. Blair
Graduate Coordinator: S. M. Slutsky.

Complete faculty listing: [Follow this link](http://www.hhp.ufl.edu/hhp).

The department offers the Master of Arts (thesis and nonthesis option) and Doctor of Philosophy degrees in economics with specializations in econometrics, economic theory, industrial organization, international economics, monetary economics, and public finance.

**M.A. requirements:** A minimum of 36 credits of course work is required for the M.A. with and without thesis. A maximum of six credits of the research course ECO 6971 may be included for a master’s degree with thesis. The following core courses are required: ECO 7408 and ECO 7404 or equivalent, ECO 7415 or equivalent, ECO 7115, and ECO 7206.

**Ph.D. requirements:** Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) an acceptable score on the GRE, and (c) for nonnative speakers of English, an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

All core courses must be completed in the first year. In addition, students must complete courses in three fields of specializations and pass qualifying examinations in two of those fields. Complete descriptions of the minimum requirements for the M.A. and Ph.D. degrees are provided elsewhere in this catalog.

Electrical and Computer Engineering Department

Chair: J. Harris.
Graduate Coordinators: G. Bosman, J. McNair

Complete faculty listing: [Follow this link](http://www.hhp.ufl.edu/hhp).

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the [Graduate Degrees Section](http://www.hhp.ufl.edu/hhp) of this catalog. For more information about our program, please visit the link below.

English Department

Chair: K. Kidd
Graduate Coordinator: S. I. Dobrin

Complete faculty listing by department: [Follow this link](http://www.hhp.ufl.edu/hhp).

The Department of English offers the Master of Arts degree (thesis and nonthesis options) and the Doctor of Philosophy degree in English, along with the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the [Graduate Degrees](http://www.hhp.ufl.edu/hhp) section of this catalog. For more information about our programs, please follow the hyperlinks below or visit our website: [http://www.english.ufl.edu/programs.html](http://www.english.ufl.edu/programs.html).
Entomology and Nematology Department

College of Agricultural and Life Sciences
Chair: John L. Capinera.
Graduate Coordinator: Heather J. McAuslane.
Complete faculty listing by department: Follow this link.

The Entomology and Nematology Department offers the Master of Science (thesis and nonthesis options) and Doctor of Philosophy degrees in entomology and nematology with the following specializations: entomology, nematology, and pest management. Minimum requirements for the M.S. and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

The Department also offers a cooperative Doctor of Philosophy degree with Florida A&M University and distance education courses leading to the M.S. degree. Members of the Graduate Faculty include the department resident faculty, faculty located on University of Florida campuses away from Gainesville, scientists with other State of Florida agencies such as the Division of Plant Industry and Florida Department of Agriculture and Consumer Services, and scientists of the U.S. Department of Agriculture. The Graduate Faculty is qualified to direct graduate students in all specialties of entomology, nematology, and acarology.

New graduate students should have backgrounds in biology, chemistry, physics, and mathematics. Minor deficiencies may be made up after entering graduate school.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

For more information, please see the program page below, and visit our website: http://entnemdept.ufl.edu.

Environmental and Global Health Department

Chair: G. C. Gray
Graduate Studies Program Assistant: N. Burke
Faculty listing: Follow this link.

The Department of Environmental and Global Health focuses upon environmental factors that impact human health. Department faculty, scientists, and students employ numerous disciplines in studying these environmental factors: virology, bacteriology, parasitology, entomology, toxicology, epidemiology, water sciences, veterinary health, environmental engineering, aerosol biology, wildlife health, etc. Research work often involves international travel and collaboration. A central theme for the department is the interdisciplinary thinking called One Health which reflects the collaborations necessary to tackle public health's most difficult problems. Faculty, students and staff often perform research in the laboratories in the Emerging Pathogens Institute, the Center for Environmental and Human Toxicology, or the Aquatic Pathobiology Laboratory.

The Department of Environmental and Global Health offers graduate work leading to the degrees of Doctor of Philosophy, Master of Health Science, and Master of Public Health.

Environmental and Land Use Law Department

Director and Graduate Coordinator: Christine A. Klein
Complete faculty listing by department: Follow this link.

Florida's sensitive, varied and beautiful natural environment makes the University of Florida a natural choice for students who want to focus on the national and global issues of land use and environmental law. Florida provides a perfect setting to study first-hand the efforts to reconcile growth and conservation.

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

For more information, please see the program page below and our website: http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law.

Environmental Engineering Sciences Department

Director: K. Hatfield
Graduate Coordinator: P. Chadik
Complete faculty listing: Follow this link.

The Department of Environmental Engineering Sciences offers graduate study in the following areas: Air Resources; Biogeochemical Systems; Environmental Nanotechnology; Solid and Hazardous Waste Management; Storm Water, Water Supply and Waste Water; Sustainability. Science & Engineering Systems Ecology and Ecological Engineering and Water Resources. Students graduated from the program will demonstrate depth in individual focus areas as well as breadth of core knowledge concepts in all areas. Please visit the link below for more information about our program in Environmental Engineering Sciences.

Epidemiology Department

College of Public Health and Health Professions
College of Medicine
Chair: Linda Cottler
Ph.D. Program Director: Cindy Prins
M.S. Program Director: Catherine Woodstock Striley

The Department of Epidemiology offers graduate study in the following areas: Biostatistics; Environmental Epidemiology; International Health; Medical Epidemiology; Public Health Practice; and Quantitative Epidemiology.

For more information, please see the program page below.
Complete faculty listing by department: Follow this link.

The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: http://epidemiology.phhp.ufl.edu

Epidemiology Department

College of Public Health and Health Professions
College of Medicine

Chair: Linda Cottler
Ph.D. Program Director: Cindy Prins
M.S. Program Director: Catherine Woodstock-Stirley

Complete faculty listing by department: Follow this link.

The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: http://epidemiology.phhp.ufl.edu

Family, Youth, and Community Sciences Department

Interim Chair: Tracy Irani
Graduate Coordinator: Larry F. Forthun

Complete faculty listing by department: Follow this link.

The FYCS graduate program is an interdisciplinary applied social science program that prepares students for advanced degrees (e.g., Ph.D.) and careers in such areas as family and youth services, Extension and community-based education, community development and nonprofit management, program planning and evaluation, and social policy. Graduates find careers in both the public and private sectors including:

- Child and Youth Development in areas such as juvenile justice, dropout prevention programs, recreational and camp programs, and youth ministry;
- Community Development Practice in local and regional government, private nonprofit organizations (such as chambers of commerce, local development corporations, and local, national and international foundations) and citizen’s groups;
- Nonprofit Organizational Management, such as management of community based, nonprofit organizations;
- Family and Social Services, such as family preservation programs, assistance for abused and neglected children and other public assistance programs; and
- Cooperative Extension Service in such areas as youth development, family and consumer sciences and community development.

Contact the graduate coordinator for more information.

Finance, Insurance, and Real Estate Department

Chair: Michael D. Ryngaert
Graduate Coordinator: Mahen Nimalendran

Complete faculty listing: Follow this link.

The Department of Finance, Insurance, and Real Estate offers graduate work leading to the Master of Science degree with major programs in finance and real estate; the Master of Science in Entrepreneurship (M.S.E.); and the Doctor of Philosophy degree in business administration with a concentration in finance, insurance, quantitative analysis, or real estate. Complete descriptions of the minimum requirements for the M.S., M.S.E. and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

Finance, Real Estate, and Entrepreneurship are also available as concentrations within the M.B.A program. For information about the M.B.A. program, please consult that listing in the Graduate Degrees section.

For more information see the program pages below, and visit our website: http://warrington.ufl.edu/departments/fire

Fisher School of Accounting

Warrington College of Business Administration

Director: Gary A. McGill
Graduate Coordinators: Dominique DeSantiago, Stephen Asare

Complete faculty listing by department: Follow this link.

As a professional school in a major public research university, the Fisher School of Accounting (FSOA) is committed to scholarly research, teaching, and service to advance knowledge and prepare future leaders for business, professional, and academic careers.

The Fisher School of Accounting offers graduate work leading to the Master of Accounting (M.Acc.) degree with a major in accounting, and the Ph.D. degree with a major in business administration and an accounting concentration. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below, or visit our website: http://warrington.ufl.edu/accounting.
Food and Resource Economics Department

College of Agricultural and Life Sciences

Interim Chair: Rodney L. Clouser
Acting Graduate Coordinator: Sherry Larkin

Complete faculty listing by department: [Follow this link](http://www.footballfansites.com)
The Food and Resource Economics Department offers the Master of Agronomy (M.Agronomy) (non-thesis), Master of Science with Concentration in Agronomy (M.S.Agronomy) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Department participates in programs with the Center for Latin American Studies, the Center for African Studies, the Center for Tropical Agriculture, the College of Natural Resources and the Environment, the College of Law, and the Florida Sea Grant College Program.

The Department offers a combined bachelor's/master's degree program for the Master of Science and Master of Science with Concentration in Agronomy. Contact the Graduate Program Office in 1170 McCarthy Hall for information.

For more information, please see the program pages below, and see our website: [http://www.fred.ifas.ufl.edu](http://www.fred.ifas.ufl.edu).

Food Science and Human Nutrition Department

College of Agricultural and Life Sciences

Chair: Susan S. Percival
Graduate Coordinators: Harry S. Sitren (M.S. in Food Science and Human Nutrition / Ph.D. in Food Science), James F. Collins (Ph.D. in Nutritional Sciences)

Complete faculty listing by department: [Follow this link](http://www.foodscience.ufl.edu)
The Food Science and Human Nutrition Department (FSHN) is one of the world's largest combined academic programs where food science, nutritional sciences, and dietetics are all studied within one department. FSHN has nearly 30 full-time faculty members, 80 graduate assistants, and close to 1,000 undergraduate students. Our programs are accredited by the Institute of Food Technologies (IFT) and the Academy of Nutrition and Dietetics. After completing undergraduate degrees, our students typically move on to professional employment, further education, or training in food or nutrition graduate programs, or to professional school programs. We have a strong record of excellent placement of our graduate students in industry and professional organization employment positions, as faculty members at colleges and universities, or in postdoctoral training experiences.

Our faculty has trained at institutions from around the world; they have been widely successful in their teaching, research, and extension efforts. Throughout our programs in food science, nutrition, and dietetics, our faculty is recognized nationally and internationally as experts in their respective fields.

The Food Science and Human Nutrition Department offers programs leading to the degrees of Master of Science in Food Science and Human Nutrition, Doctor of Philosophy in Food Science, and Doctor of Philosophy in Nutritional Sciences (offered under the auspices of the Center for Nutritional Sciences). Minimum requirements for these degrees are located in the Graduate Degrees section of this catalog.

For more information please follow the links to the program pages below, or see our website: [http://fsdn.ifas.ufl.edu](http://fsdn.ifas.ufl.edu).

Geography Department

Chair: M. W. Binford
Graduate Coordinator: C. J. Matyas

Complete faculty listing by department: [Follow this link](http://www.geog.ufl.edu)
The Department of Geography offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The focus of the Department is in human-environment interactions, with "environment" interpreted very broadly. The Department provides four main areas of specialization for graduate research: economic and cultural geography; resource management and land use and land cover change; medical geography; and physical geography. Economic and cultural geography concerns such topics as spatial econometric theory and housing and care of the elderly. Resource management and land-use and land-cover change focus on agricultural change and resource conservation and development in the tropics and subtropics, and rural and urban land use and land cover change in tropical and temperate regions. Africa and Latin America are the primary areas of regional emphasis outside of the U.S. Physical geography in the Department concentrates on climatology, fluvial geomorphology, and hydrology. Medical geography studies the geographic aspects of human health including disease ecology and transmission and healthcare issues. The Department's extensive geographic information system, remote sensing, and computer cartography teaching and research facilities contribute to and support all of the areas of research. Faculty from the Department are also major participants in the Emerging Pathogens Institute, Florida Climate Institute, Land Use and Environmental Change Institute (L.U.E.C.I), and the Water Institute. Prospective students should examine the research interests of the Graduate Faculty to obtain a more detailed sense of the Department's specialties (see the departmental website: [www.geog.ufl.edu](http://www.geog.ufl.edu)).

To ensure the incorporation of relevant interdisciplinary perspectives in each student's program, the Department maintains close ties with other departments in Liberal Arts and Sciences, and with programs in African studies, Latin American studies, the School of Natural Resources and Environment, the Institute on Aging, urban and regional planning, tropical agriculture, tropical ecology, water resources, the Warrington College of Business Administration, the College of Agricultural and Life Sciences, College of Public Health and Health Professions, and the Hydrogeological Sciences Academic Cluster. Certificates in certain of these fields may be obtained in addition to graduate degrees in geography. Geography administers the Graduate Certificate in Applied Atmospheric Sciences.

A graduate student should preferably have an undergraduate major in geography, but applicants with degrees in one of the social or physical sciences are accepted into the Department's graduate program. Deficiencies in undergraduate work in geography must be corrected concurrently with registration in graduate level courses. All students in the graduate program are required to take courses in contemporary geographic thought and geographic research skills.

For more information, see our website: [http://www.geog.ufl.edu](http://www.geog.ufl.edu).
The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

**Geological Sciences Department**

Chair: P. A. Mueller  
Graduate Coordinator: J. M. Jagger  
Complete faculty listing: [Follow this link](http://www.geology.ufl.edu)  
The Department of Geological Sciences is composed of a group of internationally recognized faculty, graduate students, and dedicated support staff. Faculty and students in the Department of Geological Sciences are involved in exciting and groundbreaking research projects throughout the world and in Florida. The Department houses world-class analytical and computing facilities for research and teaching.

The Department has identified six primary areas of emphasis in its research and teaching programs: environmental geology and hydrology, palaeoclimatology, tectonophysics, geochemistry and mineralogy/petrology, marine and coastal geology, and palaeomagnetism. For more detailed information on current departmental activities, faculty, and research centers, see [http://web.geology.ufl.edu](http://web.geology.ufl.edu). The Department has collaborative, interdisciplinary programs of study and research with the Florida Museum of Natural History, the Center for Wetlands Research, the Land Use and Environmental Change Institute (L.U.E.C.I.), and the hydrological sciences cluster.

**Health Outcomes and Policy Department**

College of Medicine  
Chair: Betsy Shankman  
Graduate Coordinator: Jill Herndon  
Complete faculty listing by department: [Follow this link](http://hsrmp.phhp.ufl.edu)  

There is increasing emphasis on assessing health outcomes throughout the lifespan in a variety of health care and community settings. Nationally, the National Institute of Health and other federal and state agencies focus on the development of evidence-based programs to promote health, improve health care delivery, and enhance health outcomes.

Outcomes research generates evidence that informs health care program design in clinical and community settings, the promotion of effective clinical and community interventions, quality of care, cost-effective and clinically appropriate choices for patients in allocation of health care resources (clinical effectiveness), and incorporation of best practice models into health-related programs and policies. Outcomes research also provides mechanisms to understand how to translate research into practice and policy, how to improve the quality and efficiency of health programs, and how to achieve equitable and appropriate delivery of health programs and clinical care, particularly for underserved and vulnerable populations.

Our graduate programs are designed to train professionals in the health care and health research fields about the science that supports the development and evaluation of evidence-based clinical and community-based programs focused on improving health outcomes. Further, our programs emphasize methods for translating research into practice and policy. The unique combination of courses offered through these graduate programs will give trainees the tools needed to examine health outcomes and policies in a variety of settings across different age spans and to examine the individual, social, health system, and health policy factors that influence health outcomes.

In addition to traditional graduate students, both programs are available to medical students, post-doctoral students, fellows, residents, Ph.D. students, and junior faculty.

**Health Services Research, Management, and Policy Department**

Chair: Arch G. Mainous, III  
Graduate Coordinator: Patricia Van Wert  
Complete faculty listing: [Follow this link](http://hsrmp.phhp.ufl.edu)  

At the doctoral level, the Department offers the Ph.D. degree in Health Services Research. This full-time program prepares graduates to investigate and evaluate the complexities of health care systems and to develop and evaluate outcomes research. Health services research is a multidisciplinary field that examines the delivery, organization, financing, and outcomes of health care services.

Minimum requirements for these degrees are available in the [Graduate Degrees section of this catalog](http://hsrmp.phhp.ufl.edu).

For more information, please see the program pages below and our website: [http://hsrmp.phhp.ufl.edu](http://hsrmp.phhp.ufl.edu).

**History Department**

**College of Liberal Arts and Sciences**  
Chair: Sean P. Adams  
Graduate Coordinator: Elizabeth Dale  

The Department of History offers the following graduate degrees: Master of Arts with fields of specialization in African, Asian, European, Latin American, and United States history, and the Doctor of Philosophy with fields of specialization in African, European, Latin American, and United States history. In addition to materials required by the Graduate School for admission, applicants must send directly to the History Department the following evidence of aptitude and interest: Three recommendations, from persons competent to evaluate your potential for graduate work; A 3- to 5-page essay identifying your career goals and particular areas of interest; a sample of your written work in history. Interested students should consult the department web page for more information.

**Horticultural Sciences Department**
College of Agricultural and Life Sciences

Chair: K.M. Folta (Interim Chair, Horticultural Sciences) and W. Mackay (Environmental Horticulture)
Graduate Coordinator: G. A. Moore (Horticultural Sciences) and L. Trenholm (Environmental Horticulture)

Complete faculty listing: Follow this link.

The Horticultural Sciences Department Graduate Program at the University of Florida has a wide array of opportunities for graduate study.

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HSE) and Horticultural Sciences (HS) departments and offers graduate programs leading to the Master of Science (thesis or nonthesis options) and the Doctor of Philosophy degrees. Members of the program's Graduate Faculty include department resident faculty and faculty at University of Florida Research and Education Centers located throughout Florida.

The Horticultural Sciences Department offers a combined bachelor's/master's degree program. Please contact the graduate coordinator for information.

For admission to the HOS graduate program, apply to either the HS or HSE departments, depending on your career/research interest. Details about the program and how to apply are listed on their website: http://hos.ufl.edu

Human Development and Organizational Studies in Education Department

Director: Linda B. Eldridge
Graduate Coordinator: Patricia Ashton

Complete faculty listing by department: Follow this link.

Programs leading to the Master of Arts in Education (M.A.E.), Master of Education (M.Ed.), Education Specialist (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees are offered through this school with programs in counseling and counselor education, educational leadership, higher education administration, marriage and family counseling, mental health counseling, research and evaluation methodology, school counseling and guidance, and student personnel in higher education.

Requirements for these degrees are given in the Graduate Degrees section of this catalog.

More information can be found at our website: http://education.ufl.edu/hdose

Industrial and Systems Engineering Department

Chair: J. Geunes.
Graduate Coordinator: J. C. Smith and P. Momeilocic.

Complete faculty listing by department: Follow this link.

The Department of Industrial and Systems Engineering offers the Master of Engineering and the Master of Science degrees, each with a thesis or nonthesis option, with specialization in engineering management, manufacturing and logistics, systems engineering, operations research, quality engineering, and special interest options such as health systems. In addition, the Department offers the Engineer degree and the Doctor of Philosophy degree with specialization in linear, combinatorial, nonlinear, and global optimization; supply chain management and e-commerce; financial engineering; manufacturing management; facilities location and layout; quality engineering; and stochastic processes.

Complete descriptions of the requirements for the M.E., M.S., Engineer, and Ph.D. degrees are provided in the General Information section of this catalog.

A degree in one of the engineering disciplines or in mathematics, statistics, physics, computer sciences, quantitative management, or similar fields is prerequisite. Where the student's background is deficient, an articulation program of foundation courses will be required.

The Department offers a combined bachelor's/master's degree program of B.S.I.S.E./Master of Science (Management), B.S.I.S.E./Master of Engineering or Master of Science, and a B.S. from disciplines within the College of Engineering/Master of Science or Master of Engineering. Contact the graduate coordinator for information.

Information Systems and Operations Management Department

Warrington College of Business Administration

Chair: Haldun Aytug
Graduate Coordinator: Praveen Pathak

Complete faculty listing: Follow this link.

The primary mission of the Department of Information Systems & Operations Management is a commitment to scholarly research, teaching and service to advance the state of knowledge in information systems and supply chain management and to train future leaders for professional and academic careers.

The Department offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Combined Bachelor/Master of Science: The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.

For more information, please see the program pages below and our website: http://warrington.ufl.edu/departments/isom

Interior Design Department

Chair: M. Portillo.
Graduate Coordinator: N. Park

Complete faculty listing by department: Follow this link.
Doctor of Philosophy:
The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning, 331 ARCH, P.O. Box 115701.

Master of Interior Design:
The Master of Interior Design (M.I.D.) provides opportunities for students to direct their attention toward a variety of topics, including
- Design pedagogy and processes
- Sustainability, safe, and secure environments
- Creative performance and innovation
- Built heritage conservation.

Regardless of the study emphasis selected by the student, the M.I.D. program has a central focus with three categories of course work:
- Design studio
- Seminars in current interior design topics
- Theories and methods of research.

All M.I.D. students must complete an approved research topic with a written thesis. Requirements for the M.I.D. and Ph.D. degrees are given in the General Information section of this catalog.

Applications:
All applications must include acceptable GRE scores, transcripts for all previous academic work, and if the applicant's native language is not English, a satisfactory score on one of the following TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute. This information must be received in the Office of the Registrar by February 2. In addition to satisfying University requirements for admission, the applicants are required to submit to the Graduate Program Assistant, Department of Interior Design, 336 Architecture, P.O. Box 115705, University of Florida, Gainesville, FL 32611-5705, the following:
- A portfolio of your design work (if applicable). The portfolio must be accompanied by a self-addressed, stamped envelope.
- A written essay on your goals and aspirations related to graduate studies.
- Three letters of recommendation.
- A personal interview is not required, but many applicants choose to visit the campus and Department as a part of the application process.

Admission: Applications are processed through February 2 for fall term and all applicants are encouraged to apply as soon as possible. Admission decisions are made between February and the end of April. All new students begin their studies in the fall to coincide with curriculum sequencing.

Graduate course requirements according to background: After assessment of previous design work, leveling courses may be required to prepare the student for the M.I.D. 36 hours of graduate course work. Therefore, each student entering the Master of Interior Design program works with the graduate coordinator to evaluate the student's unique background to determine the specific courses needed to facilitate interest and experience. Estimated credit hours and length of study time vary according to each student's individual baccalaureate degree and experience.

There are four options:
- For students enrolled in the Bachelor of Design program at the University of Florida, 12 hours of graduate-level course work in the senior year can be counted for both the undergraduate and the M.I.D. degrees. An additional 24 graduate credit hours are required. Expect at least 1 additional year to complete the M.I.D.
- For students who graduated from a Council of Interior Design Accreditation (CIDA) accredited first professional degree program within an architectural framework, the course of study is estimated to be 36 graduate credit hours. Expect 2 years to complete the M.I.D.
- For students who graduated from a design-related (architecture or interior design) baccalaureate degree program, the course of study is estimated to be a minimum of 59 graduate credit hours (includes the 36-hour M.I.D.). Expect 3 years to complete leveling courses and the master's degree.
- For students with a bachelor's degree in a field other than design, the study of course is estimated to be 86 undergraduate and graduate credit hours. Expect 3 to 4 years to complete leveling courses and the M.I.D.

Estimates of the number of credit hours and length of study time may be adjusted based on the individual student's previous preparation including experience as a practicing designer, architect, or other professional.

Program requirements: After leveling courses are completed and with approval by the graduate coordinator and supervisory committee chair, a student completes 24 hours of departmentally approved graduate work in the Department of Interior Design. In addition, with the graduate coordinator's approval, the student is required to take 3 hours of course work in graduate statistics and 9 hours of multidisciplinary graduate electives that reinforce and extend the research.

Courses from such academic units as Psychology, Anthropology, Sociology, Engineering, Education, and Business Administration provide possible electives. The College of Design, Construction, and Planning offers the Certificate in Historic Preservation. If the focus of a student is the renovation and preservation of built environments, then historic preservation courses leading to a certificate would strengthen the research and design effort. Likewise, existing appropriate courses in Architecture, Landscape Architecture, Urban and Regional Planning, and Building Construction offer both collaborative study and research opportunities for M.I.D. students.

Each student must select a two-member supervisory committee to guide course selection and to guide thesis selection, study, and production.

Landscape Architecture Department

Chair: Gina Gurucharri
Graduate Coordinator: Kevin Thompson

Complete faculty listing by department: Follow this link

The mission of the Department of Landscape Architecture is to advance the ethical, creative, and skillful application of the art and the science of planning and designing urban, rural and natural environments. The Master of Landscape Architecture seeks excellence through professional practice and service, and through research and scholarly pursuit.

Interstate field trips are required as a part of the normal program curriculum. Students should plan to have adequate funds for field trips and for studio materials. Students are also required to own a laptop computer meeting minimum department requirements. These specifications are available through the department of Landscape Architecture's website at URL: http://www.cdp.ufl.edu/landscape
The Graduate program in Landscape Architecture offers flexibility in meeting the needs of applicants with varied backgrounds. Students entering the graduate program in landscape architecture follow one of the four following tracks:

**Pre MLA Program**

Graduate students who do not possess an LAAB accredited professional degree in landscape architecture are invited to enroll in the Pre MLA program. The Pre MLA Program aids the development of basic analytical, design and graphic skills. Upon successful completion of the Pre MLA Summer term, students advance into a two-semester sequence of articulation courses that provide a foundation of applied landscape design and planning theory as well as competencies in landscape construction.

**MLA Advanced Graduate Studies Program**

Graduate students having completed the Pre MLA program or entering the MLA program with an LAAB accredited professional baccalaureate degree in Landscape Architecture commence a two year program of advanced graduate coursework towards the completion of the MLA degree.

**MLA Program + Construction**

Graduate students with a non-accredited or non-LAAB accredited degree in Landscape Architecture may apply directly to the MLA program but may be required to take additional coursework to develop core competencies required for advanced graduate study.

**MLA Research Degree**

Graduate students with an LAAB accredited professional degree in Landscape Architecture and a significant history of achievement in professional practice may tailor a program of advanced study to meet their specific needs. Proposals for the MLA Research Degree option are reviewed by the Graduate Coordinator and an approved course of study is determined through consultation with the Graduate Committee.

The normal tenure of advanced graduate study is five semesters which includes a summer semester internship. Students complete a minimum of 52 credit hours composed of lecture courses, seminars, design and construction studios, internship and individual study (special studies, supervised research and thesis or terminal project).

This time period would be extended should a student elect to expand the course work or seek a concurrent degree in a related field.

**Design studios:**
Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio's selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

**Thesis or terminal project:**
The Department recognizes that students have different professional goals and personal strengths and interests. A thesis is appropriate for students interested in further research or teaching, or in pursuing advanced degrees. A project (with a significant research component) is appropriate for students interested in design or project-oriented aspects of landscape architecture, or if their specific areas of interest suggest a nontraditional approach.

**Programs, centers, and institutes:**

The College of Design, Construction, and Planning has several research centers and institutes. The course work and summer sessions afforded by these programs offer both required and elective course work for graduate students in landscape architecture:

- **The Center for Landscape Conservation Planning:** The Center for Landscape Conservation Planning conducts applied research on the relationship between conservation and land use while providing learning opportunities for students.
- **The Center for International Design and Planning:** The Center for International Design and Planning conducts interdisciplinary research with a focus on emerging design and planning trends in an era of globalization with a focus on resilient development systems and adaptive design and planning strategies.
- **The Preservation Institute:** Nantucket gives students an opportunity to receive specialized educational experience in a broad range of preservation topics using Nantucket as a resource for case-study projects.
- **The Preservation Institute:** Caribbean gives students an opportunity to conduct and apply research regarding the conservation of the rich cultural traditions of the Greater Caribbean basin.
- **The GEOPLAN Center:**

The GEOPLAN Center is dedicated to the development of geographic and spatial information systems. Graduate students receive instruction in geographic information systems and are involved in a multidisciplinary studio that applies the tools and systems understanding afforded by GIS.

**Graduate advisement:**
Students are initially advised by the Graduate Coordinator. He or she has guided the student's application through the acceptance process and is familiar with the student's background and needs. A plan of study is developed that includes required and optional courses. By the end of the second semester of study, each student is required to form a supervisory committee composed of two faculty members. The primary purpose of the graduate committee is to advise the student on educational objectives and the thesis or terminal project course work.

**Application Procedure**

Details of application procedure are found on the Department of Landscape Architecture's website. Applicants are encouraged to familiarize themselves with the details of the application procedures and the application requirements. Applications will ONLY be considered for the track for which they have been submitted. Make certain you are applying to the correct track based on your background and credentials and the criteria detailed above.

**Application Dates**

Applications are to be completed and submitted prior to the deadline noted on the Department's website. Unless otherwise noted, international applications must be received by November 1st. Applications from within the US are to be received no later than February 1st. Early applications are encouraged.

**Application materials to be submitted online and/or to the Office of the Registrar**

Application materials include the online application form accompanied by official transcripts, Letters of Recommendation, GRE scores, and TOEFL scores (applicants with English as a second language) to Office of the Registrar: Admissions Section, Criser Hall, University of Florida, Gainesville, Florida 32611.

**Application Materials to be submitted directly to the Department**

In addition to the materials submitted to the registrar's office, applicants must also submit a letter of intention to the Department of Landscape Architecture (Graduate Program Assistant).

**Application Portfolio**

All applicants are encouraged to submit a portfolio of creative works.

Post professional degree applicants applying for either the Pre MLA Fall Start or MLA Advanced Graduate Study program are required to submit a portfolio that both exhibits creative work experience and shows evidence of acquired technical proficiencies in the practice of landscape architecture.

All portfolio must be digital. PDF is preferred.

**Application Status**

Applications will be processed once all material has been received and must be complete prior to the application deadline. Applicants will be contacted by the Program Assistant if their application is incomplete. Please respond quickly if you have been contacted to increase the chances of your application being considered in the current review period. Only completed applications will be processed for review.

Once the application has been processed for review, applicants will receive written notification of their application status, generally sometime in the middle of March. Please do not contact the department with inquiries of your application status prior to the end of March.
Latin American Studies Department

Director: C. D. Deere.
Graduate Coordinator: R. F. Brown.

Complete faculty listing by department: Follow this link.
The Center for Latin American Studies offers the following graduate programs:

- Latin American Studies
- Sustainable Development Practice

Linguistics Department

Chair: F. McLaughin
Graduate Coordinator: E. Potsdam

Complete faculty listing by department: Follow this link.
The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in:

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

Requirements for these degrees are given in the Graduate Degrees section of this catalog. For detailed information on the program, please visit the link below. For further information on the program, including financial aid, please visit http://lin.ufl.edu.

M.E. Rinker, Sr., School of Construction Management

Director: Robert Ries
Director of Master's Programs: Robert E. Minchin

Complete faculty listing: Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary doctoral program in design, construction, and planning. Areas of specialization in the program include architecture, construction management, interior design, landscape architecture, and urban and regional planning. Within the area of construction management, specialization options include sustainable construction, information systems, construction safety, affordable housing productivity, and human resource management. These specializations prepare students to assume college-level faculty positions and industry research positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115703.

The M.E. Rinker Sr. School offers courses leading to the degrees of Master of Science in Construction Management (thesis), Master of Construction Management (nonthesis), and Master of International Construction Management (nonthesis distance education program for experienced professionals). An individual plan of study is prepared for each student to insure that the student's goals are achieved within the broad policy guidelines of the Rinker School. Specialization may be in such areas as construction management, sustainable construction, information systems, construction safety, and construction law. Requirements for the M.B.C., M.S.B.C., M.I.C.M., and Ph.D. degrees are given in the General Information section of this catalog.

Master of Construction Management (M.C.M.) or Master of Science in Construction Management (M.S.C.M.): To be eligible for admission to the M.C.M. or M.S.C.M. programs, a student must hold a 4-year undergraduate degree in building construction or its equivalent in related fields. "Equivalent in related fields" should include studies in construction materials and methods, structures, and management. Students with deficiencies in these related fields may need longer residence for the master's degree; as they will be required to take specified basic courses provided for advanced courses. There is no foreign language requirement.

No more than credits of BCN 6971 may be used to satisfy the credit requirements for the M.S.C.M. degree without written permission of the Director of Master's Programs.

Master of International Construction Management (M.I.C.M.): This program prepares students to assume upper-level management responsibilities in a multinational company. To be eligible for admission to the M.I.C.M. program, a student must have:

- A 4-year undergraduate degree
- At least 5 years of meaningful, supervisor-level construction management experience
- Acceptable GRE scores (verbal and quantitative)
- A grade point average of 3.0 on a 4.0 scale
- Employer sponsorship
- International students must submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

No more 3 credits of ICM 6934 may be used to satisfy the credit requirements for the M.I.C.M. without written permission of the Director. All candidates are required to take ICM 6930. In addition to these research-oriented graduate credit hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses and special electives. All candidates are required to pass a comprehensive oral and/or written examination at the completion of the course work and their master's research report/project.

The M.E. Rinker Sr. School reserves the right to retain student work for purposes of record, exhibition, or instruction.

Research facilities: The Shinnberg Center for Housing Studies, operating within the School, researches the problems and possible solutions associated with developing and producing affordable housing. The Powell Center for Construction and the Environment conducts research on implementing sustainability in creating, operating, and constructing a built environment. The Fluor Program for Construction Safety researches and disseminates information on matters related to construction safety and health. The Center for Advanced Construction Information

Preparatory courses (see Undergraduate Catalog): LAA 2330, LAA 2350, LAA 2360, LAA 2370, LAA 3420, LAA 3350, LAA 3352, LAA 3421, LAA 3550, LAA 6716, and ORH 3513.
Modeling educates members of the AECO industry about new and emerging technologies in virtual design and construction.

**Combined program:** The School offers a combined bachelor's/master's degree program. Contact the Director of Master's Programs for information.

For more information, please see our website: [http://www.bcn.ufl.edu](http://www.bcn.ufl.edu).

### Management Department

**Warrington College of Business Administration**

**Chair:** Robert E. Thomas  
**Graduate Coordinator:** Amir Erez

Complete faculty listing: [Follow this link](http://warrington.ufl.edu/departments/mkt).

The Marketing Department at the University of Florida is a recognized leader in the discipline of marketing. For over a decade, our faculty has ranked as one of the most productive and influential in the field. Our faculty is known for conducting provocative, cutting-edge research that contributes both to the scientific understanding and practice of marketing. Our Ph.D. program has produced many leading researchers in the discipline. And the David F. Miller Center for Retailing Education and Research is known as one of the foremost centers for developing the science of retailing.

The Marketing Department offers graduate work leading to the Ph.D. degree in business administration, the M.S. degree in business administration, and a concentration in the Master of Business Administration (M.B.A.) program. Requirements for the M.B.A., M.S., and Ph.D. degrees are described in the **Graduate Degrees** section of this catalog.

For more information, please see the program pages below and our website: [http://warrington.ufl.edu/departments/mkt](http://warrington.ufl.edu/departments/mkt).

### Materials Science and Engineering Department

**Chair:** Joseph W. Alba  
**Graduate Coordinator:** Lyle A. Brenner

Complete faculty listing: [Follow this link](http://warrington.ufl.edu/departments/mkt).

The Department of Materials Science and Engineering offers the Master of Science and Doctor of Philosophy degrees in Materials Science & Engineering (MSE) and Nuclear Engineering (NE). Requirements for these degrees are described in the General Information section of this catalog.

Degrees in MSE include specific areas of research and study in biomaterials, ceramics, composites, computational materials science, electronic materials, metals, polymers, nanomaterials, and nuclear materials. Degrees in NE include specific areas of research and study in advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security.

**Nontraditional Degree Programs:** The Department offers combined bachelor/master's degree programs: MSE BS/MS, NE BS/MS, and students may also combine the MSE BS with the MS awarded through the Dept. of Biomedical Engineering (BMHE). The combined bachelor/master's program allows qualified students to earn both degrees in materials science and engineering with savings of a tangible number of credit hours. Qualified students are allowed to begin master's coursework in their junior years and double count specific graduate courses for both degrees. The master's degree may be completed within 2 to 3 semesters after completing the bachelor's degree. Program admission requirements are (1) satisfaction of Graduate School admission requirements prior to the beginning of the senior year, (2) an upper division GPA of at least 3.5 in MSE and 3.4 in NE, (3) for MSE, completion of a minimum of 18 credit hours of courses, (4) admission by the Department’s Graduate Admission Committee and approval by the College of Engineering and the Graduate School. For more information, contact the Department.

The J.D./M.S. in MSE (thesis/nonthesis) is a joint degree program culminating in both the Juris Doctor degree, awarded by the College of Law, and the Master of Science (thesis/nonthesis), awarded by the College of Engineering. Under this program, a student can earn both degrees in approximately 1 year less than it would take to attain both degrees if pursued consecutively.

Concurrent M.D./Ph.D. degrees are offered through a collaborative program between the College of Medicine and Materials Science and Engineering. For more information, please contact the Department.

To be eligible for regular admission to the graduate program within the Department, the student must hold a B.S. in an appropriate major. Because of the breadth of MSE graduate programs, students with degrees in materials, ceramics, metallurgy, other engineering, mathematics, or science areas (such as biology, chemistry, or physics) have found ample opportunities to pursue their research and training areas of interest.

The faculties of the Department of Materials Science and Engineering (MSE) of the University of Florida (UF) and the University of Roma Tor Vergata (URTV) have approved a cooperative degree program in Materials Science and Engineering culminating in a Doctor of Philosophy degree, awarded by both universities. Contact the Department for details.

### Mathematics Department

Follow this link for more information.
Chair: D. Cezar
Graduate Coordinator: J. A. Larson

Complete faculty listing: Follow this link.

The Department of Mathematics offers the degrees of Doctor of Philosophy, Master of Science and Master of Arts, and the Master of Arts in Teaching and Master of Science in Teaching, each with a major in mathematics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

Interdisciplinary Programs — The Department offers a co-major program in conjunction with the Statistics Department leading to the Doctor of Philosophy degree in mathematics and statistics. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Statistics, Industrial and Systems Engineering, and Finance, Insurance, and Real Estate Departments.

Combined Program — The Department has an accelerated bachelor’s/master’s program designed for superior undergraduate students who have the ability to pursue such a plan of study leading to the Master of Science or Master of Arts degree. The main feature of the program is that it is up to 12 semester hours of approved graduate level mathematics courses may be used as a dual credit for both the undergraduate and the graduate degree. All other requirements for both the bachelor’s degree and the master’s degree must be met. For admission requirements for this program, see the undergraduate coordinator.

There are opportunities for concentrated study in a number of specific areas of pure and applied mathematics at both the master’s and doctoral levels. The faculty directs studies and research in algebra, number theory, analysis, geometry, topology, logic, differential equations, dynamical systems, probability theory, numerical analysis, numerical optimization, approximation theory, combinatorial analysis, graph theory, computer applications, biomathematics, mathematical physics, inverse problems, and medical imaging. In addition to the requirements of the Graduate School, the minimum prerequisite for admission to the program of graduate studies in mathematics is the completion, with an average grade of B or better, of at least 24 credits of undergraduate mathematics, including a full year of calculus and three semesters of appropriate work beyond the calculus. The most appropriate courses for this purpose are advanced calculus, linear algebra and abstract algebra. Students lacking part of the requirements will be required to make up the deficiency early in their graduate work. Prerequisites to individual courses should be determined before registration by consultation with the instructor concerned. Some of the courses listed are offered only as needed. Since times of offering courses are estimated a year in advance, certain changes may be made if needs are known by the Department. The course MAA 5229, MAA 5290, MAS 5311, and MAS 5312 are required for all advanced degree programs in mathematics. The requirements for the master’s degree nonthesis option include a minimum of 32 semester hours of course work. Students pursuing the master’s degree in mathematics must pass two comprehensive written examinations, one in algebra and one in analysis. Students pursuing the master’s degree with a specialization in applied mathematics have two options: the examination option requires passage of the algebra and analysis examinations; the thesis option requires instead the preparation and oral defense of a thesis on original research conducted under the supervision of a faculty adviser. Students pursuing the Master of Arts in Teaching or the Master of Science in Teaching degree must prepare a teaching portfolio and pass an oral examination. Each of these programs normally requires two years for completion. The requirements for a doctoral degree include 36 hours of 6000-level course work in mathematics; no hours of teaching, colloquium, dissertation, or individual work will count toward this requirement. To become a candidate for the doctoral degree, the student must pass a comprehensive preliminary examination with written and oral components administered by the Department. The doctoral student must also pass a reading knowledge examination in one of the following foreign languages: French, German, or Russian. The dissertation is an important requirement for the doctoral degree in mathematics. The topic for the dissertation may be chosen from a number of areas of current research in pure and applied mathematics. Every graduate student is expected to attend the regular colloquium. Details concerning all requirements for graduate degrees in mathematics may be obtained by writing the Mathematics Department Graduate Selection Committee or consulting the Department website: http://www.math.ufl.edu

Mechanical and Aerospace Engineering Department

Chair: David W. Hahn
Graduate Coordinator: D. W. Mikolaitis

Complete faculty listing by department: Follow this link.

The Department of Mechanical and Aerospace Engineering offers the degrees of Master of Science (thesis or nonthesis), Master of Engineering (thesis or nonthesis), Engineer, and Doctor of Philosophy in aerospace engineering and mechanical engineering. Minimum requirements for these degrees are given in the General Information section of this catalog. Additional information can be found at http://www.mae.ufl.edu/graduate. Prospective students are expected to have strong backgrounds in engineering. For the first year of study, each student is generally required to take a minimum of three regular courses each semester. There are three areas of specialization available for graduate studies: dynamics, systems, and control; solid mechanics, design, and manufacturing; thermal science and fluid dynamics. Within a specialization there are unique opportunities to conduct analytical, experimental, and/or numerical study in a wide variety of challenging problems. The Department offers a combined bachelor’s/master’s degree program. Contact the graduate coordinator for information.

Medicinal Chemistry Department

College of Pharmacy

Chair: M. O. James.
Graduate Coordinator: H. Luzoch

Complete faculty listing by department: Follow this link.

The College of Pharmacy offers the Doctor of Philosophy degree in pharmaceutical sciences with a concentration in medicinal chemistry. Medicinal chemistry is a unique blend of the physical and biological sciences. The scope of the field is sufficiently broad to give students with many different science backgrounds a rewarding and challenging program of study. Areas of active research include organic synthesis of medicinal agents, metal chelate design, prodrugs and topical drug delivery, drug metabolism, molecular toxicology, molecular biology, combinatorial chemistry, neurochemistry, analytical chemistry, molecular modeling, natural products, and drug discovery. The applicant should have an undergraduate degree in pharmacy, chemistry, biology, or premedical sciences. A background in calculus and physical and organic chemistry is required. In addition to graduate medicinal chemistry courses in the College of Pharmacy, graduate courses in chemistry and biochemistry are required for the program. The College also offers the Master of Science in Pharmacy degree in pharmaceutical sciences (nonthesis option) with concentrations in both forensic drug chemistry and forensic serology and DNA in a distance learning format. Minimum requirements for the M.S.P. and Ph.D. degrees are described in the General Information section of this catalog. The Department participates in the interdisciplinary concentration in toxicology. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

Microbiology and Cell Science Department

Chair: E. Triplett.
Graduate Coordinator: Tony Romeo.

Complete faculty listing by department: Follow this link.

Graduate study is offered leading to the Master of Science and Doctor of Philosophy degrees in microbiology and cell science, with emphasis in one or more of the disciplines of biochemistry,
cell biology, and microbiology.

Requirements for these degrees are provided in the Graduate Degrees section of this catalog and also at the Department webpage: http://microcell.ufl.edu/.

Instruction and guidance are collaborative among faculty in the Colleges of Agricultural and Life Sciences, Liberal Arts and Sciences, and Medicine.

Research spans broad areas in the cellular and molecular aspects of bacterial, plant, and animal life functions: Areas of research include microbial biochemistry, biotechnology; biomass conversion; genetic and metabolic regulation; environmental microbiology; cell biology; molecular biology; molecular genetics; genomics and bioinformatics; immunology; virology; parasitology, host-pathogen interactions; cellular ultrastructure;

Prerequisites for admission to graduate study, in addition to those of the Graduate School, are a broad educational background including mathematics, physics, and chemistry through organic, analytical, and physical chemistry; basic courses in biology, botany, and/or zoology; and at least one course in microbiology and biochemistry. An undergraduate major in biochemistry, physical or chemical science, engineering, or general biology may be an acceptable alternative to a degree in microbiology or cell science. Receipt of an advanced degree requires detailed knowledge in microbiology, biochemistry, and chemistry; undergraduate deficiencies may necessitate additional course work prior to entry into the graduate program.

In addition, the Microbiology and Cell Science Department also offers a combined B.S./M.S. program that allows qualified students to earn both the Bachelor's and Master's degrees with 12 credit hours of jointly counted course work. This program is considered a "4/1" because students may be awarded both degrees within a five-year period. For further information on this program, follow this link: http://microcell.ufl.edu/graduate-program/combined-degree-program/.

### Molecular Genetics and Microbiology Department

Chair: H. V. Baker.  
Graduate Coordinator: A. S. Levin.

Complete faculty listing by department: Follow this link.

The Graduate Faculty of the Department of Molecular Genetics and Microbiology participate in the interdisciplinary program (IDP) in medical sciences, leading to the Doctor of Philosophy degree, with specialization in one of the six advanced concentration areas of the IDP (see Medical Sciences). Departmental areas of research associated with the IDP focus on topical problems in molecular genetics, viral genetics, and viral and bacterial pathogenesis. Faculty in the Department of Molecular Genetics and Microbiology also participate in the M.S. programs (see Medical Sciences). In addition to courses associated with the IDP, the Department of Molecular Genetics and Microbiology maintains the courses listed below.

**Biology:** This Master of Science program is for students seeking careers in the biomedical industry as research or managerial associate; students seeking careers as teachers or educators at any level, but primarily high school or junior college; or students seeking an in-depth understanding of modern biology and scientific research as an end in itself or in preparation for further graduate study. The foundation of the M.S. program is a basic understanding of molecular and cell biology and the performance of a high-quality research project, culminating in a thesis, under the direction of a skilled mentor, with supervision by a committee composed of members of the Graduate Faculty. Specialization may be in any of the fields of research being pursued at the College of Medicine including but not limited to molecular genetics, gene therapy, bacterial or viral pathogenesis, protein structure, toxicology, mammalian genetics, wound healing, and congenital eye diseases.

For more information contact the Master's Program Coordinator, Molecular Genetics and Microbiology, P.O. Box 100266, College of Medicine, Gainesville, FL 32610, Telephone (352)392-3314.

### Music Department

**College of the Arts**

Director: J. A. Duff.  
Graduate Coordinator: L. S. Odom.

Complete faculty listing by department: Follow this link.

The School of Music offers programs leading to the Master of Music degree in music and music education. Program concentrations in music include choral conducting, composition, instrumental conducting, musicology, ethnomusicology, music theory, performance, and sacred music. In addition, the School of Music offers the Doctor of Philosophy degree in music and in music education.

The Ph.D. program in music education emphasizes college music teaching. The Ph.D. program in music includes concentrations in:

- Music history and literature, with options in traditional musicology and ethnomusicology
- Composition, with options in acoustic and electroacoustic specialization

All Ph.D. students are encouraged to find opportunities to teach and lecture in their specializations; and with the assistance of their principal professors, to prepare papers, workshops, and clinics for presentation at professional conferences, in the public schools, and at colleges and universities. Students also are encouraged to publish their research in appropriate journals. Minimum requirements for the M.M. and Ph.D. degrees are given in the General Information section of this catalog. The week before classes begin, students must take placement examinations in music history and in music theory. Students wanting to study privately in a performance studio must be auditioned and accepted by the appropriate area faculty. Voice students must demonstrate appropriate skills in language and diction. All deficiencies must be remedied.

For more information, please see the program pages below and our website: http://www.arts.ufl.edu/welcome/music.

### Nuclear and Radiological Engineering Department

Chair: D. Hintenlang  
Graduate Coordinator: W. Bolch

Complete faculty listing Follow this link.

The Department offers the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy in nuclear engineering sciences with emphases in nuclear power engineering, medical physics, and health physics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The medical physics and health physics options are offered through interdepartmental programs in cooperation with the College of Medicine (see the Health Physics and Medical Physics description under Interdisciplinary Graduate Studies).

**Combined Program** — The Department also offers a B.S.N.E/M.S. degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of one semester. Qualified students may begin their master's program while seniors counting 12 hours of specified nuclear engineering sciences graduate courses for both the bachelor's and master's degree requirements. Seniors admitted to the combined program are eligible for teaching and research assistantships. Program admission requirements are (1) satisfaction of Graduate School admission requirements for a master's degree, (2) an upper-division (undergraduate) GPA of at least 3.6, and (3) completion of specified bachelor's degree requirements.
The graduate program has two major programs, Nuclear Engineering and Medical Physics. Specific areas of research and study in Nuclear Engineering include advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security. The Medical Physics program is a CAMPEP accredited program designed to meet the professional requirements for a career in clinical service or research and development. Areas of Medical Physics study and research include diagnostic medical imaging, radiation therapy, nuclear medicine imaging, and radiation dosimetry.

The requirement for admission to the graduate program in nuclear engineering sciences is a bachelor's degree in an approved program in engineering or in the sciences. Students applying to the Medical Physics program should have completed the equivalent of at least a minor in physics. If the student's background is considered deficient for the planned course of study, an articulation program of background courses will be required.

Depending on professional objectives, the student may select a non-thesis option for the MS degree and substitute 8 credits of graduate-level course work, of which at least 6 credits are in nuclear engineering sciences, including a 4-credit (minimum) special project, ENU 6936. Completion of 32 credits will meet the minimum requirements for the non-thesis MS degree.

Normally, the requirements for a master's degree can be completed in 12 months. Students in the medical physics option usually take 21 to 24 months to complete the master's degree, which requires 40-42 credit hours. For a master’s degree in health physics, a student must complete 42 hours of credit. If articulation work is required, it may take longer, depending upon the extent of the student's deficiency.

### Occupational Therapy Department

**Chair:** W. C. Mann  
**Graduate Coordinator:** C. A. Velozo, J.J. Foss  

Complete faculty listing by department: [Follow this link.](http://www.hp.ufl.edu)

The Department of Occupational Therapy offers graduate programs in occupational therapy leading to the Master of Health Science (M.H.S.) degree (on-campus nonthesis and thesis options and distance learning nonthesis option) and the entry-level Master of Occupational Therapy (M.O.T.) degree. Complete descriptions of the requirements for these degrees are provided in the [General Information](http://www.hp.ufl.edu) section of this catalog.

**Master of Health Science**: This program is designed for students who have earned an undergraduate degree in Occupational therapy. The thesis option requires four semesters of course work and a formal research thesis, whereas the nonthesis option requires three semesters of course work and a research project. The program emphasizes research and advanced theories related to occupational therapy practice. Preparation for teaching, administrative, and other occupational therapy roles is supplemented through elective courses. A coherent series of elective courses related to occupational therapy must be approved by the supervisory committee chairperson before the second semester of work.

In addition to the requirements of the Graduate School, admission requires the candidate to have completed a curriculum in occupational therapy accredited by the American Occupational Therapy Association or by the World Federation of Occupational Therapists.

The distance learning degree option for the Master of Health Science is specifically intended to meet the needs of the working professional. The nonthesis program is designed to improve the knowledge and skills of working occupational therapists for practice in a complex and challenging health care system. It provides preparation for new practice areas, leadership roles, and independent practice and is delivered through the Internet. In addition to the departmental requirements listed above, applicants to the distance learning program must have basic personal computer competency and access to a computer that meets minimal configuration requirements.

Additional information about the Master of Health Science is available at [http://www.hp.ufl.edu](http://www.hp.ufl.edu) or [http://gradschool.rgp.ufl.edu](http://gradschool.rgp.ufl.edu) or by telephone at (352)273-6817. For distance learning, see [http://otdlm.phhp.ufl.edu/](http://otdlm.phhp.ufl.edu/) or call toll free (866)878-3297.

**Master of Occupational Therapy**: This entry-level degree program is designed for students who do not have an undergraduate degree in occupational therapy. The program provides students with a holistic perspective, including an understanding of the philosophical and theoretical bases for practice in the current health care environment. The M.O.T. program provides a strong background in theory, assessment, and therapeutic interventions. Before their professional preparation in the M.O.T. program, students receive a liberal education in their preprofessional baccalaureate studies, including several courses specifically focused for students planning to enter the M.O.T. program. Students may enroll in courses in the Bachelor of Health Science degree program at the bachelor's level, or they may complete these courses on a postbaccalaureate level before starting the M.O.T. program. Students are only admitted into the M.O.T. program in summer term and graduate at the end of the fall term after 1.33 years of full-time study (5 semesters) and 58 credits.

Admission requirements include completion of an undergraduate degree and the prerequisite course work. Three letters of reference and a letter of application are required by the Department. Additional information is available at [http://www.phhp.ufl.edu/ot/](http://www.phhp.ufl.edu/ot/) and [http://gradschool.rgp.ufl.edu](http://gradschool.rgp.ufl.edu) or by telephone at (352)273-6817.

This program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association. The address for ACOTE is 4720 Montgomery Lane, Box 31220, Bethesda, MD, 20814-1220. The phone number is (301) 652-2632. Graduates of the program are eligible to sit for the national certification exam administered by the National Board for Certification in Occupational Therapy (NBCOT). The website address of NBCOT is [www.nbcot.org](http://www.nbcot.org).

### Pharmaceutical Outcomes and Policy Department

**Chair:** R. Segal  
**Graduate Coordinator:** A. Winterstein  

Complete faculty listing by department: [Follow this link.](http://www.hp.ufl.edu)

The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree. Complete descriptions of the requirements for these degrees are provided in the [Graduate Degrees](http://www.hp.ufl.edu) section of this catalog.

### Pharmaceutics Department

**Chair:** H. C. Derendorf  
**Graduate Coordinator:** A. Palmieri III  

Complete faculty listing by department: [Follow this link.](http://www.hp.ufl.edu)

The Department of Pharmaceutics offers the Doctor of Philosophy in pharmaceutical sciences. Pharmaceutics is the scientific endeavor concerned with the design, formulation, evaluation, and use of drug delivery systems. A foundation in physical chemistry, chemistry, mathematics, and in the life sciences, is necessary. Its domain extends from studies of the physiochemical properties of drugs and related molecules to investigations of the mechanisms of physiological processes affecting drug delivery and therapeutic effectiveness. The Department's general focus involves studying the design and evaluation of traditional and novel dosage forms for delivering drug molecules and macromolecules. The design involves physical chemical studies and development of analytical techniques involving spectroscopy and chromatography. Evaluation includes development of sensitive analytical techniques for the drug in biological fluids and subsequent biopharmaceutical and clinical pharmacokinetic studies.
Pharmacodynamics Department

Chair: M. Keller-Wood.
Interim Graduate Coordinator: Joanna Peris

Complete faculty listing by department: Follow this link.

The Department of Pharmacodynamics offers the Doctor of Philosophy in the pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the interdisciplinary toxicology concentration (see Interdisciplinary Graduate Studies in this catalog). Pharmacodynamics is an integrated field of study involving pharmacology, physiology, and toxicology in a holistic approach to drug action in living systems. The Department focuses on neuroendocrinology, cardiovascular pharmacology, and neuropharmacology with diverse research interests in aging, hypertension, reproduction, glaucoma, neurotoxicity, and environmental physiology.

An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.

Pharmacotherapy and Translational Research Department

For a full list of faculty, please follow this link.

Description to be added

Philosophy Department

Chair: G. Witmer.
Graduate Coordinator: C. Liu.

Complete faculty listing by department: Follow this link.

The Department offers the Master of Arts and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog.

Admission to the program requires a bachelor’s degree in philosophy or sufficient course work in philosophy, as determined by the department. Applicants are evaluated on the basis of academic achievement, GRE scores, three letters of recommendation, a statement of purpose, and a sample essay in philosophy. Students may be admitted as for a terminal M.A. degree or for the Ph.D. Program.

The M.A. degree requires two years (36 hours) of course work. All graduate students take foundational courses in their first four semesters: the graduate Proseminar (PHI 5935), Graduate Logic (PHI 5135), a course in Ancient Philosophy (PHP 5005 or PHP 5015), a course in Modern Philosophy (PHI 5405 or PHI 5406), and either Foundations of Analytic Philosophy (PHP 5785) or Epistemology (PHI 5365).

The Ph.D. requires 90 credit hours, which may include 36 used as credit for the M.A. In addition to the foundational courses required for the M.A., the Ph.D. requires Ethical Theory (PHI 5665) and both of PHP 5785 and PHI 5365. It also requires six courses at the advanced 6000-level, 3 proposal research hours and 12 doctoral research hours, and of course the successful completion and defense of a dissertation.

Further information about the department's programs and admissions can be obtained on the department's website web.phil.ufl.edu or by contacting the Graduate Coordinator, 330 Griffin-Floyd Hall, (352)392-2064 or gradcoord@phil.ufl.edu.

Physics Department

College of Liberal Arts and Sciences

Chair: Kevin Ingersent
Graduate Coordinator: Guido Mueller

Complete faculty listing: Follow this link.

The Department of Physics offers the Master of Science (thesis or nonthesis) and the Doctor of Philosophy degrees. The nonthesis Master of Science in Teaching is also offered.

Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Areas of specialization for graduate research include astrophysics and cosmology, atomic and molecular physics, biological physics, chemical physics, condensed matter physics (theory and experiment), nuclear physics, particle physics (theory and experiment), statistical physics, and low temperature physics.

Special interdisciplinary research programs include the Institute for Fundamental Theory (carried out jointly with the Department of Mathematics), the Institute for Theoretical and Computational Studies in Molecular and Materials Science (carried out jointly with the Department of Chemistry), the Institute of High Energy and Particle Astrophysics, and Microfabritech (jointly with the College of Engineering). A curriculum is offered by the Center for Chemical Physics for students interested in research related to chemistry or chemical engineering. The Center for Condensed Matter Sciences provides opportunities for investigations in a diverse range of subjects and fields, including the Microkelvin Research Laboratory. The University of Florida operates the National High Magnetic Field Laboratory jointly with Florida State University and Los Alamos National Laboratory.

The core curriculum is designed to provide a thorough foundation for all physics graduate students. It consists of PHY 6246, PHY 6346, PHY 6347, PHY 6356, PHY 6645, and PHY 6646. Doctoral students must achieve a 3.30 GPA in the core curriculum. All students must pass a preliminary examination at the undergraduate level. All degree candidates are required, as part of their graduate education, to participate continuously in the research and/or teaching programs of the Department.

For more information, please see the program page below, and visit our website http://www.phys.ufl.edu.

Plant Molecular and Cellular Biology Department

College of Agricultural and Life Sciences
College of Liberal Arts and Sciences
College of Medicine

Complete faculty listing by department: Follow this link.
Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology within the colleges of Agriculture and Life Sciences, Medicine, and Liberal Arts and Sciences.

**Plant Molecular and Cellular Biology Department**

College of Agricultural and Life Sciences
College of Liberal Arts and Sciences
College of Medicine

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology within the colleges of Agriculture and Life Sciences, Medicine, and Liberal Arts and Sciences.

**Plant Pathology Department**

Chair: R. Loria
Graduate Coordinators: J. Jones

Complete faculty listing by department: [Follow this link](#).

The Department of Plant Pathology offers graduate studies leading to the Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees. The Department also participates in the Doctor of Plant Medicine interdisciplinary professional degree.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

**Political Science Department**

Chair: Ido Oren
Graduate Coordinator: Daniel Smith

Complete faculty listing: [Follow this link](#).

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science–international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information, please contact the Political Science Department or follow the hyperlinks below to more information about the specific programs offered.

**Psychology Department**

College of Liberal Arts and Sciences

Chair: Lise Abrams
Graduate Coordinator: Julia A. Graber

Complete faculty listing by department: [Follow this link](#).

The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees section of this catalog. Students are not accepted for a terminal master's degree.

For more information, please see the program page below and our website: [http://www.psych.ufl.edu](http://www.psych.ufl.edu).

**Religion Department**

Chair: Manuel A. Vasquez
Graduate Coordinator: David G. Hackett

Complete faculty listing by department: [Follow this link](#).

The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asia
- Religion and nature.

Minimum requirements for these degrees are given in the General Information section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religions and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at [http://religion.ufl.edu/graduate-studies/](http://religion.ufl.edu/graduate-studies/) under "Graduate Program." In special instances, and with the agreement of the supervisory committee and two sponsoring faculty members, master's degree students may choose an area outside the three specialty fields.

In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest

- Three references from persons competent to evaluate the applicant's potential for graduate work
- An essay of 3 to 5 double-spaced, typewritten pages identifying the applicant's goals and particular interests pertinent to the three available specialty fields (this essay is extremely important and applicants should attend to it carefully)
- A writing sample.

Beyond these requirements, applicants need to show clear evidence of solid preparation before admission. This usually includes formal study of the primary language in the specialty field. Acceptable scores on the GRE General Test are required. In addition to evidence of preparation and academic promise, the Department gives careful consideration to the fit between an applicant's central scholarly interests and the resources the Department and University have to offer.

**Master of Arts:** The M.A. degree provides a broad background in the study of religious traditions, theoretical orientations in the discipline, and an initial concentration in one of the three specialty fields. Course work culminates in a thesis and oral examination on the thesis and course work.

**Total credits:** Thirty credit hours are required. These include Method and Theory I and II, the core course(s) of the major field (or equivalent for those not in one of the three specialty fields), and 6 hours of thesis research credits. The additional hours shall consist of further courses in the specialty field, other graduate seminars, and up to 6 hours of research language study.

**Language study:** All M.A. students are required to demonstrate competency in a scholarly language other than English before beginning the thesis. Most languages are acceptable, though students should consult the individual field requirements. The chosen language must be approved by the student's mentor and the graduate coordinator.

**Thesis:** Each student, guided by a supervisory committee, will prepare a Master of Arts thesis, acceptable to the Department of Religion and the Graduate School, and undergo an oral examination.

**Promotion to doctoral status:** The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish to begin. An advisor and decision will be made by the field faculty and the graduate committee.

**Doctor of Philosophy:** The Ph.D. program trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religion master's degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master's degree with additional religion course work. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

**Course requirements:** The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours credited toward the Ph.D. is at the discretion of department faculty. A minimum of 45 hours is devoted to course work at the doctoral level. The specific distribution of course work depends on the specialization but will include intensive work in the major area of specialization, 6 hours of method and theory (if not taken at the M.A. level) and 15 hours devoted to dissertation writing and research.

**Language requirements:** All doctoral students must demonstrate proficiency in at least one and in many cases two languages other than English. The chosen language(s) as well as how and when the student's competence will be judged must be approved by the student's supervisory committee chair. Frequently language competence is documented by 1) taking an appropriate course or courses in the language with a grade of "B" or better, or 2) passing a language exam (usually administered by a department member or a language department at the University). Basic course work for scholarly languages will not count toward the required 90 credit hours. However, students studying a scholarly language connected to their research needs (above and beyond basic competence) can receive 6 (or more) credit hours for each advanced course toward the required 90 total credit hours, with approval of the student's supervisory committee chair.

**Qualifying examinations:** Qualifying examinations form a bridge between course work and dissertation research. Normally, students will take qualifying examinations during their third year in residence. The precise areas of questioning and the reading list are decided by the supervisory committee in consultation with the student, well in advance of the examinations, but no later than the beginning of the term in which the student intends to take the qualifying examinations.

**Dissertation proposal:** Each doctoral candidate submits a formal dissertation proposal to the candidate's supervisory committee chair at least 3 weeks before the end of the semester after the qualifying examination.

**Admission to candidacy:** On successfully completing the qualifying examination and the dissertation proposal, and all other course and language requirements, and with the approval of the supervisory committee, students make formal application to the Department and Graduate School for admission to Ph.D. candidacy.

**Dissertation and its defense:** The final years of the program are devoted to dissertation research and writing. The student is expected to present the completed dissertation and defend it at a public oral defense conducted by the supervisory committee.

**Mentoring:** Each student is assigned a faculty mentor on admission to the program, based on expressions of faculty interest and the student's intended area of concentration. The mentor and graduate coordinator answer questions and provide support for the student in choosing courses and planning a program. By the end of the second semester, all master's degree students must designate their supervisory committee chair and one additional department committee member. By the end of the second semester, all doctoral students must designate their committee chair. By no later than the end of the fourth semester of study, all doctoral students must designate a four-member supervisory committee including the chair and one member from outside the department. For details about the programs listed above, visit [http://religion.ufl.edu/graduate-studies](http://religion.ufl.edu/graduate-studies).

**School of Architecture**

**Director:** M. Gold.

**Graduate Coordinator:** N. M. Clark.

Complete faculty listing [Follow this link](#).

**Doctor of Philosophy:** The college offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization in this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, Box 115701.

**Master of Architecture:** The School of Architecture offers graduate work leading to the first professional degree, Master of Architecture. During graduate studies, each student has the opportunity to focus on one or more areas, including design, history and theory, urban design, preservation, structures, and technology. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design. The student's overall college experience, both undergraduate and graduate programs, is intended to be a complete unit of professional education leading to practice in architecture or related fields.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs must consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Florida School of Architecture offers the following NAAB-accredited degree programs:

- **Master of Architecture** (pre-professional degree + 52 graduate credits)
- **Master of Architecture** (professional degree + 30 graduate credits)
- **Master of Architecture** (non-pre-professional degree...
School of Architecture

Master of Science in Architectural Studies: The M.S.A.S. is a nonprofessional degree for advanced investigations in specialized areas of architectural history, architectural pedagogy, theory, technology, design, preservation, or practice. Students with a bachelor's degree in any discipline from an accredited university are eligible to apply to this program. The proposed area of focus should be precisely defined in the application. This is a 3- to 4-semester program (32 hours minimum) that includes a thesis. (No more than 6 hours of ARC 6971 may be counted in the minimum credit hours for the degree.) Interdisciplinary study is encouraged. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design.

Most states require individuals intending to become architects to hold an accredited degree. The National Architectural Accrediting Board acknowledges two types of degrees: the Bachelor of Architecture (minimum 5 years of study) and the Master of Architecture (minimum 3 years of study after an unrelated bachelor's degree, or 2 years after a related pre-professional bachelor's degree). These professional degrees educate those who aspire to registration and licensure to practice as architects.

Student work: The College may retain student work for the purpose of record, exhibition, or instruction.

School of Art and Art History

College of the Arts

Director: Richard C. Heipp
Graduate Coordinator: Patrick Grigsby

Applications: All applications for fall term graduate admission (including official transcripts, GRE scores, and TOEFL scores, if necessary) must be received by the Office of the Registrar by January 15. In addition to satisfying the University requirements for admission, applicants are required to submit to the Graduate Program Assistant, School of Architecture, 231 ARCH, Box 115702, the following: a portfolio of their creative work; a scholarly statement of intent and objectives; and three letters of recommendation. This material must be received by January 15 to be considered for admission in the next fall term. Students may apply after the January 15 deadline but will only be considered if spaces become available. (Updates of portfolios are accepted after January 15; however, applications will not be considered until they are complete.)

The School reserves the right to retain student work for purposes of record, exhibition, or instruction. Field trips are required of all students; students should plan to have adequate funds available. It may be necessary to assess studio fees to defray costs of base maps and other generally used materials.

School of Forest Resources and Conservation

College of Agricultural and Life Sciences

Director: T. L. White
Graduate Coordinator: T. V. Stein

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics, policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a variety of specific areas. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.
Joint program: Students may simultaneously earn a juris doctorate from the College of Law and a graduate degree (M.F.R.C., M.S., or Ph.D.) in Forest Resources and Conservation.

Combined programs: The School offers a combined bachelor's/master's degree program, which allows qualified students to earn both a bachelor's degree and a master's degree with a savings of 1 semester. Ph.D. students may pursue a co-major with the Department of Statistics (see below).

Concentration in geomatics: Students completing 15 or more credits with an SIR designation, as part of an SFRC graduate degree, may earn the concentration in geomatics. Geomatics is the collection, analysis, and management of spatial information and includes such fields as surveying, mapping, land tenure, cadastral systems, geographic information systems, and remote sensing.

Concentration in ecological restoration: This concentration is available to M.S. non-thesis students. To earn this concentration a student must complete Ecosystem Restoration Principles and Practice and four of the following courses: Ecological Distribution and Management of Invasive Plants, Ecology and Restoration of Invasive Ecosystems, Watershed Restoration and Management, Natural Resource Policy and Administration, and Agroforestry in the Southeastern U.S. Ecological restoration seeks to return ecosystems to a close approximation of condition before a disturbance.

Statistics co-major: Ph.D. students with the School may elect the co-major offered jointly with the Department of Statistics. Students focusing on forest genetics, tree improvement, and other statistics-intensive aspects of natural resource management are potential candidates for this option.

Certificates: The School administers the Graduate Certificate in Agroforestry, and SFRC students regularly earn certificates in Geographic Information Systems and in Environmental Education and Communication. Requirements are described under Interdisciplinary Graduate Certificates and Concentrations in this catalog.

For additional information, please visit the School's web page at [http://sfrc.ufl.edu](http://sfrc.ufl.edu).

For details on what terms courses will be offered, please visit [http://sfrc.ufl.edu/gradcourses.html](http://sfrc.ufl.edu/gradcourses.html).

School of Natural Resources and Environment

Graduate coordinator: T. Frazier

Complete faculty listing by department: [Follow this link](http://www.ufl.edu/nres/graduate-faculty-listing)

The University of Florida School of Natural Resources and Environment offers interdisciplinary coursework in the basic and applied science of ecology, the related social sciences, and sustainability, leading to M.S. and Ph.D. degrees. Choose from about 450 courses, 280 faculty advisors, and 44 participating departments. Research areas of ecology graduate students range across natural resource ecology, environmental policy and management, and sustainable development.

Environmental problems are fundamentally human problems and should be understood in terms of human motivations and actions in a biophysical context. Their solution requires holistic thinking about dynamic ecological systems and the social, economic, and political forces driving human action. To this end, the goal of the Interdisciplinary Ecology graduate program is to provide advanced training in ecosystem thinking and the main theories and methodologies of the biophysical and social sciences to foster integrative approaches to complex real-world problems. Interdisciplinary Ecology students are intensely interested in the sustainability problem, and they welcome the challenge of addressing it through more than one traditional discipline.

School of Teaching and Learning

Director: E. Bondy
Graduate Coordinator: S. G. Terzian

Complete faculty listing by department: [Follow this link](http://www.ufl.edu/teachingandlearning/grad_faculty_list.html)

The School of Teaching and Learning offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis or project in lieu of thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees in curriculum and instruction.

Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 10 areas of specialization: curriculum, teaching, and teacher education; educational technology; elementary education; mathematics education; language and literacy education (including children's literature, English education, ESOL, bilingual education, language arts, and reading education); science and environmental education; social foundations of education; social studies education; and teacher leadership for school improvement.

The nationally recognized Proteach graduate program leads to the M.Ed. degree and state certification as a classroom teacher. Unified Elementary ProtEach admits undergraduates who complete the five-year program with a master’s degree. Secondary ProtEach English, Science, Social Studies, and Math teachers who have completed a bachelor’s degree in the discipline they will teach. Prospective elementary teachers who already hold a bachelor’s degree in a non-education field may want to consider the School’s SITE program (Site-based Implementation of Teacher Education), which leads to the M.Ed. degree in curriculum and instruction. Students may apply to the state for alternative certification.

Beyond the Graduate School and College of Education admission requirements, students should have academic preparation and teaching experience appropriate to the program being pursued. Students having deficiencies in their preparation will be required to follow a program to remove such deficiencies. A limited amount of support is available for graduate studies through fellowships, scholarships, research assistantships, and teaching assistantships.

School of Theatre and Dance

Director: J. Dickey
Graduate Performance Program Coordinator: Ralf Remshardt
Graduate Design Program Coordinator: S. Kaye

Complete faculty listing by department: [Follow this link](http://www.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp)

The graduate program offered by the School of Theatre and Dance leads to the degree of Master of Fine Arts in Theatre. Minimum requirements for this degree are given in the General Information section of this catalog.

The M.F.A. degree prepares students for professional entry in acting production, or teaching. Placement in the M.F.A. program is determined by audition/portfolio review, academic credentials, and personal interview. Candidates for admission should have adequate training in theatre. Deficiencies may be corrected before beginning graduate study.

The program emphasizes the study and practice of theatre as an art and discipline. Students of acting and design study concepts of theatre together while working in their areas of specialization. Focus is on the collaboration and synthesis of theatre artistry. Each incoming class is composed of approximately 12 to 18 students in acting and all design areas.

The student's artistic and academic progress will be reviewed at the end of each semester. The School of Theatre Handbook gives details on the form and focus of each review. This information is online at [http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp](http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp).
During the final year of study, each student must successfully complete the comprehensive examination and oral defense. The project in lieu of thesis includes research, analysis, rehearsal process, and evaluation. Development and execution of the project includes public performance (acting or design). The written document and oral defense of the project which follow must demonstrate the ability to communicate the creative process.

Graduate acting students audition for all departmental productions.

**Sociology and Criminology & Law Department**

Chair: Barbara Zsenbek
Graduate Coordinator: Barbara Zsenbek

Complete faculty listing by department: [Follow this link](http://www.spanishandportuguese.ufl.edu/spanish/graduate.html).

The Department of Sociology and Criminology & Law offers several programs of graduate study leading to the Ph.D. in Sociology, the Ph.D. in Criminology, Law and Society, the MA in Sociology, the MA in Criminology, Law and Society, and a Joint MA in Criminology/ID degree. The department also partners with the School of Natural Resources and Environment Department to offer the Ph.D. or MA in Interdisciplinary Ecology. Advanced undergraduate majors may complete a combined BA/MA degree in Sociology or a combined BA/MA degree in Criminology, Law and Society.

**Soil and Water Science Department**

Chair: K. Ramesh Raddy
Graduate Coordinator: Max Teplitski

Complete faculty listing by department: [Follow this link](http://www.spanishandportuguese.ufl.edu/spanish/graduate.html).

The Department of Soil and Water Science offers a Master of Science degree (thesis or professional non-thesis option) and a Doctor of Philosophy degree in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The Department also offers a Master of Science degree (thesis or professional option) specialization in environmental science via distance education for place bound students ([http://soils.ifas.ufl.edu/distancedistance](http://soils.ifas.ufl.edu/distancedistance)). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Soil and Water are vital resources in urban, agricultural, and natural ecosystems. The Soil and Water Science Department (SWSD) provides highly visible leadership in teaching, research, and extension/outreach programs as related to improving the productivity of agriculture with environmentally sound management practices, improving water quality, and protection and conservation of natural resources. Our department is one of the few in the nation that offers a comprehensive research and educational programs (molecular to landscape level) involving terrestrial, wetlands and aquatic ecosystems of the landscape. In addition to traditional on-campus educational programs, we use innovative e-technologies to offer educational programs to place-bound students. Our graduates and postdoctoral fellows are well placed at universities, state and federal agencies, and private industry.

The SWSD programs are designed to meet the changing needs of our clientele at state, national and international levels. To meet new challenges and explore new opportunities, the SWSD's research, teaching, and extension programs are focused in five areas, with broader implication to water quality, carbon sequestration, greenhouse gases, and climate change:

- Nutrient, Pesticide, and Waste Management
- Soil, Water, and Aquifer Remediation
- Carbon Dynamics and Ecosystem Services
- Landscape Analysis and Modeling
- Wetlands and Aquatic Ecosystems

The Department offers graduate level certificates in Biodegradation and Remediation, Sustainable Land Resource and Nutrient Management, Soil Ecosystem Services, and Wetland and Water Resource Management for both on-campus students and via distance education for place bound students ([http://soils.ifas.ufl.edu/academics/degree-certificates.shtml](http://soils.ifas.ufl.edu/academics/degree-certificates.shtml)).

An additional option offered by the Department is a combined bachelor's/master's degree program that permits a B.S in Soil and Water Science or Interdisciplinary Studies – Environmental Management in Agriculture and Natural Resources and M.S. Degree to be completed in five years. Contact the graduate coordinator for more information.

For more information, please see the program page below and our website: [http://soils.ifas.ufl.edu](http://soils.ifas.ufl.edu).

**Spanish and Portuguese Studies Department**

Chair: G. Lord
Graduate Coordinator: L. Álvarez Castro

Complete faculty listing by department: [Follow this link](http://www.spanishandportuguese.ufl.edu/spanish/graduate.html).

The Department of Spanish and Portuguese Studies offers a Master of Arts degree (M.A.) in Spanish (thesis and non-thesis options) and a Doctor of Philosophy degree (Ph.D.) in Romance Languages and Literatures, with a concentration in Spanish. Descriptions of the minimum requirements for both degrees are provided in the General Information section of this catalog. For specific information about the program, please visit the graduate section of the departmental webpage:

[http://www.spanishandportuguese.ufl.edu/spanish/graduate.html](http://www.spanishandportuguese.ufl.edu/spanish/graduate.html).

Candidates for graduate degrees (both M.A. and Ph.D.) in Spanish can choose between two specializations—literature/culture or linguistics. In conjunction with their master’s or doctoral work, students may also earn a Certificate in Latin American Studies. Though a graduate degree is not offered in Portuguese, extensive course offerings at the graduate level permit students to develop a strong specialization in Portuguese language and Luso-Brazilian literature, film and culture.

The main prerequisite for admission to the M.A. program is an undergraduate major in Spanish, ideally including advanced courses in the proposed area of specialization. Applicants for the Ph.D. should hold an M.A. or equivalent degree in Spanish. At the discretion of the Graduate Studies Committee, candidates from related fields of study (History, Sociology, …) may be offered a conditional admission into the Ph.D. program pending the passing of the M.A. Comprehensive Examination within the first year of study.

All M.A. and Ph.D. students in Spanish who are appointed as teaching assistants must take Romance Language Teaching Methods (FOL / FOL 6943). Besides, all M.A. and Ph.D. students specializing in literature and culture must take Introduction to Graduate Study and Research ([SPW 6806](http://soils.ifas.ufl.edu)). Other requirements vary with degree and specialization. For details, consult the graduate section of the departmental webpage (see above).
The Department is able to offer most students a teaching assistantship that provides a maintenance stipend and includes a tuition waiver. Contingent on positive performance in teaching and graduate work, M.A. students are guaranteed four semesters of support, and Ph.D. students are guaranteed eight semesters of support beyond the M.A. In addition, there are several fellowships, supplements and stipends for which students may apply, and summer teaching may be available.

Prospective students are encouraged to review the departmental webpage in order to familiarize themselves with the program and the application process. Only those applications including all required materials and submitted by the advertised deadlines will be considered. For any questions about the program or how to apply, please contact the graduate coordinator:

lacastro@ufl.edu

Highly qualified UF undergraduate students majoring in Spanish may apply for a combined B.A./M.A. program in Spanish that allows up to 12 graduate credits to be counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details.

Special Education, School Psychology and Early Childhood Studies Department

Director: Jean Crockett

Complete faculty listing by department: Follow this link.

The School of Special Education, School Psychology, and Early Childhood Studies offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 3 areas of specialization: Special Education; School Psychology; and Early Childhood Studies. Programs are accredited by the Florida Department of Education and approved by the National Council for Accreditation of Teacher Education (NCATE). The School Psychology program is approved by the NCATE and the National Association of School Psychologists (NASP). The Ph.D. program in School Psychology is accredited by the American Psychological Association (APA).

Speech, Language and Hearing Sciences Department

Chair: Scott K. Griffiths
Graduate Coordinators: Kenneth J. Logan and Alice Holmes

Complete faculty listing by department: Follow this link.

Graduate programs in the Department lead to Master of Arts and Doctor of Philosophy degrees in Communication Sciences and Disorders and to the Doctor of Audiology degree. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate specializations and programs in speech-language pathology and audiology are accredited by the Council on Academic Accreditation/American Speech-Language-Hearing Association.

The Doctor of Audiology (Au.D.) Program in the Department of Speech, Language, and Hearing Sciences is a four-year graduate degree. Graduate students take course work in theoretical and applied audiology sciences and research. There are no specific undergraduate courses required for admission to the Au.D. degree program, although applicants with a strong science background are encouraged to apply. Graduates of this program are eligible for the Certificate of Clinical Competence in Audiology (CCC-A) administered by the American Speech-Language-Hearing Association, Board Certification in Audiology administered by the American Academy of Audiology, and for state licensure in audiology. For more information, contact Alice Holmes, Ph.D. (aholmes@ufl.edu).

The Ph.D. Program in Communication Sciences and Disorders provides a state-of-the-art education in research practices in speech-language pathology and audiology, with a strong interdisciplinary focus. Our goal is to prepare the next generation of researchers who are specialized in basic and applied science that relates to a range of speech, language, hearing, and swallowing functions. The program is designed to develop researchers who are skilled at independently designing and conducting original research that adds to the body of knowledge in the field. Students are individually mentored and pursue individually designed programs of study tailored to their interests and needs, which incorporate training in appropriate adjacent fields such as engineering, dentistry, gerontology, linguistics, psychology, medicine and special education. For more information, contact Lori Altman, Ph.D. (laltman@ufl.edu).

The Master of Arts (M.A.) Program offers comprehensive academic training and clinical experience for students who are interested in a career in speech-language pathology. The five-semester program culminates in the completion of either a clinical externship or a Master's thesis, and it provides graduates with a solid foundation for obtaining employment in a variety of work settings. Students have the opportunity to complete clinical practica at sites within the University of Florida's Health Science Center and at other medical, rehabilitative, and educational facilities on or near the campus. These sites allow students to gain experience with providing clinical services to a range of patient populations.

Applicants to the Master's program must demonstrate successful completion of pre-requisite coursework in both normal bases of communication and introductory concepts in communication disorders. Additional information about these pre-requisites is available on the Department website. Graduates of the program are eligible for the Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP) from the American Speech-Language-Hearing Association as well as state licensure in speech-language pathology. For more information, contact Kenneth J. Logan, Ph.D. (klogan@ufl.edu).

The Department of Speech, Language, and Hearing Sciences is committed to providing its students with a high-quality educational experience that will prepare them for rewarding employment in the areas of speech-language pathology and audiology, as well as an eagerness for lifelong learning and professional development. The department strives to enroll a diverse group of students who possess both high ethical standards and strong academic skills. The application deadlines are January 15 for fall admission to the Ph.D. program, and February 1 for fall admission to the Master's and Au.D. programs.

For more information, please see the program pages below and our website: http://slhs.phhp.ufl.edu.

Statistics Department

Chair: M. J. Daniels
Graduate Coordinator: J. P. Hobert

Complete faculty listing Follow this link.

Graduate programs are available leading to Master of Science in Statistics, Master of Statistics, and Doctor of Philosophy degrees. Minimum requirements for these degrees are described in the General Information section of this catalog.

Both master's programs usually require 2 years of course work including material covered in STA 6208, 6209, STA 6326, STA 6327, STA 6246, and STA 6329. In addition to earning a "Ph.D. pass" on the first-year evaluation, requirements for the Ph.D. degree include STA 6466, 6467, STA 7249, and STA 7346.
**Interdisciplinary programs:** The Department offers a co-major program in conjunction with the Fisher School of Accounting leading to the Doctor of Philosophy degree in statistics and business administration accounting. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Departments of Mathematics, Industrial and Systems Engineering and Finance, Insurance, and Real Estate. For information on these programs, consult the departmental graduate coordinator.

**Combined program:** The Department offers a bachelor's/master's degree program. Contact the graduate coordinator for information.

**Taxation Department**

Chair and Graduate Coordinator: M. K. Frid.

Complete faculty listing by department: [Follow this link.](#)

Graduate study in the field of taxation leading to the Master of Laws in Taxation degree or to the Master of Laws in International Tax degree is available in the College of Law.

Applicants for admission to the Graduate School for these degrees must hold a law degree from an accredited law school or in the case of international students, from a recognized foreign university but need not submit scores on the Graduate Record Examination. For further information concerning admission consult the [Graduate Tax Program Catalog](#), or write the Tax Office, 320 Holland Law Center.

**Tourism, Recreation, and Sport Management Department**

College of Health and Human Performance

Chair: Michael Sagas.
Graduate Coordinator: Stephen Holland.

Complete faculty listing: [Follow this link.](#)

The degree Master of Science is offered by the Department of Tourism, Recreation, and Sport Management with programs in sport management and in recreation, parks, and tourism. Both programs offer thesis and non-thesis formats. The Department participates in the Ph.D. program in Health and Human Performance. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Master's program provides advanced preparation of tourism, recreation, and parks and sport management professionals for positions of leadership in planning, developing, administering, and marketing of programs in a variety of employment settings; public and private. Concentrations of study may be developed in a number of areas, such as:

- Natural resource recreation management
- Tourism and commercial recreation
- Campus recreation
- Recreation administration and supervision
- Sport management

The doctoral program is offered through the College of Health and Human Performance with concentrations in tourism; natural resource recreation and sport management. These interdisciplinary specializations blend course work and research. The curriculum is individualized, and applicants with degrees from unrelated fields can be accepted into the program. However, their previous work will be evaluated and their programs planned according to their individual needs, interests, and career objectives.

**Combined program:** The Department offers a combined bachelor's/master's degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of approximately one semester. Up to 12 approved graduate credit hours can be utilized toward both degrees.

**MS/MSM Concurrent Degree Program:** This joint degree program is offered through the College of Business Administration (Master of Science in Business Management [MSM]) and the College of Health and Human Performance's, Department of Tourism, Recreation and Sport Management (Master of Science in Sport Management [MS]). Applicants must apply to both programs and be admitted to both to participate. The MS/MSM is a non-thesis degree. The MS/MSM is designed for students who seek a graduate business degree and who lack the work experience necessary for admission to the MBA program. The MS/MSM curriculum is similar to the first year of the MBA program, giving students a good foundation in business principles. Concurrent degree students can share up to 9 credit hours of the same coursework towards both degree programs. They do not have to graduate during the same semester. Students admitted into the concurrent program must work closely with both departments to verify all requirements are being met during their course of study.

**MS/J.D. joint program:** This 98-credit-hour joint degree program culminates in the Master of Science and the Juris Doctor degrees. Applicants must meet the entrance requirements for the Department of Tourism, Recreation, and Sport Management and the College of Law. Admission to the second degree program is required no later than the end of the fourth consecutive semester after beginning one of the degree programs. The student's supervisory committee comprises faculty members from both the Department of Tourism, Recreation, and Sport Management and the College of Law. Students admitted into the joint program are permitted to share up to 12 credit hours of the same coursework towards both degree programs. Students must graduate during the same semester from both programs.

**Urban and Regional Planning Department**

Director of School of Landscape Architecture and Planning: Kristin Larsen

Chair: Joseph Macedo

Graduate Coordinator: Stanley Latimer

Graduate Coordinator of Online Degree program: Ferdinand Lewis

Complete faculty listing by department: [Follow this link.](#)

**Doctor of Philosophy:** The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, Construction, and Planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

**Master of Arts in Urban and Regional Planning:** The Department of Urban and Regional Planning offers graduate work leading to the degree of Master of Arts in Urban and Regional Planning (M.A.U.R.P.). Students are encouraged to enter the program in the fall semester. The program is usually completed in two academic years. The student entering with an undergraduate degree and no graduate study must complete 52 hours of credit for the M.A.U.R.P. degree. Students who have a master's degree in a related field may transfer up to 18 graduate semester hours toward the 52 hour requirement. Such a transfer of credit requires the approval of the Department. The Department encourages students with any undergraduate degree who are interested in the field of planning to apply for admission.
Complete descriptions of the requirements for the M.A.U.R.P. and Ph.D. degrees are provided in the General Information section of this catalog.

The urban and regional planning curriculum is designed to provide a set of core studies and contextual projects which prepare the graduate for the practice of planning in public or private agencies at both national and international levels. The core studies include history and theory of planning, planning methods, growth management at local, regional, and state levels, and related studies in community and regional social, natural, and economic systems. Contextual projects include, among many subject areas, urban design, transportation, regional planning, community redevelopment and preservation, housing, real estate, and economic development. The program emphasizes planning, policies, and design for the physical environment. Current specializations include growth management and transportation, urban design, housing, community and economic development, information technologies for planning and environmental planning. Students are also encouraged to take advantage of the extensive faculty, course offerings, and other resources available in the College of Design, Construction, and Planning and throughout the University. The Department has two research centers: The Geo-facilities Planning and Information Center (GeoPlan), the Center for Building Better Communities (CBBC), and the Center for Health and the Built Environment (CHBE).

The curriculum is supported by an extensive GIS laboratory, and a visual aid library. Variation from the core studies may be approved by the Department if the student can demonstrate education and experience to the faculty that would support such an alternative. The M.A.U.R.P. degree is accredited by the Planning Accreditation Board, a joint undertaking of the American Institute of Certified Planners and the Association of Collegiate Schools of Planning, for having achieved the highest applicable standards for graduate education in the field of planning. Graduates of the Department are prepared to practice urban and regional planning.

The Department of Urban and Regional Planning and the College of Law offer a joint degree program (see Requirements for Master's Degrees in the General Information section of this catalog). Areas of concentration with other programs in the Graduate School may be developed to meet the individual needs of students. In addition to course work the student is required to complete an internship with a public or private planning office and the student must complete a thesis.

The Department reserves the right to retain student work for purposes of record, exhibition, or instruction.

**Wildlife Ecology and Conservation Department**

College of Agricultural and Life Sciences

Chair: Eric C. Hellgren
Graduate Coordinator: Kathryn E. Steving

Complete faculty listing by department: [Follow this link](http://www.abe.ufl.edu)

The Department of Wildlife Ecology and Conservation offers Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees in wildlife ecology and conservation. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Program emphases include wildlife biology, ecology, and management; landscape ecology and restoration; human dimensions; tropical and international conservation; and conservation education. Graduate students should have appropriate undergraduate training in the biological, social, and physical sciences including physics, chemistry, and mathematics. Students with inadequate backgrounds may be required to take (without credit at the graduate level) remedial undergraduate courses pertinent to their fields of interest.

For more information, please see our website: [http://www.wec.ufl.edu](http://www.wec.ufl.edu)

**Women's Studies Department**

Director: Bonnie Moradi
Graduate Coordinator: Kendal Broad

Complete faculty listing by department: [Follow this link](http://www.wst.ufl.edu)

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as a two certificates. These options give students the opportunity to take advantage of scholarship in this dynamic field, and to become acquainted with different research perspectives and methodologies. Students become well grounded in theories of gender in cultural systems and in ways that gender intersects with other categories of difference such as race, ethnicity, religion, class, sexuality, nation, physical and mental ability, age, and economic and civil status. Faculty and students employ feminist and other appropriate theoretical approaches and methodologies.

The Center offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring. The Center in Ustler Hall houses archives, a small library, offices, and meeting space.

For more information about our colloquium series, please see our website: [http://web.wst.ufl.edu](http://web.wst.ufl.edu)

**Departments and Programs**

**Agricultural and Biological Engineering Department**

College of Agricultural and Life Sciences

Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: [Follow this link](http://www.abe.ufl.edu)

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at [http://www.abe.ufl.edu](http://www.abe.ufl.edu)

**Other**

**Agricultural and Biological Engineering (CALS)**
College

- College of Agricultural and Life Sciences
- College of Engineering

Department/School

Agricultural and Biological Engineering Department

Agricultural and Biological Engineering Program

The degrees of Master of Science, Master of Engineering, and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences.

Requirements for these degrees are given in the Graduate Degrees section of this catalog. Additional information can also be found on the graduate studies pages on the department website at www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

- Agricultural production includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.
- Biological engineering includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.
- Information systems includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.
- Land and water resources includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.
- Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Degrees Offered with a Major in Agricultural and Biological Engineering

Doctor of Philosophy

without a concentration

centeration in Geographic Information Systems
concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Agricultural and Biological Engineering Courses

- ABE 5015: Empirical Models of Crop Growth and Yield Response
- ABE 5038: Recent Developments and Applications in Biosensors
- ABE 5152: Electro-Hydraulic Circuits and Controls
- ABE 5332: Advanced Agricultural Structures
- ABE 5442: Advanced Agricultural Process Engineering
- ABE 5643C: Biological Systems Modelling
- ABE 5646: Biological and Agricultural Systems Simulation
- ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials
- ABE 5663: Advanced Applied Microbial Biotechnology
- ABE 5707C: Agricultural Waste Management
- ABE 5815C: Food and Bioprocess Engineering Design
- ABE 6005: Applied Control for Automation and Robots
- ABE 6031: Instrumentation in Agricultural Engineering Research
- ABE 6035: Advanced Remote Sensing: Science and Sensors
- ABE 6037C: Remote Sensing in Hydrology
- ABE 6252: Advanced Soil and Water Management Engineering
- ABE 6254: Simulation of Agricultural Watershed Systems
- ABE 6265: Vadose Zone Modeling
- ABE 6266: Nanotechnology in Water Research
- ABE 6615: Advanced Heat and Mass Transfer in Biological Systems
- ABE 6644: Agricultural Decision Systems
- ABE 6816: Food and Bioprocess Sterilization
- ABE 6905: Individual Work in Agricultural and Biological Engineering
- ABE 6910: Supervised Research
- ABE 6931: Seminar
- ABE 6933: Special Topics in Agricultural and Biological Engineering
- ABE 6940: Supervised Teaching
- ABE 6971: Research for Master's Thesis
- ABE 6972: Research for Engineer's Thesis
- ABE 6974: Nonthesis Project
- ABE 6986: Applied Mathematics in Agricultural and Biological Engineering
- ABE 7979: Advanced Research
- ABE 7980: Research for Doctoral Dissertation
- AOM 5334C: Agricultural Chemical Application Technology
- AOM 5431: GIS and Remote Sensing in Agriculture and Natural Resources
- AOM 5435: Advanced Precision Agriculture
- AOM 6905: Individual Work in Agricultural Operations Management
- AOM 6932: Special Topics in Agricultural Operations Management
- CWR 6536: Stochastic Subsurface Hydrology
The Department of Agricultural Education and Communication offers the degrees of Master of Science and Doctor of Philosophy. Graduate students who obtain a degree in Agricultural Education and Communication will focus their study in one of four areas of specialization. The areas of specialization are agricultural communication, agricultural education, extension education, and leadership development. These degree programs are individually tailored to meet the student's unique needs for professional development. The requirements for each degree are described in the [Graduate Degrees](#) section of the University of Florida Graduate Catalog. More information about our program can be found by following the link below.

### Other

### Agricultural Education and Communication

#### College

[College of Agricultural and Life Sciences](#)

#### Department/School

[Agricultural Education and Communication Department](#)

### Agricultural Education and Communication Program

The Master of Science program is designed to prepare graduates for domestic and international teaching, research, extension, administrative and leadership positions in both the public and private sectors. Courses are taught in an agricultural and natural resources context and are broadly applicable in educational, business, government, and agency settings. The Master of Science program is delivered on-campus and online via the AEC e-Learning Institute (eLI). The Doctor of Philosophy degree program is primarily designed to prepare graduates for academic positions in teaching, research, and extension within the realm of Agricultural Education and Communication. In addition, graduates may obtain positions in administration, human resource management, or training and development.

The Agricultural Communication specialization prepares students for professional communication careers in or dealing with agriculture and agribusiness. It is intended primarily for students who enter with a bachelor's degree in journalism, agricultural communication/journalism, advertising, broadcasting, public relations, or related fields. Graduates of this option are employed in: (1) communication or management positions with the numerous commodity or special-interest associations in agriculture and related fields; (2) communication support positions in agricultural extension and research information departments of land-grant universities, agencies of USDA, state Departments of Agriculture, and agricultural development projects overseas; (3) advertising and public relations positions with agribusiness firms or commodity associations; and (4) media positions involved in reporting on agriculture, agribusiness, and natural resource issues. Students in Agricultural Communication also develop strong skills/application in media writing, production, campaign strategies and/or Web design/desktop publishing. Graduates become prepared for positions in both public and private sectors in both industry and educational settings.

The Agricultural Education specialization is designed to enhance the careers of those employed in the educational professions in agriculture and natural resources. Regardless if one is employed in public school teaching, community college instruction, or training and development in agribusiness, students gain valuable knowledge and experience in designing, implementing, and evaluating educational programs. In addition, graduates of the program command added depth in the understanding of the teaching and learning process. This specialization may be designed to allow students to complete the requirements of teacher certification while completing their master's degree program. The PhD is a research-oriented degree that has a primary focus of preparing candidates to assume faculty positions in colleges or university teacher education programs. Candidates develop an individual program of study that provides a comprehensive knowledge of teaching and learning processes. The degree also seeks to extend the candidate's development by providing instruction, research opportunities, and experiences that enhance the
depth and breadth of the candidate's prior learning opportunities.

The Extension Education specialization is designed to prepare students for careers in the Cooperative Extension service, outreach education, and/or other international agencies. Through coursework and research, students will gain valuable knowledge and experience in designing, implementing, and evaluating educational programs. Extension graduate students choose between a domestic or international focus in regards to coursework and/or research. In addition, graduates of the program command tremendous depth of the teaching and learning process. Candidates who select the Extension Education specialization develop an individual program of study that focuses on such topics as program development, experiential education, the change process, educational technologies and extension, program evaluation and organizational accountability, administration and leadership, and international extension. Graduates become prepared for a variety of positions including extension specialists, county and district extension directors, outreach education coordinators for private and public agencies, 4-H Extension agents and specialists, and educator specialists with international agencies.

The Leadership Development specialization is designed to prepare students for educational leadership, training, and outreach positions in agricultural, extension, community and governmental agencies. Course work in the major will focus on a core of agricultural courses along with emphasis in designing educational/training programs, professional presentation enhancement, leadership development, teaching/training methods, and interpersonal communication. Candidates who select the Leadership Development specialization develop an individual program that focuses on leadership theory and measurement, critical and creative thinking, and leadership in cross-cultural settings. Students will encompass a strong research and theory-based program with a strong knowledge of training and development, and human resource management. Graduates become prepared for positions in both public and private sectors in both industry and educational settings.

Degrees Offered with a Major in Agricultural Education and Communication

Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development

Master of Science

without a concentration

concentration in Tropical Conservation and Development

Agricultural Education and Communication Courses

- AEC 5032: Agricultural Media Writing
- AEC 5037: Agricultural Media Production
- AEC 5060: Public Opinion and Agricultural and Natural Resource Issues
- AEC 5074: Agriculture, Resources, People, and the Environment: A Global Perspective
- AEC 5201: Teaching in Colleges of Agricultural and Life Sciences
- AEC 5203: Advanced Teaching in Colleges of Agricultural and Life Sciences
- AEC 5206: Teaching Methods in Agricultural Education
- AEC 5227: Teaching in Agricultural Education Laboratory Facilities
- AEC 5302: Professional Skill Development in Agriscience Education I
- AEC 5324: Philosophy and Development of Agricultural Education
- AEC 5454: Leadership Development for Extension and Community Nonprofit Organizations
- AEC 5501: Professional Skill Development in Agriscience Education II
- AEC 5541: Communication and Instructional Technologies in Agricultural and Life Sciences
- AEC 5544: Curriculum Development and Assessment Techniques in Emerging Agricultural Technologies
- AEC 5545: Special Methods in Teaching Agriculture
- AEC 5546: Program Planning in Agricultural Education
- AEC 6205: Advanced Curriculum and Teaching Methods
AEC 6210: Designing Educational Programs in Agricultural Settings
AEC 6211: Delivering Educational Programs in Agricultural Settings
AEC 6212: Teacher Education in Agriculture
AEC 6218: From America to Zimbabwe: An Overview of International Extension Systems
AEC 6321: The Land Grant University and University Governance
AEC 6325: History and Philosophy of Agricultural Education
AEC 6540: Agricultural and Natural Resources Communications Theory and Strategies
AEC 6543: Teaching and Learning Theory: Applications in Agricultural Education
AEC 6552: Evaluating Programs in Extension Education
AEC 6611: Agricultural and Extension Adult Education
AEC 6704: Extension Administration and Supervision
AEC 6767: Research Strategies in Agricultural Education and Communication
AEC 6905: Problems in Agricultural and Extension Education
AEC 6910: Supervised Research
AEC 6912: Nonthesis Research in Agricultural and Extension Education
AEC 6933: Seminar in Agricultural Education and Communication
AEC 6940: Supervised Teaching
AEC 6945: Practicum in Agricultural Education and Communication
AEC 6947: Experiential Learning in Agricultural Education
AEC 6971: Research for Master's Thesis
AEC 7979: Advanced Research
AEC 7980: Research for Doctoral Dissertation
AGG 5504: Critical and Creative Thinking in Problem Solving and Decision Making

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Agronomy Department

Chair: R. A. Gilbert
Graduate Coordinator: L. E. Sollenberger
Complete faculty listing by department: Follow this link.

The Agronomy Department offers the degrees of Doctor of Philosophy and Master of Science (thesis and non-thesis options) in agronomy with specializations in plant physiology, ecology, management and nutrition, weed science (terrestrial and aquatic), and plant breeding and genetics. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate programs emphasize the development and subsequent application of basic principles in each specialization to the management of agricultural and natural ecosystems in Florida and throughout the world. The continuing need for increased plant production for food, fiber and energy to meet the demands of a rapidly escalating population is reflected in departmental research programs. When compatible with a student's program and permitted by prevailing circumstances, some thesis and dissertation research may be conducted wholly or in part in one or more of several countries.

Students seeking a graduate program in the Agronomy Department should hold a Bachelor of Science degree from an accredited college or university with a major in an area of plant science, or closely related discipline. A science background with basic courses in biology, botany, mathematics, chemistry, and physics is required of new graduate students.

Other

Agronomy

College

College of Agricultural and Life Sciences

Department/School

Agronomy Department
Agronomy Program Information

The Agronomy Department offers the degrees of Doctor of Philosophy and Master of Science (thesis and non-thesis option) in agronomy with specializations in plant physiology, ecology, management and nutrition, weed science (terrestrial and aquatic), and plant breeding and genetics. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate programs emphasize the development and subsequent application of basic principles in each specialization to the management of agronomic plants in Florida and throughout the world. The continuing need for increased plant production for food, fiber and energy to meet the demands of a rapidly escalating population is reflected in departmental research programs. When compatible with a student's program and permitted by prevailing circumstances, some thesis and dissertation research may be conducted wholly or in part in one or more of several countries.

Students seeking a graduate program in the Agronomy Department should hold a Bachelor of Science degree from an accredited college or university with a major in an area of plant science, or closely related discipline. A science background with basic courses in biology, botany, mathematics, chemistry, and physics is required of new graduate students.

Degrees Offered with a Major in Agronomy

Doctor of Philosophy

without a concentration

concentration in Toxicology

concentration in Tropical Conservation and Development

Master of Science

without a concentration

concentration in Agroecology

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

Agronomy Departmental Courses

- AGR 5215C: Integrated Field Crop Science
- AGR 5230C: Florida Grassland Agroecosystems
- AGR 5266C: Field Plot Techniques
- AGR 5277C: Tropical Crop Production
- AGR 5307: Molecular Genetics for Crop Improvement
College of Agricultural and Life Sciences Courses

- AGR 5321C: Genetic Improvement of Plants
- AGR 5444: Ecophysiology of Crop Production
- AGR 5511: Crop Ecology
- AGR 6233: Tropical Grassland Agroecosystems
- AGR 6237C: Research Techniques in Forage Evaluation
- AGR 6311: Population Genetics
- AGR 6322: Advanced Plant Breeding
- AGR 6325L: Plant Breeding Techniques
- AGR 6353: Cytogenetics
- AGR 6422C: Environmental Crop Nutrition
- AGR 6442C: Physiology of Agronomic Plants
- AGR 6905: Agronomic Problems
- AGR 6910: Supervised Research
- AGR 6932: Topics in Agronomy
- AGR 6933: Graduate Agronomy Seminar
- AGR 6940: Supervised Teaching
- AGR 6971: Research for Master's Thesis
- AGR 7979: Advanced Research
- AGR 7980: Research for Doctoral Dissertation
- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link.

For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/

Other

Animal Molecular and Cellular Biology

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine

Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program's website at http://www.animal.ufl.edu/amcb/.

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5905: Individual Study
- ALS 6046: Grant Writing
- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6228: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
- ANS 6666L: Molecular and Cellular Research Methods
- ANS 6702: Ladation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
- PCB 6816: Thermal Physiology
- ANS 6707: Growth Physiology in Farm Animals
- ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
- ANS 6715: Gastrointestinal and Feed Microbiology
- ANS 6716: Physiology in Farm Animals
- ANS 6718: Nutritional Physiology of Domestic Animals
- ANS 6723: Mineral Nutrition and Metabolism
- ANS 6745: Introduction to Statistical Genetics
- ANS 6750: Reproductive Physiology in Farm Animals
- ANS 6751: Physiology of Reproduction
- ANS 6751C
- ANS 6767: Molecular Endocrinology
- ANS 6905: Problems in Animal Science
- ANS 6910: Supervised Research
- ANS 6932: Special Topics in Animal Science
- ANS 6933: Graduate Seminar in Animal Science
- ANS 6936: Graduate Seminar in Animal Molecular and Cell Biology
- ANS 6939: Animal Molecular and Cellular Biology Journal Colloquy
- ANS 6940: Supervised Teaching
- ANS 6971: Research for Master's Thesis
- ANS 7979: Advanced Research
- ANS 7980: Research for Doctoral Dissertation
- BCH 5045: Graduate Survey of Biochemistry
- BCH 6876: Recent Advances in Membrane Biology
- BME 5085: Patents, Product Development, and Technology Transfer
- BME 5401: Biomedical Engineering and Physiology I
- BCH 5413: Mammalian Molecular Biology and Genetics
- BCH 6740: Physical Biochemistry/Structural Biology
- BCH 6877: Recent Advances in Structural Biology
- BCH 6878: Recent Advances in Cytoskeletal Processes
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
- GMS 6031: Molecular Immunology
- GMS 6051: Signal Transduction
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6065: Fundamentals of Cancer Biology
- GMS 8140: Principles of Immunology
- GMS 6331: Stem Cell Biology
GMS 6421: Cell Biology
GMS 6647: Transcriptional and Translational Control of Cell Growth and Proliferation
MCB 5305L: Microbial Genetics and Biotechnology Laboratory
MCB 6845: Advanced Techniques in Microbiology and Cell Science
PCB 5065: Advanced Genetics
PCB 5235: Immunology
PCB 5615: Molecular Evolution and Systematics
PHA 6449: Pharmacogenomics
STA 6166: Statistical Methods in Research I
STA 6167: Statistical Methods in Research II
STA 6834: Special Topics in Statistics
VME 5244: Physiology Organ Systems
VME 6602: General Toxicology
VME 6810: Integrating Veterinary Medicine with Shelter Systems
VME 6811: Shelter Animal Physical Health
VME 6812: Shelter Animal Behavior and Welfare
ZOO 6927: Special Topics in Zoology

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Animal Sciences Department

Chair: G. E. Dahl
Graduate Coordinator: G. Adesogan

Complete faculty listing by department: Follow this link.

Animal Sciences is an academic department of the College of Agriculture and Life Sciences (CALS), a unit of the Institute of Food and Agricultural Sciences (IFAS). Creating new solutions to tomorrow’s problems underlies everything we do in the Animal Sciences Program. In the areas of teaching, research, and extension, our faculty integrates the most modern technologies available with personal expertise and attention to the needs of students and our industry. For more information about the Animal Sciences program, please follow the link below.

Other

Animal Sciences

College

College of Agricultural and Life Sciences

Department/School

Animal Sciences Department

Animal Sciences Program

The Department of Animal Sciences offers the degrees of Master of Science and Doctor of Philosophy in animal sciences with emphasis in beef or dairy cattle, swine, or equine. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The following specializations are available:
- Breeding and genetics
- Management
Nutrition (nutritional physiology, nutrient metabolism, and feedstuff utilization)
Physiology (environmental, lactational, and reproductive)
Molecular biology (embryology, endocrinology, and genetics)
Meat science (meat processing, meat quality, muscle biology, and food safety)

A student may work on a problem covering more than one area of study. Animal resources (beef cattle, dairy cattle, horses, swine, sheep, and laboratory animals) are available for use in various research programs. Nutrition, physiology, and meats laboratories are available for detailed chemical and carcass quality evaluations, and excellent computer facilities are available. Special arrangements may be made to conduct research at the various branch agricultural experiment stations throughout Florida.

Departmental and program prerequisites for admission to graduate study include a sound science background, with basic courses in microbiology, biology, mathematics, and chemistry. All courses in the animal sciences program area are acceptable for graduate credit as part of the candidate's major.

The Graduate School restricts graduate students from pursuing minors in academic units that contribute major credit toward their degree program. Therefore, graduate students majoring in Animal Sciences cannot pursue a minor in Food and Resource Economics, Food Science and Human Nutrition, Medicine-Biochemistry, and Veterinary Medical Sciences. In addition, undergraduate credits at the 3000–4000 level in the major of any of these listed academic units are not eligible to count toward degree requirements.

Degrees Offered with a Major in Animal Sciences

Doctor of Philosophy

without a concentration

concentration in Animal Molecular and Cellular Biology

Master of Science

without a concentration

Animal Sciences Departmental Courses

- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6314: Experimental Embryology
- ANS 6447: Ruminant Nutrition
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6536: Meat Technology
- ANS 6702: Lactation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
- ANS 6705: Muscle Physiology
- ANS 6707: Growth Physiology in Farm Animals
- ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
- ANS 6715: Gastrointestinal and Feed Microbiology
- ANS 6716: Physiology in Farm Animals
- ANS 6718: Nutritional Physiology of Domestic Animals
- ANS 6723: Mineral Nutrition and Metabolism
- ANS 6750: Reproductive Physiology in Farm Animals
- ANS 6751: Physiology of Reproduction
- ANS 6767: Molecular Endocrinology
- ANS 6775: Essentials of Livestock Immunology
- ANS 6905: Problems in Animal Science
- ANS 6910: Supervised Research
- ANS 6932: Special Topics in Animal Science
- ANS 6933: Graduate Seminar in Animal Science
Additional Courses for Major Credit in Animal Sciences

- AEB 5326: Agribusiness Financial Management
- AEB 6385: Management Strategies for Agribusiness Firms
- AEB 7162: Agricultural Risk Analysis and Decision Making
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5732: Current Issues in Food Regulations
- FOS 5126C: Psychophysical Aspects of Foods
- FOS 6226C: Advanced Food Microbiology
- FOS 6315C: Advanced Food Chemistry
- FOS 6317C: Flavor Chemistry and Technology
- FOS 6355C: Instrumental Analysis and Separations
- FOS 6428C: Advanced Food Processing
- FOS 6455C: Industrial Food Fermentations
- HUN 5447: Nutrition and Immunity
- HUN 6245: Advanced Human Nutrition
- HUN 6301: Nutritional Aspects of Lipid Metabolism
- HUN 6305: Nutritional Aspects of Carbohydrates
- HUN 6321: Proteins and Amino Acids in Nutrition
- VME 5162C: Avian Diseases
- VME 5244: Physiology: Organ Systems

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Entomology and Nematology Department

Chair: John L. Capinera.
Graduate Coordinator: Heather J. McAuslane.

Complete faculty listing by department: Follow this link.

The Entomology and Nematology Department offers the Master of Science (thesis and nonthesis options) and Doctor of Philosophy degrees in entomology and nematology with the following specializations: entomology, nematology, and pest management. Minimum requirements for the M.S. and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

The Department also offers a cooperative Doctor of Philosophy degree with Florida A&M University and distance education courses leading to the M.S. degree. Members of the Graduate Faculty include the department resident faculty, faculty located on University of Florida campuses away from Gainesville, scientists with other State of Florida agencies such as the Division of Plant Industry and Florida Department of Agriculture and Consumer Services, and scientists of the U.S. Department of Agriculture. The Graduate Faculty is qualified to direct graduate students in all specialties of entomology, nematology, and acarology.

New graduate students should have backgrounds in biology, chemistry, physics, and mathematics. Minor deficiencies may be made up after entering graduate school.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

For more information, please see the program page below, and visit our website: http://entnemdept.ufl.edu.

Other

Entomology and Nematology
The Entomology and Nematology department offers research-based M.S. (thesis) and PhD degrees in entomology and in nematology. Our large faculty in Gainesville and at Research and Education Centers around the state allow for study in many important areas, including behavior, ecology, systematics, biological control, nematology, pest management, and medical, veterinary and urban entomology. Molecular, whole organism and population ecology studies are all within the range of supported research in the Entomology and Nematology department, and our nematology program is one of the most comprehensive in the nation.

The M.S. degree can be taken in a non-thesis format, in Gainesville or entirely online, with a specialization in either entomology or pest management. Online M.S. degrees are designed to accommodate place-bound students interested in biological science with emphasis on insects and other arthropods, including extension faculty and other educators; state and federal employees in agricultural, environmental and regulatory positions; consultants; pest control industry personnel; and others who want to further their education.

Certificates, comprising 15 credit hours of specific coursework, are available online or to residential students with concentrations in urban pest management, landscape pest management or medical entomology. These certificates document specialization and proficiency in sub-disciplines within entomology for enrolled graduate students and provide evidence of expertise for non-degree seeking students.

Students entering graduate programs in entomology and nematology should have a strong science background, including biology, chemistry, and algebra. Physics and statistics are recommended. Admissions criteria can be found on the Graduate School's Admission page.

Degrees Offered with a Major in Entomology and Nematology

Doctor of Philosophy

Master of Science

Entomology and Nematology Departmental Courses

- ALS 5156: Agricultural Ecology Principles and Applications
- ALS 6046: Grant Writing
- ALS 6166: Exotic Species and Biosecurity Issues
- ALS 6935: Topics in Biological Invasions
- ENY 5006: Graduate Survey of Entomology
- ENY 5006L: Graduate Survey of Entomology Laboratory
- ENY 5031C: Insect Field Biology
- ENY 5151C: Techniques in Insect Systematics
- ENY 5160C: Survey of Science with Insects
- ENY 5164: Graduate Survey of Invertebrate Field Biology
- ENY 5212: Insects and Wildlife
- ENY 5223C: Biology and Identification of Urban Pests
- ENY 5226C: Principles of Urban Pest Management
- ENY 5332: Graduate Survey of Urban Vertebrate Pest Management
- ENY 5236: Insect Pest and Vector Management
- ENY 5241: Biological Control
- ENY 5245: Agricultural Acarology
- ENY 5405: Insects as Vectors of Plant Pathogens
- ENY 5516: Turf and Ornamental Entomology
- ENY 5566: Tropical Entomology
- ENY 5567: Tropical Entomology Field Laboratory
- ENY 5572: Advanced Apiculture
- ENY 5611: Immature Insects
- ENY 5820: Insect Molecular Genetics
- ENY 6166: Insect Classification
- ENY 6203: Insect Ecology
- ENY 6203L: Insect Ecology Laboratory
ENY 6248: Termite Biology and Control
ENY 6401: Insect Physiology
ENY 6401L: Insect Physiology Laboratory
ENY 6454: Behavioral Ecology and Systematics of Insects
ENY 6591C: Advanced Mosquito Identification
ENY 6593: Advanced Mosquito Biology
ENY 6651C: Insect Toxicology
ENY 6665: Advanced Medical and Veterinary Entomology I
ENY 6665L: Advanced Medical and Veterinary Entomology Laboratory
ENY 6706: Forensic Entomology
ENY 6706L: Forensic Entomology Laboratory
ENY 6821: Insect Microbiology
ENY 6822C: Molecular Biology Techniques with Invertebrates and Their Pathogens
ENY 6905: Problems in Entomology
ENY 6910: Supervised Research
ENY 6931: Entomology Seminar
ENY 6932: Special Topics in Entomology
ENY 6934: Selected Studies in Entomology
ENY 6940: Supervised Teaching
ENY 6942: Insect Diagnostics
ENY 6943: Entomology Internship
ENY 6944: Entomology Extension Internship
ENY 6971: Research for Master's Thesis
ENY 7979: Advanced Research
ENY 7980: Research for Doctoral Dissertation
NEM 5004C: Graduate Survey of Nematology
NEM 5707C: Plant Nematology
NEM 6101C: Nematode Morphology and Anatomy
NEM 6102: Nematode Systematics and Molecular Phylogeny
NEM 6102L: Nematode Systematics and Molecular Phylogeny Laboratory
NEM 6103: Insect Parasitic Nematodes
NEM 6104L: Insect Parasitic Nematodes Laboratory
NEM 6201: Nematode Ecology
NEM 6708: Field Plant Nematology
NEM 6905: Problems in Nematology
NEM 6931: Nematology Seminar
NEM 6932: Special Topics in Nematology
NEM 6934: Selected Studies in Nematology
NEM 6940: Supervised Teaching
NEM 6942: Nematode Diagnostics
NEM 6943: Nematode Internship
NEM 6944: Nematode Extension Internship
NEM 6971: Research for Master's Thesis
NEM 7979: Advanced Research
NEM 7980: Research for Doctoral Dissertation
PMA 5205: Citrus Pest Management
PMA 6228: Field Techniques in Integrated Pest Management

College of Agricultural and Life Sciences Courses

ALS 5106: Food and the Environment
ALS 5364C: Molecular Techniques Laboratory
ALS 5905: Individual Study
ALS 5932: Special Topics
ALS 6046: Grant Writing
ALS 6921: Colloquium on Plant Pests of Regulatory Significance
ALS 6925: Integrated Plant Medicine
ALS 6930: Graduate Seminar
ALS 6931: Plant Medicine Program Seminar
ALS 6942: Principles of Plant Pest Risk Assessment and Management
ALS 6943: Internship in Plant Pest Risk Assessment and Management
BCH 5045: Graduate Survey of Biochemistry

Plant Medicine

College

Plant Medicine Program Information
Coordinator: Amanda C. Hodges

The Doctor of Plant Medicine (DPM) program is an intensive doctorate-level graduate level training program for students interested in plant health diagnosis and management. Requirements for the degree can be found in the Graduate Degrees section of this catalog.

DPM students complete rigorous coursework and intensive internships. Only DPM students jointly enrolled in one of our discipline department M.S. or Ph.D. programs complete a thesis or dissertation. DPM students often participate in applied research within laboratory programs, and may participate in the publication of peer-reviewed scientific and extension papers. More information regarding the latest policies for the DPM program is available in the DPM graduate handbook.

The DPM program is a partnership among faculty mentors and teaching faculty within the following primary departments:

- Entomology and Nematology Department
- Department of Plant Pathology
- Agronomy Department
- Horticulture Sciences Department
- Environmental Horticulture Department
- Soil and Water Sciences Department
- Food Science and Human Nutrition Department

For more information, please see the DPM website: [http://dpm.ifas.ufl.edu](http://dpm.ifas.ufl.edu).

Degrees Offered with a Major in Plant Medicine

**Doctor of Plant Medicine**

without a concentration

concentration in Tropical Conservation and Development

Agronomy Departmental Courses

- AGR 5215C: Integrated Field Crop Science
- AGR 5230C: Florida Grassland Agroecosystems
- AGR 5266C: Field Plot Techniques
- AGR 5277C: Tropical Crop Production
- AGR 5307: Molecular Genetics for Crop Improvement
- AGR 5321C: Genetic Improvement of Plants
- AGR 5444: Ecophysiology of Crop Production
- AGR 5511: Crop Ecology
- AGR 6233: Tropical Grassland Agroecosystems
- AGR 6237C: Research Techniques in Forage Evaluation
- AGR 6311: Population Genetics
- AGR 6322: Advanced Plant Breeding
- AGR 6325L: Plant Breeding Techniques
- AGR 6353: Cytogenetics
- AGR 6422C: Environmental Crop Nutrition
- AGR 6442C: Physiology of Agronomic Plants
- AGR 6905: Agronomic Problems
- AGR 6910: Supervised Research
- AGR 6932: Topics in Agronomy
- AGR 6933: Graduate Agronomy Seminar
- AGR 6940: Supervised Teaching
- AGR 6971: Research for Master's Thesis
- AGR 7979: Advanced Research
- AGR 7980: Research for Doctoral Dissertation
- ALS 5155: Global Agroecosystems
- IPM 5305: Principles of Pesticides
- PLS 5632C: Integrated Weed Management
- PLS 5652: Advanced Weed Science
- PLS 6623: Weed Ecology
- PLS 6626: Invasive Plant Ecology
- PLS 6655: Plant-Herbicide Interaction
Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
- BOT 5725C: Taxonomy of Vascular Plants
- BOT 6508C: Proteomics Theory and Practice
- BOT 6516: Plant Metabolism
- BOT 6566: Plant Growth and Development
- BOT 6716C: Advanced Taxonomy
- BOT 6726C: Principles of Systematic Biology
- BOT 6905: Individual Studies in Botany
- BOT 6910: Supervised Research
- BOT 6927: Advances in Botany
- BOT 6935: Special Topics
- BOT 6936: Graduate Student Seminar
- BOT 6940: Supervised Teaching
- BOT 6943: Internship in College Teaching
- BOT 6971: Research for Master's Thesis
- BOT 7979: Advanced Research
- BOT 7980: Research for Doctoral Dissertation
- PCB 5046C: Advanced Ecology
- PCB 5338: Principles of Ecosystem Ecology
- PCB 5356: Tropical Ecology
- PCB 6675C: Evolutionary Biogeography
- PLP 6656C: Fungal Biology

Entomology and Nematology Departmental Courses

- ALS 5156: Agricultural Ecology Principles and Applications
- ALS 6046: Grant Writing
- ALS 6166: Exotic Species and Biosecurity Issues
- ALS 6935: Topics in Biological Invasions
- ENV 5006: Graduate Survey of Entomology
- ENV 5006L: Graduate Survey of Entomology Laboratory
- ENV 5031C: Insect Field Biology
- ENV 5151C: Techniques in Insect Systematics
- ENV 5160C: Survey of Science with Insects
- ENV 5164: Graduate Survey of Invertebrate Field Biology
- ENV 5212: Insects and Wildlife
- ENV 5223C: Biology and Identification of Urban Pests
- ENV 5226C: Principles of Urban Pest Management
- ENV 5332: Graduate Survey of Urban Vertebrate Pest Management
- ENV 5336: Insect and Vector Management
- ENV 5241: Biological Control
- ENV 5245: Agricultural Acarology
- ENV 5405: Insects as Vectors of Plant Pathogens
- ENV 5516: Turf and Ornamental Entomology
- ENV 5566: Tropical Entomology
- ENV 5567: Tropical Entomology Field Laboratory
- ENV 5572: Advanced Apiculture
- ENV 5611: Immature Insects
- ENV 5820: Insect Molecular Genetics
- ENV 6166: Insect Classification
- ENV 6203: Insect Ecology
- ENV 6203L: Insect Ecology Laboratory
- ENV 6248: Termite Biology and Control
- ENV 6401: Insect Physiology
- ENV 6401L: Insect Physiology Laboratory
- ENV 6454: Behavioral Ecology and Systematics of Insects
- ENV 6591C: Advanced Mosquito Identification
- ENV 6593: Advanced Mosquito Biology
- ENV 6651C: Insect Toxicology
- ENV 6665: Advanced Medical and Veterinary Entomology I
- ENV 6665L: Advanced Medical and Veterinary Entomology Laboratory
- ENV 6706: Forensic Entomology
- ENV 6708: Forensic Entomology Laboratory
- ENV 6821: Insect Microbiology
- ENV 6822C: Molecular Biology Techniques with Invertebrates and Their Pathogens
- ENV 6905: Problems in Entomology
- ENV 6910: Supervised Research
- ENV 6931: Entomology Seminar
- ENV 6932: Special Topics in Entomology
- ENV 6934: Selected Studies in Entomology
- ENV 6940: Supervised Teaching
- ENV 6942: Insect Diagnostics
School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mapping
- SUR 5385: Remote Sensing Applications
- SUR 5386: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
- SUR 5425: Cadastral Information Systems
- SUR 5525: Least Squares Adjustment Computations
- SUR 6375: Terrain Analysis and Mapping
- SUR 6395: Topics in Geographic Information Systems
- SUR 6427: Land Tenure and Administration
- SUR 6535: GPS-INS Integration
- SUR 6905: Special Problems in Geomatics
- SUR 6934: Topics in Geomatics

Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5276C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5901: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Phycology
- FAS 6256: Fish and Aquatic Invertebrate Histology
- FAS 6272: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6932: Special Topics in Fisheries and Aquatic Sciences
- FAS 6933: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
- FAS 6940: Supervised Teaching
- FAS 6971: Research for Master's Thesis
- FAS 7979: Advanced Research
- FAS 7980: Research for Doctoral Dissertation

Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6564: Ecohydrology
- FOR 5157: Ecosystem Restoration Principles and Practice
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6626: Community Forest Management
- FOR 6665: Landscape Planning for Ecotourism
- FOR 6905: Research Problems in Forest Resources and Conservation
- FOR 6910: Supervised Research
- FOR 6933: Seminar
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 6940: Supervised Teaching
- FOR 6971: Research for Master's Thesis
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6555: Introduction to Quantitative Genetics

Horticultural Sciences Departmental Courses

- ALS 5934: Graduate Professional Development Seminar
- HOS 5085C: Principles of Postharvest Horticulture
- HOS 5115C: Horticultural Plant Morphology and Identification
- HOS 5242: Genetics & Breeding of Vegetable Crops
- HOS 5306: Molecular Biology of Plant Hormones
- HOS 5330: Postharvest Technologies for Horticultural Crops
- HOS 5432: Advanced Nutritional Management of Ornamental Crops
- HOS 5515C: Greenhouse and Nursery Operations
- HOS 5516C: Advanced Production of Greenhouse and Nursery Crops
- HOS 5555: Tropical Fruit Production and Research in Florida
- HOS 5711: Phytochemicals in Food & Health
- HOS 6201: Breeding Perennial Cultivars
- HOS 6236: Molecular Marker Assisted Plant Breeding
- HOS 6331: Postharvest Biology
- HOS 6345: Environmental Physiology
- HOS 6412: Nutrition of Horticultural Crops
- HOS 6523: Research and Development in Turfgrass Science
- HOS 6545: Advanced Citiculture I
- HOS 6546: Advanced Citiculture II
- HOS 6905: Problems in Horticultural Science
- HOS 6910: Supervised Research
- HOS 6931: Horticultural Science Seminar
- HOS 6932: Special Topics
- HOS 6940: Supervised Teaching
- HOS 6941: Practicum in Horticultural Science
- HOS 6971: Research for Master's Thesis
- HOS 7979: Advanced Research
- HOS 7980: Research for Doctoral Dissertation
- ORH 5026C: Advanced Annual and Perennial Gardening
- ORH 5068: Advanced Golf and Sports Turf Management
- ORH 5282: Orchid Biology and Culture
- ORH 5322C: Palm Biology and Culture
- ORH 5817C: Advanced Florida Native Landscaping
- ORH 7941: Doctor of Plant Medicine: Internship in Environmental Horticulture
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PLS 5222C: Propagation of Horticultural Crops
- PLS 5241C: Advanced Plant Micropropagation
- PLS 5405: Advanced Composting Technology

Plant Pathology Departmental Courses
PLP 5005C: General Plant Pathology
PLP 5102: Theory and Practice of Plant Disease Control
PLP 5115C: Citrus Pathology
PLP 5155: Microbiological Control of Plant Diseases and Weeds
PLP 6856C: Fungal Biology
PLP 6223C: Viral Pathogens of Plants
PLP 6214C: Bacterial Plant Pathogens
PLP 6262C: Fungal Plant Pathogens
PLP 6291: Plant Disease Diagnosis
PLP 6303: Host-Parasite Interactions II
PLP 6404: Epidemiology of Plant Disease
PLP 6502: Host-Parasite Interactions I
PLP 6621C: Pop Genetics Microbes
PLP 6905: Problems in Plant Pathology
PLP 6910: Supervised Research
PLP 6921: Colloquium in Principles of Plant Pathology
PLP 6932: Seminar in Plant Pathology
PLP 6940: Supervised Teaching
PLP 6942: Professional Internship in Plant Disease Clinic
PLP 6971: Research for Master's Thesis
PLP 7946: Plant Pathology Internship
PLP 7979: Advanced Research
PLP 7980: Research for Doctoral Dissertation

Soil and Water Science Departmental Courses

- ALS 5027: Reusable Learning Objects
- ALS 5155: Global Agroecosystems
- CWR 6537: Contaminant Subsurface Hydrology
- SWS 5050: Soils for Environmental Professionals
- SWS 5050L: Soils for Environmental Professionals Laboratory
- SWS 5115: Environmental Nutrient Management
- SWS 5132: Tropical Soil Management
- SWS 5182: Earth System Analysis
- SWS 5208: Sustainable Agricultural and Urban Land Management
- SWS 5234: Environmental Soil, Water, and Land Use
- SWS 5235: South Florida Ecosystems
- SWS 5224: Environmental Biogeochernistry
- SWS 5246: Water Resource Sustainability
- SWS 5247: Hydric Soils
- SWS 5248: Wetlands and Water Quality
- SWS 5305C: Soil Microbial Ecology
- SWS 5308: Ecology of Waterborne Pathogens
- SWS 5406: Soil and Water Chemistry
- SWS 5424C: Soil Chemical Analysis
- SWS 5551: Soils, Water, and Public Health
- SWS 5605C: Environmental Soil Physics
- SWS 5716C: Environmental Pedology
- SWS 5721C: GIS in Land Resource Management
- SWS 5805: Environmental Soil and Water Monitoring Techniques
- SWS 6134: Soil Quality
- SWS 6136: Soil Fertility
- SWS 6161: Bioavailability of Soil Nutrients
- SWS 6252: Soil Contamination and Remediation
- SWS 6323: Advanced Microbial Ecology
- SWS 6352: Rhizosphere Biochemistry
- SWS 6366: Biodegradation and Bioremediation
- SWS 6448: Biogeochemistry of Wetlands and Aquatic Systems
- SWS 6454: Advanced Soil and Water Chemistry
- SWS 6456: Advanced Biogeochemistry
- SWS 6464C: Soil Mineralogy
- SWS 6622: Vadose Zone Hydrology
- SWS 6722: Soil-Landscape Modeling
- SWS 6905: Special Problems
- SWS 6910: Supervised Research
- SWS 6931: Seminar
- SWS 6932: Topics in Soils
- SWS 6940: Supervised Teaching
- SWS 6971: Research for Master's Thesis
- SWS 7979: Advanced Research
- SWS 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
Family, Youth, and Community Sciences Department

Interim Chair: Tracy Irani
Graduate Coordinator: Larry F. Forthun

Complete faculty listing by department: Follow this link

The FYCS graduate program is an interdisciplinary applied social science program that prepares students for advanced degrees (e.g., Ph.D.) and careers in such areas as family and youth services, Extension and community-based education, community development and nonprofit management, program planning and evaluation, and social policy. Graduates find careers in both the public and private sectors including:

- Child and Youth Development in areas such as juvenile justice, dropout prevention programs, recreational and camp programs, and youth ministry;
- Community Development Practice in local and regional government, private nonprofit organizations (such as chambers of commerce; local development corporations, and local, national and international foundations) and citizen's groups;
- Nonprofit Organizational Management, such as management of community based, nonprofit organizations;
- Family and Social Services, such as family preservation programs, assistance for abused and neglected children and other public assistance programs; and
- Cooperative Extension Service in such areas as youth development, family and consumer sciences and community development.

Contact the graduate coordinator for more information.

Other

Family, Youth, and Community Sciences

College

College of Agricultural and Life Sciences

Department/School

Family, Youth, and Community Sciences Department

Master of Science in Family, Youth and Community Sciences

The Master of Science in FYCS offers two degree options—a thesis and a non-thesis. Both options prepare students for advanced professional positions. FYCS students in either option may complete the FYCS Concentration in Nonprofit Organizational Development, the Certificate in Nonprofit Organizational Development, or the Certificate in Personal & Family Financial Planning.

Thesis Option prepares students to conduct independent research needed to develop science-based solutions to problems, issues and policies that affect families, youth and communities. Students develop expertise in a subject matter area directly relevant to the problem or need they want to address with the thesis research.

Non-Thesis Project Option provides the student with a broad base of knowledge and skills in the discipline. Students complete a non-thesis project determined in consultation with the supervisory committee. Projects vary in nature and may include directed research, program evaluation, or other empirically-based projects.

The Minor in Family, Youth and Community Sciences provides students with knowledge about the theories and body of research that explain how families, youth and communities develop and interact. The minor consists of nine hours of study.

The Minor in Organizational Leadership for Nonprofits provides students with an understanding of how to develop not-for-profit organizations to address problems facing families, youth and communities. The minor consists of six hours of study (nine hours for doctoral students).

Concentration in Nonprofit Organizational Development The nonprofit organizational development concentration will prepare students to work with tax exempt nonprofit organizations and informal community based groups that serve a charitable purpose for the public good. The concentration includes the study of the historical development of nonprofits in the US that enable students to understand the unique aspects of nonprofits and their growing importance and impact on our society. It provides students with a knowledge base for aspiring nonprofit organizational leaders and proven competencies for practicing professionals in the nonprofit sector.

The Graduate Certificate in Nonprofit Leadership will prepare students to work with all 501 (c) nonprofit organizations, tax exempt and others. Courses provide an in depth understanding for developing and sustaining and efficient and effective nonprofit organization. Core competencies in governance, strategic planning, fund raising, and risk management are included as well as other tools.

The Graduate Certificate in Personal and Family Financial Planning The certificate addresses the Certified Financial Planner™ (CFP) Board of Standards education requirement for sitting for the CFP examination, including insurance, personal investing, retirement planning, tax planning, behavioral finance, financial planning practice management and foundational family economic theories. The CFP designation is the leading standard in financial planning and our program is registered with the CFP Board of Standards enabling students to sit for the exam upon completion of the certificate.
Degrees Offered with a Major in Family, Youth, and Community Sciences

Master of Science

without a concentration

concentration in Community Studies

concentration in Family and Youth Development

concentration in Nonprofit Organization Development

Courses

- FYC 5008: Personal and Family Tax Planning
- FYC 5009: Personal and Family Insurance Planning
- FYC 5106: Personal and Family Retirement and Estate Planning
- FYC 5935: Personal and Family Financial Planning Capstone
- FYC 6020: Principles of Family, Youth, and Community Sciences
- FYC 6111: Families and Violence
- FYC 6117: Military Families in Community Context
- FYC 6131: Ethics for FYCS Practitioners
- FYC 6207: Adolescent Problematic Behavior
- FYC 6221: Grant Proposals for Community-Based Organizations
- FYC 6222: Parenting and Child Relationships
- FYC 6223: Promoting Positive Youth Development
- FYC 6224: Resilience and Positive Youth Development
- FYC 6230: Theories of Youth and Family Development
- FYC 6232
- FYC 6234: Theoretical Approaches to Youth Programming
- FYC 6302: Sustainable Community Development
- FYC 6320: Community Development and Civic Engagement
- FYC 6330: Theories of Community Development
- FYC 6331: Involving Youth in Community Issues
- FYC 6412: Historical Foundations of Philanthropy
- FYC 6421: Nonprofit Organizations
- FYC 6422: Policy Issues and Case Studies in Nonprofit Organizations
- FYC 6423: Non-Governmental Organizations
- FYC 6424: Fund Raising for Community/Nonprofit Organizations
- FYC 6425: Risk Management in Nonprofit Organizations
- FYC 6620: Program Planning and Evaluation for Human Service Delivery
- FYC 6662: Public Policy and Human Resource Development
- FYC 6800: Scientific Reasoning and Research Design
- FYC 6802: Advanced Research Methods for Family, Youth, and Community Sciences
- FYC 6901: Problems in Family, Youth, and Community Sciences
- FYC 6912: Nonthesis Project in Family, Youth, and Community Sciences
- FYC 6932: Topics, in Family, Youth, and Community Sciences
- FYC 6933: Seminar in Human Resource Development
- FYC 6934: Professional Internship/Practicum in Family, Youth, and Community Sciences
- FYC 6971: Research for Master's Thesis

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
Food and Resource Economics Department

College of Agricultural and Life Sciences

Interim Chair: Rodney L. Clouser
Acting Graduate Coordinator: Sherry Larkin

Complete faculty listing by department: Follow this link

The Food and Resource Economics Department offers the Master of Agribusiness (M.AB) (non-thesis), Master of Science with Concentration in Agribusiness (M.S.AB.) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Department participates in programs with the Center for Latin American Studies, the Center for African Studies, the Center for Tropical Agriculture, the School of Natural Resources and Environment, the College of Law, and the Florida Sea Grant College Program.

The Department programs reflect the diversity of Florida's agriculture which has more than fifty major commodities. With over thirty faculty involved in a full range of research, extension, and teaching programs in areas including Agricultural Marketing, International Trade, Policy, Production/Farm Management, International Development, Marine Economics, Natural Resource and Environmental Economics, Community/Regional Development and Labor Economics. In addition to the main campus location, the department has faculty at research centers throughout the state.

Several members of the faculty have garnered international reputations in diverse fields such as trade policy, generic advertising, citrus economics, sugar policy, business retention and expansion, leadership development, consumer attitudes towards genetically modified food, and dairy marketing.

The Department offers a combined bachelor/master's degree program for the Master of Science and Master of Science with Concentration in Agribusiness. Contact the Graduate Program Office in 1170 McCarty Hall for information.

For more information, please see the program pages below, and see our website: http://www.fred.ifas.ufl.edu.

Other

Food and Resource Economics

College

Department/School

Food and Resource Economics Department

Food and Resource Economics Program Information

The Food and Resource Economics Department offers the Master of Agribusiness (M.AB) (non-thesis), Master of Science with Concentration in Agribusiness (M.S.AB.) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Ph.D. in Food and Resource Economics is designed to provide the student with rigorous training in economics, statistics, and applied quantitative techniques. Each student is exposed to core theory and to fields of specialization with the purpose to prepare the candidate for a professional career in post-secondary education, government, non-governmental organizations, private business, and international agencies.

The Master of Agribusiness is designed specifically for students with no academic background in economics or agricultural economics. The program is made up of students from diverse backgrounds including Accounting, Agricultural Education and Communication, Agricultural Operations Management, Animal Science, Business Administration, Finance, Food Science, Horticulture, Management, Turfgrass, and Wildlife Ecology and Conservation. The graduate coursework complements the student’s undergraduate background and prepare them for careers in financial analysis, sales, management, marketing, human resources, policy, production, and entrepreneurial pursuits working in private industry, international firms, non-profit organizations and government.

The Master of Science in the Food and Resource Economics Department provides broad training in applied economics as it relates to food production, marketing and trade, regional economics, and natural resource issues. Students are taught to use basic economic principles and quantitative methods to address empirical problems. The core consists of graduate level courses in microeconomics, policy, econometrics and survey research methods. Many students elect to continue their education with a Ph.D. degree while others opt for employment with government agencies, non-governmental organizations, foreign agencies, private consulting firms, or corporations.

The Master of Science with Concentration in Agribusiness is designed specifically for students with an educational background in economics and agricultural economics. The quantitative courses include microeconomics, policy, econometrics and survey research methods and provide solid economic theory to prepare students for careers in financial analysis, sales, management, marketing, human resources, policy, production, and entrepreneurial pursuits working in private industry, international firms, non-profit organizations and government.
For more information, please see our website: http://www.fred.ifas.ufl.edu

Degrees Offered with a Major in Food and Resource Economics

Doctor of Philosophy

without a concentration

with a concentration in Hydrologic Sciences

with a concentration in Toxicology

with a concentration in Tropical Conservation and Development

Master of Agribusiness

without a concentration

with a concentration in Tropical Conservation and Development

Master of Science

without a concentration

with a concentration in Agribusiness

with a concentration in Hydrologic Sciences

with a concentration in Toxicology
with a concentration in Tropical Conservation and Development

Courses

- AEB 5167: Economic Analysis in Small Farm Livelihood Systems
- AEB 5188: Economics of Agribusiness Decisions
- AEB 5326: Agribusiness Financial Management
- AEB 5516: Quantitative Methods in Agribusiness Decisions
- AEB 5757: Strategic Agribusiness Human Resource Management
- AEB 6106: Microeconomic Principles and Analysis
- AEB 6139: Strategic Agribusiness Management
- AEB 6145: Agricultural Finance
- AEB 6153: Agribusiness Risk Management
- AEB 6225: Public Policy and the Agribusiness Firm
- AEB 6301: Food Wholesale and Retail Marketing
- AEB 6363: Agricultural Marketing
- AEB 6385: Management Strategies for Agribusiness Firms
- AEB 6533: Static and Dynamic Optimization Models in Agriculture
- AEB 6553: Elements of Econometrics
- AEB 6592: Mathematical Programming for Economic Analysis
- AEB 6675: International Agribusiness Marketing
- AEB 6815: Science and Research Methodology
- AEB 6817: Survey Research Methods for Economists
- AEB 6906: Problems in Food and Resource Economics
- AEB 6910: Supervised Research
- AEB 6921: Workshop in Food and Resource Economics I
- AEB 6933: Special Topics
- AEB 6934: Workshop in Food and Resource Economics II
- AEB 6942: Advanced Applications in Agribusiness Experience
- AEB 6971: Research for Master's Thesis
- AEB 7108: Microeconomic Theory II
- AEB 7174: Economic Coordination and Organizational Behavior in Agribusiness
- AEB 7182: Agricultural Risk Analysis and Decision Making
- AEB 7184: Production Economics
- AEB 7240: Macroeconomic Theory in Open Economies II
- AEB 7373: Consumer Demand and Applied Analysis
- AEB 7453: Natural Resource and Environmental Economics
- AEB 7483: Seminar in Natural Resource and Environmental Economics
- AEB 7571: Econometric Methods I
- AEB 7572: Econometric Methods II
- AEB 7645: Economic Development and Agriculture
- AEB 7979: Advanced Research
- AEB 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Food Science and Human Nutrition Department

Chair: Susan S. Percival
Graduate Coordinators: Harry S. Sitren (M.S. in Food Science and Human Nutrition / Ph.D. in Food Science), James F. Collins (Ph.D. in Nutritional Sciences)

Complete faculty listing by department: Follow this link.

The Food Science and Human Nutrition Department (FSHN) is one of the world's largest combined academic programs where food science, nutritional sciences, and dietetics are all studied within one department. FSHN has nearly 30 full-time faculty members, 80 graduate assistants, and close to 1,000 undergraduate students. Our programs are accredited by the Institute of Food.
Technologists (IFT) and the Academy of Nutrition and Dietetics. After completing undergraduate degrees, our students typically move on to professional employment, further education or training in food or nutrition graduate programs, or to professional school programs. We have a strong record of excellent placement of our graduate students in industry and professional organization employment positions, as faculty members at colleges and universities, or in postdoctoral training experiences.

Our faculty has trained at institutions from around the world; they have been widely successful in their teaching, research, and extension efforts. Throughout our programs in food science, nutrition, and dietetics, our faculty is recognized nationally and internationally as experts in their respective fields.

The Food Science and Human Nutrition Department offers programs leading to the degrees of Master of Science in Food Science and Human Nutrition, Doctor of Philosophy in Food Science, and Doctor of Philosophy in Nutritional Sciences (offered under the auspices of the Center for Nutritional Sciences). Minimum requirements for these degrees are located in the Graduate Degrees section of this catalog.

For more information please click the links to the program pages below, or see our website: http://fshn.ifas.ufl.edu.

Other

Food Science

College

College of Agricultural and Life Sciences

Department/School

Food Science and Human Nutrition Department

Food Science Program Information

The Ph.D. program in Food Science is a multidisciplinary program consisting of Food Chemistry, Food Processing and Engineering, and Food Microbiology and Safety. Students are expected to obtain a breadth of food science knowledge by taking courses in all program areas with the majority of courses stressing one of the three areas of emphasis.

For further information, please see our website at: http://fshn.ifas.ufl.edu.

Doctor of Philosophy

without a concentration

collection in Toxicology

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6038: Advanced Dietetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II
- DIE 6949: Dietetic Internship in Sports Nutrition
- FOS 5525: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5561C: Citrus Processing Technology
- FOS 5645: Functional Foods and Nutraceuticals
- FOS 5732: Current Issues in Food Regulations
- FOS 5126C: Psychophysical Aspects of Foods
- FOS 6215: Principles of Food Safety
The M.S. program offers tracks in food science and in nutritional sciences. The Institute of Food Technologists and the American Society for Nutrition recognize these concentrations. The department also offers a combined Master of Science-Dietetics Internship (MS-DI) program accredited by the Commission on Accreditation for Dietetic Education (CADE). Students who complete this program are eligible to take the national registration examination to become a registered dietitian. Only graduates from a CADE accredited/approved Didactic Program in Dietetics are eligible for the MS-DI program.

Specific areas of study include nutritional biochemistry/molecular biology, nutrient function/metabolism, medical nutrition therapy/dietetics, nutritional immunology, food technology, food safety, and more.
processing/engineering, food chemistry/biochemistry, and food safety/microbiology/quality.

Applicants must have an adequate background in physical and biological sciences and food science or nutritional sciences. Students with specific deficiencies will be required to take prerequisite courses.

For further information, please see our website at: http://fshn.ifas.ufl.edu.

Degrees Offered with a Major in Food Science and Human Nutrition

Master of Science

without a concentration

concentration in Nutritional Sciences

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6908: Advanced Dietetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II
- DIE 6949: Dietetic Internship in Sports Nutrition
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Food Product Development
- FOS 5561C: Citrus Processing Technology
- FOS 5645: Functional Foods and Nutraceuticals
- FOS 5732: Current Issues in Food Regulations
- FOS 6125C: Sensory Evaluation of Food
- FOS 5126C: Psychophysical Aspects of Foods
- FOS 6215: Principles of Food Safety
- FOS 6216: Food Safety Systems
- FOS 6217: Food Safety, Sanitation, and Microbiology
- FOS 6226C: Advanced Food Microbiology
- FOS 6315C: Advanced Food Chemistry
- FOS 6317C: Flavor Chemistry and Technology
- FOS 6355C: Instrumental Analysis and Separations
- FOS 6428C: Advanced Food Processing
- FOS 6455C: Industrial Food Fermentations
- FOS 6736: Food Regulations
- FOS 6905: Problems in Food Science
- FOS 6910: Supervised Research
- FOS 6915: Research Planning
- FOS 6936: Topics in Food Science
- FOS 6938: Food Science Seminar
- FOS 6940: Supervised Teaching
- FOS 6971: Research for Master's Thesis
- FOS 7979: Advanced Research
- FOS 7980: Research for Doctoral Dissertation
- HUN 5246: Current Issues in Dietary Supplements
- HUN 5441: Metabolic Response to Enteral and Parenteral Nutrition
- HUN 5447: Nutrition and Immunity
- HUN 6245: Advanced Human Nutrition
- HUN 6255: Clinical Nutrition
- HUN 6301: Nutritional Aspects of Lipid Metabolism
- HUN 6305: Nutritional Aspects of Carbohydrates
- HUN 6321: Proteins and Amino Acids in Nutrition
- HUN 6331: Vitamins in Human Nutrition
- HUN 6356: Minerals in Nutrition
- HUN 6812C: Analytical Techniques in Nutritional Biochemistry
- HUN 6905: Problems in Nutritional Sciences
- HUN 6910: Supervised Research
The field of nutritional science has unprecedented public interest. This is fostered by evolving links between diet and health, and the impact of one's individual genetic makeup on nutrient utilization. The Ph.D. degree program in Nutritional Sciences is interdisciplinary, with participating CALS, COM, CLAS, and CVM faculty directing research of doctoral students, where the full spectrum of Nutritional Sciences is available. Emphasis areas include basic nutritional sciences, biochemistry and molecular biology, genetics, immunology, physiology, clinical nutrition, microbiology, and biostatistics.

Students are admitted to the program after the bachelor's degree or a master's degree in nutritional sciences or a related field. Applicants should have a strong undergraduate background in biological sciences and chemistry. Deficiencies may be made up during the first year of graduate study.

Additional information can be found at http://nutritionalsciences.centers.ufl.edu.

For additional information, e-mail Dr. Mitchell D. Knutson, Director at mknutson@ufl.edu or Dr. James F. Collins, Graduate Coordinator at jfcollins@ufl.edu.

 Degrees Offered with a Major in Nutritional Sciences

 Doctor of Philosophy

 without a concentration

 concentration in Clinical and Translational Science
Nutritional Sciences Program Core Courses

- BCH 6206: Advanced Metabolism
- HUN 6938: Nutritional Sciences Seminar
- STA 6166: Statistical Methods in Research I
- HUN 6301: Nutritional Aspects of Lipid Metabolism
- HUN 6305: Nutritional Aspects of Carbohydrates
- HUN 6321: Proteins and Amino Acids in Nutrition
- HUN 6331: Vitamins in Human Nutrition
- HUN 6356: Minerals in Nutrition

Additional Course Offerings

The following courses may be taken to contribute to the overall degree award requirements.

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6938: Advanced Dietetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II
- DIE 6949: Dietetic Internship in Sports Nutrition
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5561C: Citrus Processing Technology
- FOS 5645: Functional Foods and Nutraceuticals
- FOS 5732: Current Issues in Food Regulations
- FOS 6125C: Sensory Evaluation of Food
- FOS 6126C: Psychophysical Aspects of Foods
- FOS 6215: Principles of Food Safety
- FOS 6216: Food Safety Systems
- FOS 6217: Food Safety, Sanitation, and Microbiology
- FOS 6226C: Advanced Food Microbiology
- FOS 6315C: Advanced Food Chemistry
- FOS 6317C: Flavor Chemistry and Technology
- FOS 6355C: Instrumental Analysis and Separations
- FOS 6428C: Advanced Food Processing
- FOS 6455C: Industrial Food Fermentations
- FOS 6736: Food Regulations
- FOS 6905: Problems in Food Science
- FOS 6910: Supervised Research
- FOS 6915: Research Planning
- FOS 6936: Topics in Food Science
- FOS 6938: Food Science Seminar
- FOS 6940: Supervised Teaching
- FOS 6951: Research for Master's Thesis
- FOS 7979: Advanced Research
- FOS 7980: Research for Doctoral Dissertation
- HUN 5246: Current Issues in Dietary Supplements
- HUN 5441: Metabolic Response to Enteral and Parenteral Nutrition
- HUN 5447: Nutrition and Immunity
- HUN 6245: Advanced Human Nutrition
- HUN 6255: Clinical Nutrition
- HUN 6301: Nutritional Aspects of Lipid Metabolism
- HUN 6305: Nutritional Aspects of Carbohydrates
- HUN 6321: Proteins and Amino Acids in Nutrition
- HUN 6331: Vitamins in Human Nutrition
- HUN 6356: Minerals in Nutrition
- HUN 6912C: Analytical Techniques in Nutritional Biochemistry
- HUN 6905: Problems in Nutritional Sciences
- HUN 6910: Supervised Research
- HUN 6936: Topics in Nutritional Sciences
- HUN 6938: Nutritional Sciences Seminar
- HUN 6939: Advanced Clinical Nutrition
- HUN 6940: Supervised Teaching
- HUN 6971: Research for Master's Thesis
- HUN 7979: Advanced Research
- HUN 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses
Horticultural Sciences Department

College of Agricultural and Life Sciences

Chairs: K.M. Folta (Interim Chair, Horticultural Sciences) and W. Mackay (Environmental Horticulture)

Graduate Coordinator: G. A. Moore (Horticultural Sciences) and L. Trenholm (Environmental Horticulture)

Complete faculty listing: Follow this link.

The Horticultural Sciences Department Graduate Program at the University of Florida has a wide array of opportunities for graduate study.

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HSE) and Horticultural Sciences (HS) departments and offers graduate programs leading to the Master of Science (thesis or nonthesis options) and the Doctor of Philosophy degrees. Members of the program's Graduate Faculty include department resident faculty and faculty at University of Florida Research and Education Centers located throughout Florida.

The Horticultural Sciences Department offers a combined bachelor's/master's degree program. Please contact the graduate coordinator for information.

For admission to the HOS graduate program, apply to either the HS or HSE departments, depending on your career/research interest. Details about the program and how to apply are listed on their website: http://hos.ufl.edu.

Other

Horticultural Sciences

College

College of Agricultural and Life Sciences

Department/School

Horticultural Sciences Department

Environmental Horticulture Department

Horticultural Sciences Program Information

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HSE) and Horticultural Sciences (HS) departments and offers graduate programs leading to the Master of Science (thesis or nonthesis options) and the Doctor of Philosophy degrees. The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information. Members of the program's Graduate Faculty include department resident faculty and faculty at University of Florida Research and Education Centers located throughout Florida.

For admission to the HOS graduate program, apply to either the HS or HSE departments, depending on your career/research interest.

Requirements:
A strong undergraduate or graduate background in horticultural, biological, agronomic, or other disciplines in the life sciences and undergraduate coursework in chemistry, physics, and mathematics. A prospective graduate student need not have majored in horticulture as an undergraduate or master's student; however, students with curriculum deficiencies are required to take prerequisite subjects during the first year of graduate study. Undergraduate courses taken to correct curriculum deficiencies do not count for graduate program credit.

Specializations in the HS department focus on vegetable and fruit crops and include
- Plant Breeding and Genetics
- Crop Production and Nutrient Management
- Postharvest Biology
- Organic Sustainable Agriculture
- Weed Science
- Physiology and Biochemistry
- Plant Molecular Biology
- Protected Agriculture

Numerous HS and HSE faculty participate in the interdisciplinary Plant Molecular and Cellular Biology Program. Students interested in molecular biology/biotechnology may pursue molecular-oriented studies in any listed specialization. Students interested in full specialization in molecular and related disciplines should contact the Plant Molecular and Cellular Biology interdisciplinary program for specific requirements.
Specializations in the HSE department:
- Breeding and Genetics
- Restoration Ecology
- Floriculture
- Foliage Production
- Plant anatomy and development
- Plant Biotechnology
- Plant Restoration Conservation Biotechnology
- Stress Physiology
- Taxonomy
- Tissue Culture
- Turfgrass Science
- Woody Plants

Graduate School Degree Program Requirements Master of Science (thesis option):

Students must earn at least 30 credits as a graduate student at UF. No more than 9 of the 30 credits (earned with a grade of A, B+, or B) may be transferred from institutions approved for this purpose by the Dean of the Graduate School. A minimum of 12 credits is required in the Horticultural Sciences major; additionally, a maximum of 6 credits in HOS 6971- Master's Research may be counted toward the total credits. See here for information on M.S. graduate degree.

A minor may be chosen in an academic unit other than the major. If a minor is chosen, at least 6 credits of course work are required in the minor field. Two 6-credit minors may be taken with the major academic unit's permission. A 3.00 (truncated) GPA is required for minor credit. In addition, a representative from the department in which the minor is being received must be on the supervisory committee.

Master of Science non-thesis option:

This option offers additional training beyond the bachelor's degree in a horticultural specialization. Essential elements of this program include a program of courses and a comprehensive written and/or final oral qualifying examination. There is no thesis requirement. A minimum of 30 credit hours of course work is required. Courses taken for program credit must be numbered 5000 or higher with at least 15 of these credits in the Horticultural Science major. With supervisory committee and college dean approval, 6 hours of 3000- or 4000-level undergraduate courses, taught outside the major department, may count toward the minimum requirements for the degree. Click for information on all graduate degrees.

A minor may be chosen in an academic unit other than the major. If a minor is chosen, at least 6 credits of work are required in the minor field. Two 6-credit minors may be taken with the major academic unit's permission. A 3.00 (truncated) GPA is required for minor credit. In addition, a representative from the department in which the minor is being received must be on the supervisory committee.

Doctor of Philosophy:

The Doctor of Philosophy is a research degree and is granted on evidence of general proficiency, distinctive attainment in a special field, and ability to conduct independent investigation as demonstrated in a dissertation presenting original research with a high degree of literary skill. Consequently, doctoral programs are more flexible and varied than those leading to M.S. degree programs. The Ph.D. degree requires at least 90 credits beyond the bachelor's degree, although specific course requirements vary from field to field and from student to student. Up to 30 credits of master's degree may be transferred to a doctoral program. Any credits counted from an M.S. degree program must have been earned within the previous seven years (or by petition). The Graduate Council does not specify the courses required for the Ph.D. degree.

General requirements for the program include:
- a clear objective for research
- approval of the student's entire supervisory committee
- an appropriate number of credits of doctoral research

Click for information on all graduate degrees.

Minor:

With the supervisory committee's approval, the student may choose one or more minor fields. Minor work may be completed in any academic unit outside the major, if approved for M.S. or doctoral programs listed in this catalog. The collective grade for courses included in a minor must be "B" (3.00) or higher. If one minor is chosen, the supervisory committee number representing the minor suggests 12 to 24 credits of courses numbered 5000 or higher as preparation for a qualifying examination. Part of this credit may have been earned in the M.S. degree program. If two minors are chosen, each must include at least 8 credits. Competence in the minor area is demonstrated by written examination by the minor academic unit, or by the oral qualifying examination. Minor course work at the doctoral level may include courses in more than one academic unit, if the objective of the minor is clearly stated and the combination of courses is approved by the Graduate School (this approval is not required for a minor in one academic unit). Further requirements for the Master of Science and the Doctor of Philosophy degrees are listed under those headings in the General Information section of this catalog.

Degrees Offered with a Major in Horticultural Sciences

Doctor of Philosophy

without a concentration

concentration in Environmental Horticulture

concentration in Horticultural Sciences
concentration in Toxicology

Master of Science

without a concentration

concentration in Environmental Horticulture

concentration in Horticultural Sciences

Horticultural Sciences Program Courses

- ALS 6935: Topics in Biological Invasions
- BCH 5045: Graduate Survey of Biochemistry
- BOT 6936: Special Topics
- HOS 6934: Professional Seminar Preparation
- PLS 5222C: Propagation of Horticultural Crops
- PLS 5241C: Advanced Plant Micropropagation
- PLS 5405: Advanced Composting Technology

Additional Course Offerings

The following courses may be taken to contribute to the overall degree award requirements.

Horticultural Sciences Departmental Courses

- ALS 5934: Graduate Professional Development Seminar
- HOS 5085C: Principles of Postharvest Horticulture
- HOS 5115C: Horticultural Plant Morphology and Identification
- HOS 5242: Genetics & Breeding of Vegetable Crops
- HOS 5306: Molecular Biology of Plant Hormones
- HOS 5330: Postharvest Technologies for Horticultural Crops
- HOS 5432: Advanced Nutritional Management of Ornamental Crops
- HOS 5515C: Greenhouse and Nursery Operations
- HOS 5516C: Advanced Production of Greenhouse and Nursery Crops
- HOS 5565: Tropical Fruit Production and Research in Florida
- HOS 5711: Phytochemicals in Food & Health
- HOS 6201: Breeding Perennial Cultivars
- HOS 6236: Molecular Marker Assisted Plant Breeding
- HOS 6331: Postharvest Biology
- HOS 6345: Environmental Physiology
- HOS 6412: Nutrition of Horticultural Crops
- HOS 6523: Research and Development in Turfgrass Science
- HOS 6545: Advanced Citiculture I
- HOS 6546: Advanced Citiculture II
- HOS 6905: Problems in Horticultural Science
- HOS 6910: Supervised Research
- HOS 6931: Horticultural Science Seminar
- HOS 6932: Special Topics
- HOS 6940: Supervised Teaching
- HOS 6941: Practicum in Horticultural Science
- HOS 6971: Research for Master's Thesis
- HOS 7979: Advanced Research
- HOS 7980: Research for Doctoral Dissertation
College of Agricultural and Life Sciences Courses

- ORH 5026C: Advanced Annual and Perennial Gardening
- ORH 5086: Advanced Golf and Sports Turf Management
- ORH 5282: Orchid Biology and Culture
- ORH 5322C: Palm Biology and Culture
- ORH 5617C: Advanced Florida Native Landscaping
- ORH 7941: Doctor of Plant Medicine: Internship in Environmental Horticulture
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PLS 5222C: Propagation of Horticultural Crops
- PLS 5241C: Advanced Plant Micropropagation
- PLS 5405: Advanced Composting Technology

- ORH 5817C: Advanced Florida Native Landscaping
- ORH 5322C: Palm Biology and Culture
- ORH 5941: Doctor of Plant Medicine: Internship in Environmental Horticulture
- ORH 5817C: Advanced Florida Native Landscaping
- ORH 5322C: Palm Biology and Culture
- ORH 5941: Doctor of Plant Medicine: Internship in Environmental Horticulture
- ORH 5817C: Advanced Florida Native Landscaping
- ORH 5322C: Palm Biology and Culture
- ORH 5941: Doctor of Plant Medicine: Internship in Environmental Horticulture

Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
- BOT 5725C: Taxonomy of Vascular Plants
- BOT 5755C: Introductory Plant Physiology
- BOT 5905C: Plant Anatomy
- BOT 5935: Advanced Topics
- BOT 6566: Plant Growth and Development
- BOT 6716C: Advanced Taxonomy
- BOT 6726C: Principles of Systematic Biology
- BOT 6905: Individual Studies in Botany
- BOT 6910: Supervised Research
- BOT 6927: Advances in Botany
- BOT 6935: Special Topics
- BOT 6936: Graduate Student Seminar
- BOT 6940: Supervised Teaching
- BOT 6943: Internship in College Teaching
- BOT 6971: Research for Master's Thesis
- BOT 7979: Advanced Research
- BOT 7980: Research for Doctoral Dissertation
- PCB 5046C: Advanced Ecology
- PCB 5338: Principles of Ecosystem Ecology
- PCB 5356: Tropical Ecology
- PCB 6656C: Fungal Biology
- PLS 5222C: Propagation of Horticultural Crops
- PLS 5241C: Advanced Plant Micropropagation
- PLS 5405: Advanced Composting Technology
- PLS 5817C: Advanced Florida Native Landscaping
- PLS 5822C: Propagation of Horticultural Crops
- PLS 5922C: Palm Biology and Culture
- PLS 6505: Advanced Genetics
- PLS 6528: Plant Cell and Developmental Biology
- PLS 6540: Advanced Composting Technology

Microbiology and Cell Science Department

Chair: E. Triplett.
Graduate Coordinator: Tony Romeo.

Complete faculty listing by department: Follow this link.

Graduate study is offered leading to the Master of Science and Doctor of Philosophy degrees in microbiology and cell science, with emphasis in one or more of the disciplines of biochemistry, cell biology, and microbiology.

Requirements for these degrees are provided in the Graduate Degrees section of this catalog and also at the Department webpage: http://microcell.ufl.edu/.

Instruction and guidance are collaborative among faculty in the Colleges of Agricultural and Life Sciences, Liberal Arts and Sciences, and Medicine.

Research spans broad areas in the cellular and molecular aspects of bacterial, plant, and animal life functions: Areas of research include microbial biochemistry, biotechnology, biomass conversion, genetic and metabolic regulation, environmental microbiology, cell biology, molecular biology, molecular genetics, genomics and bioinformatics, immunology, virology, parasitology, host-pathogen interactions, cellular ultrastructure.

Prerequisites for admission to graduate study, in addition to those of the Graduate School, are a broad educational background including mathematics, physics, and chemistry through organic, analytical, and physical chemistry; basic courses in biology, botany, and/or zoology; and at least one course in microbiology and biochemistry. An undergraduate major in biochemistry,
physical or chemical science, engineering, or general biology may be an acceptable alternative to a degree in microbiology or cell science. Receipt of an advanced degree requires detailed knowledge in microbiology, biochemistry, and chemistry; undergraduate deficiencies may necessitate additional course work prior to entry into the graduate program.

In addition, the Microbiology and Cell Science Department also offers a combined B.S./M.S. program that allows qualified students to earn both the Bachelor's and Master's degrees with 12 credit hours of jointly counted course work. This program is considered a "4/1" because students may be awarded both degrees within a five-year period. For further information on this program, follow this link: [http://microcell.ufl.edu/graduate-program/combined-degree-program/](http://microcell.ufl.edu/graduate-program/combined-degree-program/).

Other

Microbiology and Cell Science

College

[College of Agricultural and Life Sciences](#)

Department/School

[Microbiology and Cell Science Department](#)

Degrees Offered with a Major in Microbiology and Cell Science

Doctor of Philosophy

without a concentration

concentration in Medical Microbiology and Biochemistry

concentration in Toxicology

Master of Science

without a concentration

concentration in Medical Microbiology and Biochemistry

Courses

- MCB 5205: Microbiology of Human Pathogens
- MCB 5252: Microbiology, Immunology, and Immunotherapeutics
- MCB 5305L: Microbial Genetics and Biotechnology Laboratory
- MCB 5408: Anaerobic Microbiology and Biotechnology
- MCB 5458: Energy Transformation in Microorganisms
- MCB 5505: General Virology
- MCB 6317: Molecular Biology of Gene Expression
- MCB 6318: Comparative Microbial Genomics
- MCB 6355: Microbial/Host Defense
  - MCB 6358
- MCB 6409: Microbial Cell Structure and Function
- MCB 6417: Microbial Metabolism and Energetics
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5912: Special Topics
- ALS 6946: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Plant Molecular and Cellular Biology Department

College of Agricultural and Life Sciences
College of Liberal Arts and Sciences
College of Medicine

Complete faculty listing by department: Follow this link

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology within the colleges of Agriculture and Life Sciences, Medicine, and Liberal Arts and Sciences.

Other

Plant Molecular and Cellular Biology

College

College of Agricultural and Life Sciences

Department/School

Plant Molecular and Cellular Biology Department

Plant Molecular and Cellular Biology Program Information

Director: Gloria A. Moore
Graduate Coordinator: Matias Kirst

Plant Molecular and Cellular Biology (PMCB) is an interdisciplinary and interdepartmental graduate degree program that emphasizes understanding the molecular and cellular mechanisms that mediate plant development, adaptation, and evolution. Students can pursue an M.S. or a Ph.D. degree through the PMCB program. All students complete core courses in Advanced Genetics, Plant Molecular Biology and Genomics, Plant Cellular and Developmental Biology, and Plant Biochemistry. In addition to the core classes, students can select from a variety of courses in biochemistry, molecular biology, physiology, breeding genetics, evolution, microbiology, and plant pathology.
New students are exposed to a variety of faculty and experimental systems while they rotate through several laboratories during their first two semesters before selecting an adviser and dissertation research area. Both M.S. and Ph.D. students take four required courses: PCB 5065 Advanced Genetics, PCB 5530 Plant Molecular Biology and Genomics, PCB 6528 Plant Cell and Developmental Biology and BOT 6935 Plant Biochemistry, as well as journal colloquium classes (PCB 7922 Journal Colloquium). Additional elective courses are taken after approval by the student's supervisory committee. For additional information see [http://pmcb.ifas.ufl.edu](http://pmcb.ifas.ufl.edu).

Successful candidates should have a strong interest in plant molecular and cellular mechanisms controlling development, metabolism, adaptation, and evolution. Applicants typically have a B.S. or M.S. in the agricultural, forestry, biological or chemical sciences with advanced undergraduate coursework in genetics, molecular and cellular biology, and biochemistry. However, outstanding students from a broad range of science disciplines are actively considered.

Degrees Offered with a Major in Plant Molecular and Cellular Biology

**Doctor of Philosophy**

without a concentration

concentration in Toxicology

**Master of Science**

**Plant Molecular and Cellular Biology Courses**

- BOT 6935: Special Topics
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6910: Supervised Research
- PCB 6937: Special Topics in Plant Molecular and Cellular Biology
- PCB 6971: Research for Master's Thesis
- PCB 7922: Journal Colloquium in Plant Molecular and Cellular Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation

**College of Agricultural and Life Sciences Courses**

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

**Plant Pathology Department**

Chair: R. Loria
Graduate Coordinators: J. Jones

Complete faculty listing by department: [Follow this link](http://pmcb.ifas.ufl.edu).
The Department of Plant Pathology offers graduate studies leading to the Master of Science (thesis and non-thesis option) and Doctor of Philosophy degrees. The Department also participates in the Doctor of Plant Medicine interdisciplinary professional degree.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Plant Pathology

College

College of Agricultural and Life Sciences

Department/School

Plant Pathology Department

Plant Pathology Program Information

A student may pursue studies in one of several basic areas of plant pathology. These areas include fungal plant pathology, plant bacteriology, plant virology, diagnostics, control, and also molecular and biochemical aspects of host-pathogen systems, biological control of pathogens and weeds, epidemiology, etiology, genetics of host-pathogen systems, soil microbiology, and pathogen taxonomy. In Florida, the variety of cultivated plants, coupled with an environment ideal for plant disease development, offers the student opportunities to study diseases of many crops as they develop. First-hand knowledge can be gained of diseases of field, fruit, ornamental, pasture, range, turf, and vegetable crops in temperate, subtropical, and tropical environments. Students who anticipate study in plant pathology at the University of Florida should include in their undergraduate programs training in botany, chemistry (through biochemistry), genetics, and microbiology.

Courses in nematology are offered by the Department of Entomology and Nematology.

Degrees Offered with a Major in Plant Pathology

Doctor of Philosophy

without a concentration

concentration in Toxicology

Master of Science

Plant Pathology Departmental Courses

- PLP 5005C: General Plant Pathology
- PLP 5102: Theory and Practice of Plant Disease Control
- PLP 5115C: Citrus Pathology
- PLP 5155: Microbiological Control of Plant Diseases and Weeds
- PLP 6556C: Fungal Biology
- PLP 6223C: Viral Pathogens of Plants
- PLP 6241C: Bacterial Plant Pathogens
- PLP 6262C: Fungal Plant Pathogens
- PLP 6291: Plant Disease Diagnosis
- PLP 6303: Host-Parasite Interactions II
- PLP 6404: Epidemiology of Plant Disease
College of Agricultural and Life Sciences Courses

- PLP 6502: Host-Parasite Interactions I
- PLP 6621C: Pop Genetics Microbes
- PLP 6905: Problems in Plant Pathology
- PLP 6910: Supervised Research
- PLP 6921: Colloquium in Principles of Plant Pathology
- PLP 6932: Seminar in Plant Pathology
- PLP 6940: Supervised Teaching
- PLP 6942: Professional Internship in Plant Disease Clinic
- PLP 6971: Research for Master's Thesis
- PLP 7946: Plant Pathology Internship
- PLP 7979: Advanced Research
- PLP 7990: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

School of Forest Resources and Conservation

College of Agricultural and Life Sciences

Director: T. L. White.
Graduate Coordinator: T. V. Stein

Complete faculty listing by department: Follow this link.

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/environment, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Joint program: Students may simultaneously earn a juris doctorate from the College of Law and a graduate degree (M.F.R.C., M.S., or Ph.D.) in Forest Resources and Conservation.

Combined programs: The School offers a combined bachelor's/master's degree program, which allows qualified students to earn both a bachelor's degree and a master's degree with a savings of 1 semester. Ph.D. students may pursue a co-major with the Department of Statistics (see below).

Concentration in geomatics: Students completing 15 or more credits with an SUR designation, as part of an SFRC graduate degree, may earn the concentration in geomatics. Geomatics is the collection, analysis, and management of spatial information and includes such fields as surveying, mapping, land tenure, cadastral systems, geographic information systems, and remote sensing.

Concentration in ecological restoration: This concentration is available to M.S. non-thesis students. To earn this concentration a student must complete Ecosystem Restoration Principles and Practice and four of the following courses: Ecological Distribution and Management of Invasive Plants, Ecology and Restoration of Invasive Ecosystems, Ecology and Restoration of Longleaf Pine Ecosystem, Watershed Restoration and Management, Natural Resource Policy and Administration, or Agroforestry in the Southeastern US. Ecological restoration seeks to return ecosystems to a closer approximation of condition before a disturbance.

Statistics co-major: Ph.D. students with the School may elect the co-major offered jointly with the Department of Statistics. Students focusing on forest genetics, tree improvement, and other statistics-intensive aspects of natural resource management are potential candidates for this option.

Certificates: The School administers the Graduate Certificate in Agroforestry, and SFRC students regularly earn certificates in Geographic Information Systems and in Environmental Education and Communication. Requirements are described under Interdisciplinary Graduate Certificates and Concentrations in this catalog.

For additional information, please visit the School's web page at http://sfrc.ufl.edu.

For details on what terms courses will be offered, please visit http://sfrc.ufl.edu/gradcourses.html.

Other

Fisheries and Aquatic Sciences

College

College of Agricultural and Life Sciences
School of Forest Resources and Conservation

Fisheries and Aquatic Sciences Program

Director: T. L. White
Graduate Coordinator: William J. Lindberg

Complete faculty listing by department: Follow this link.

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas.

The School's program in Fisheries and Aquatic Sciences leads to the Master of Science, Master of Fisheries and Aquatic Sciences (nonthesis), and Doctor of Philosophy degrees with a program in Fisheries and Aquatic Sciences. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Fisheries and Aquatic Sciences program also offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

The School of Forest Resources and Conservation's program in Fisheries and Aquatic Sciences conducts research, teaching, and extension programs in four broad areas:

- Sustainable fisheries
- Aquaculture
- Aquatic animal health
- Conservation and management of aquatic environments

Faculty encompass both freshwater and marine environments, as well as managed aquaculture systems. Collaborators include the UF College of Veterinary Medicine, National Biological Survey, National Marine Fisheries Service, Harbor Branch Oceanographic Institute, Mote Marine Laboratory, the US Geologic Survey, the Florida Fish and Wildlife Conservation Commission, and others. Academic programs are structured to emphasize direct engagement of students with faculty. Further information, including specific degree options, faculty biographies, and information on the admissions process, is available at: http://sfrc.ufl.edu.

Degrees Offered with a Major in Fisheries and Aquatic Sciences

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

Master of Fisheries and Aquatic Sciences

without a concentration

concentration in Geographic Information Systems
concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mapping
- SUR 5385: Remote Sensing Applications
- SUR 5386: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
- SUR 5425: Cadastral Information Systems
- SUR 5525: Least Squares Adjustment Computations
- SUR 6375: Terrain Analysis and Mapping
- SUR 6395: Topics in Geographic Information Systems
- SUR 6427: Land Tenure and Administration
- SUR 6535: GPS-INS Integration
- SUR 6905: Special Problems in Geomatics
- SUR 6934: Topics in Geomatics

Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5278C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5901: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Phycology
- FAS 6256: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6932: Special Topics in Fisheries and Aquatic Sciences
- FAS 6933: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
- FAS 6940: Supervised Teaching
- FAS 6971: Research for Master's Thesis
- FAS 7979: Advanced Research
Forest Resources and Conservation Program Courses

- FAS 7980: Research for Doctoral Dissertation

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6564: Ecohydrology
- FOR 5157: Ecosystem Restoration Principles and Practice
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6628: Community Forest Management
- FOR 6665: Landscape Planning for Ecotourism
- FOR 6905: Research Problems in Forest Resources and Conservation
- FOR 6910: Supervised Research
- FOR 6933: Seminar
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 6940: Supervised Teaching
- FOR 6941: Research for Master's Thesis
- FOR 7970: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6555: Introduction to Quantitative Genetics

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Forest Resources and Conservation

College

College of Agricultural and Life Sciences

Department/School

School of Forest Resources and Conservation

Forest Resources and Conservation Program Information

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and...
recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas.

The SFRC offers graduate programs leading to the Master of Forest Resources and Conservation (professional, non-thesis), Master of Science (thesis and non-thesis), and Doctor of Philosophy degrees in Forest Resources and Conservation. The Master of Science non-thesis degree may be taken entirely online. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Forest Resources and Conservation program prepares students to work with the ecological, economic, and social aspects of natural resources, including the management of spatial information gathered through traditional surveying as well as remote sensing. Faculty have a wide variety of specializations, including fire ecology, land tenure, tree genetics, recreation management, environmental education, geographic information systems, silviculture, forest economics, and environmental policy. Further information, including specific degree options, faculty biographies, and information on the admissions process, is available at: http://sfrc.ufl.edu.

Degrees Offered with a Major in Forest Resources and Conservation

Doctor of Philosophy

without a concentration

concentration in Agroforestry

concentration in Geographic Information Systems

concentration in Geomatics

concentration in Hydrologic Sciences

concentration in Natural Resource Policy and Administration

concentration in Tropical Conservation and Development

concentration in Toxicology

concentration in Wetland Sciences

Master of Forest Resources and Conservation

without a concentration
concentration in Agroforestry

concentration in Geographic Information Systems

concentration in Geomatics

concentration in Natural Resource Policy and Administration
concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Agroforestry

concentration in Ecological Restoration

concentration in Geographic Information Systems

concentration in Geomatics

concentration in Hydrologic Sciences

concentration in Natural Resource Policy and Administration

concentration in Tropical Conservation and Development
concentration in Wetland Sciences

School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mapping
- SUR 5385: Remote Sensing Applications
- SUR 5386: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
- SUR 5425: Cadastre Information Systems
- SUR 5525: Least Squares Adjustment Computations
- SUR 6375: Terrain Analysis and Mapping
- SUR 6395: Topics in Geographic Information Systems
- SUR 6427: Land Tenure and Administration
- SUR 6535: GPS-INS Integration
- SUR 6905: Special Problems in Geomatics
- SUR 6934: Topics in Geomatics

Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5276C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5901: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Physiology
- FAS 6256: Fish and Aquatic Invertebrate Histology
- FAS 6272: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6903: Special Topics in Fisheries and Aquatic Sciences
- FAS 6903: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
- FAS 6940: Supervised Teaching
- FAS 6971: Research for Master's Thesis
- FAS 7979: Advanced Research
- FAS 7980: Research for Doctoral Dissertation

Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Forestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6564: Ecosystem Restoration Principles and Practice
- FOR 5157: Forest Ecology
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6628: Community Forest Management
- FOR 6665: Landscape Planning for Ecotourism
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

School of Natural Resources and Environment

Graduate coordinator: T. Frazer

Complete faculty listing by department: [Follow this link](http://sfrc.ufl.edu/fish/people/).

The University of Florida School of Natural Resources and Environment offers interdisciplinary coursework in the basic and applied science of ecology, the related social sciences, and sustainability, leading to M.S. and Ph.D. degrees. Choose from about 450 courses, 280 faculty advisors, and 44 participating departments. Research areas of ecology graduate students range across natural resource ecology, environmental policy and management, and sustainable development.

Environmental problems are fundamentally human problems and should be understood in terms of human motivations and actions in a biophysical context. Their solution requires holistic thinking about dynamic ecological systems and the social, economic, and political forces driving human action. To this end, the goal of the Interdisciplinary Ecology graduate program is to provide advanced training in eco-system thinking and the main theories and methodologies of the biophysical and social sciences to foster integrative approaches to complex real-world problems. Interdisciplinary Ecology students are intensely interested in the sustainability problem, and they welcome the challenge of addressing it through more than one traditional discipline.

Other

Interdisciplinary Ecology

College

College of Agricultural and Life Sciences

Department/School

School of Natural Resources and Environment

Interdisciplinary Ecology Program

Director of Academic Programs and Graduate Coordinator: T. Frazer

Graduate students are advised by one of the 280 members of the School's affiliate faculty and have a supervisory committee with interdisciplinary composition. For the list of Graduate Faculty, see [https://sfrc.ufl.edu/fish/people/](https://sfrc.ufl.edu/fish/people/). Graduate students are hosted in one of 44 participating academic units.

The School offers a program of study leading to the Master of Science (thesis and non-thesis options), and Doctor of Philosophy degrees in interdisciplinary ecology. Minimum requirements for these degrees are given in the [Graduate Degrees](http://www.snre.ufl.edu/) section of this catalog. The course work requirements and curriculum are described in more detail at [http://www.snre.ufl.edu/](http://www.snre.ufl.edu/). Choices among 450 courses are custom-fitted by the student and the supervisory committee to meet the student's specific needs and interests.

The Interdisciplinary Ecology Program views the social-ecological system as the proper framework for addressing the full scope of complex, adaptive systems comprising humans in the natural world. The degree program challenges students to understand both natural and human dynamics to obtain a holistic view and to foster integration of human activities with natural resources and the environment. The learning outcomes of the program are to develop a thorough understanding of the components, processes, and interactions of the social-ecological system, competence in scientific research methodologies, and experience in professional interaction with peers.
The degree programs combine 1) course work in the science of ecology and additional natural and social sciences; and 2) competence in a recognized discipline in one of these fields of study. The former is achieved with a core-course and distribution requirement and the latter by extra course work for the master's and a concentration for the doctoral degree. A thesis or dissertation provides first-hand experience creating scientific knowledge. The non-thesis master's option provides rapid, advanced preparation for the job market in 3 to 4 semesters, without research experience. Course requirements are 36 semester hours for the thesis option, 38 hours for the non-thesis option, and 60 hours beyond the master's degree for the doctoral degree.

Degrees Offered with a Major in Interdisciplinary Ecology

Doctor of Philosophy

without a concentration

concentration in Agricultural and Biological Engineering

concentration in Agricultural Education and Communication

concentration in Agronomy

concentration in Anthropology

concentration in Architecture

concentration in Biochemistry and Molecular Biology

concentration in Botany

concentration in Business Administration

concentration in Chemistry

concentration in Civil Engineering

concentration in Climate Science
concentration in Coastal and Oceanographic Engineering

concentration in Economics

concentration in English

concentration in Entomology and Nematology

concentration in Environmental Engineering Sciences

concentration in Family, Youth and Community Sciences

concentration in Farming Systems

concentration in Fisheries and Aquatic Sciences

concentration in Food and Resource Economics

concentration in Food Science

concentration in Forest Resources and Conservation

concentration in Foundations of Education

concentration in Geographic Information Systems

concentration in Geography

concentration in Geology
concentration in Health and Human Performance

concentration in Horticultural Sciences

concentration in Hydrologic Sciences

concentration in Landscape Architecture

concentration in Mathematics

concentration in Microbiology and Cell Science

concentration in Nuclear and Radiological Engineering

concentration in Philosophy

concentration in Political Science

concentration in Religion

concentration in Sociology

concentration in Soil and Water Science

concentration in Statistics

concentration in Tropical Conservation and Development
concentration in Urban and Regional Planning

concentration in Veterinary Medical Sciences

concentration in Wetland Sciences

concentration in Wildlife Ecology And Conservation

concentration in Women's/Gender Studies

concentration in Zoology

Master of Science

without a concentration

concentration in Agricultural and Biological Engineering

concentration in Agricultural Education and Communication

concentration in Agronomy

concentration in Anthropology

concentration in Architecture

concentration in Biochemistry and Molecular Biology

concentration in Botany
concentration in Business Administration

concentration in Chemistry

concentration in Civil Engineering

concentration in Climate Science

concentration in Coastal and Oceanographic Engineering

concentration in Economics

concentration in English

concentration in Entomology and Nematology

concentration in Environmental Engineering Sciences

concentration in Family, Youth and Community Sciences

concentration in Farming Systems

concentration in Fisheries and Aquatic Sciences

concentration in Food and Resource Economics

concentration in Food Science

concentration in Forest Resources and Conservation
concentration in Foundations of Education

concentration in Geographic Information Systems

concentration in Geography

concentration in Geology

concentration in Health and Human Performance

concentration in Horticultural Sciences

concentration in Hydrologic Sciences

concentration in Landscape Architecture

concentration in Mathematics

concentration in Microbiology and Cell Science

concentration in Nuclear and Radiological Engineering

concentration in Philosophy

concentration in Political Science

concentration in Religion
concentration in Sociology

concentration in Soil and Water Science

concentration in Statistics

concentration in Tropical Conservation and Development

concentration in Urban and Regional Planning

concentration in Veterinary Medical Sciences

concentration in Wetland Sciences

concentration in Wildlife Ecology And Conservation

concentration in Women's/Gender Studies

concentration in Zoology

Courses

- www.snre.ufl.edu/graduate/curriculum.htm
- EVR 5322: Scientific Processes in Conservation and Development
- EVR 5705: Natural Resources and Innovation Systems
- EVR 6320: Sustainable Natural Resource Management
- EVR 6933: Seminar
- EVR 6934: Internship
- EVR 6979: Nonthesis Master's Project
- PCB 6971: Research for Master's Thesis
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
Soil and Water Science Department

Chair: K. Ramesh Reddy  
Graduate Coordinator: Max Teplitski

Complete faculty listing by department: Follow this link.

The Soil and Water Science Department offers Master of Science (thesis or professional non-thesis option) and Doctor of Philosophy degrees in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The department also offers Master of Science (thesis or professional option) specialization in environmental science via distance education for place bound students (http://soils.ifas.ufl.edu/distance). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Two SWSD programs are designed to meet the changing needs of the clientele at state, national and international levels. To meet new challenges and explore new opportunities, the SWSD's research, teaching, and extension programs are focused in five areas, with broader implication to water quality, carbon sequestration, greenhouse gases, and climate change:

- Nutrient, Pesticide, and Waste Management
- Soil, Water, and Aquifer Remediation
- Carbon Dynamics and Ecosystem Services
- Landscape Analysis and Modeling
- Wetlands and Aquatic Ecosystems

The Department offers graduate level certificates in Biodegradation and Remediation, Sustainable Land Resource and Nutrient Management, Soil Ecosystem Services, and Wetland and Water Resource Management for both on-campus students and via distance education for place bound students (http://soils.ifas.ufl.edu/academics/degree-certificates.shtml).

An additional option offered by the Department is a combined bachelor's/master's degree program that permits a B.S. in Soil and Water Science or Interdisciplinary Studies – Environmental Management in Agriculture and Natural Resources and M.S. Degree to be completed in five years. Contact the graduate coordinator for more information.

For more information, please see the program page below and our website: http://soils.ifas.ufl.edu.

Other

Soil and Water Science

College

College of Agricultural and Life Sciences

Department/School

Soil and Water Science Department

Soil and Water Science Program Information

The Soil and Water Science Department offers Master of Science (thesis or professional non-thesis option) and Doctor of Philosophy degrees in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The department also offers Master of Science (thesis or professional option) specialization in environmental science via distance education for place bound students (http://soils.ifas.ufl.edu/distance). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Students can also develop specializations in several interdisciplinary areas including biogeochemistry, ecology, geographic information systems, hydrologic science, tropical agriculture, turfgrass management, and wetland science. The Department emphasizes (but is not limited to) the following research areas:

- Nutrient, Pesticide, and Waste Management
- Soil, Water, and Aquifer Remediation
- Carbon Dynamics and Ecosystem Services
- Landscape Analysis and Modeling
- Wetlands and Aquatic Ecosystems

Interests of the student and faculty, the facilities, and funding available will determine the student's research area. A specific program of study is prepared by an appointed supervisory committee for each student. Students will present a thesis or dissertation in their major field (M.S. thesis option and Ph.D.). In addition, Ph.D. candidates must pass a qualifying examination covering several areas of soil and water science and related fields.
Prerequisites: Students who expect to do graduate work in the Soil and Water Science Department should hold a bachelor's degree from an accredited college or university with a major in soil and water science or the equivalent background in another field of science. Graduate students should have backgrounds in biology, chemistry, physics, and mathematics and knowledge of basic soil and water science.

For more information, please see our website: [http://soils.ifas.ufl.edu](http://soils.ifas.ufl.edu).

Degrees Offered with a Major in Soil and Water Science

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Agroecology

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development
concentration in Wetland Sciences

Soil and Water Science Departmental Courses

- ALS 5027: Reusable Learning Objects
- ALS 5155: Global Agroecosystems
- CWR 6537: Contaminant Subsurface Hydrology
- SWS 5050: Soils for Environmental Professionals
- SWS 5050L: Soils for Environmental Professionals Laboratory
- SWS 5115: Environmental Nutrient Management
- SWS 5132: Tropical Soil Management
- SWS 5182: Earth System Analysis
- SWS 5208: Sustainable Agricultural and Urban Land Management
- SWS 5234: Environmental Soil, Water, and Land Use
- SWS 5235: South Florida Ecosystems
- SWS 5224: Environmental Biogeochemistry
- SWS 5246: Water Resource Sustainability
- SWS 5247: Hydric Soils
- SWS 5248: Wetlands and Water Quality
- SWS 5305C: Soil Microbial Ecology
- SWS 5308: Ecology of Waterborne Pathogens
- SWS 5406: Soil and Water Chemistry
- SWS 5424C: Soil Chemical Analysis
- SWS 5551: Soils, Water, and Public Health
- SWS 5605C: Environmental Soil Physics
- SWS 5716C: Environmental Pedology
- SWS 5721C: GIS in Land Resource Management
- SWS 5805: Environmental Soil and Water Monitoring Techniques
- SWS 6134: Soil Quality
- SWS 6136: Soil Fertility
- SWS 6161: Bioavailability of Soil Nutrients
- SWS 6262: Soil Contamination and Remediation
- SWS 6323: Advanced Microbial Ecology
- SWS 6325: Rhizosphere Biochemistry
- SWS 6366: Biodegradation and Bioremediation
- SWS 6448: Biogeochemistry of Wetlands and Aquatic Systems
- SWS 6454: Advanced Soil and Water Chemistry
- SWS 6456: Advanced Biogeochemistry
- SWS 6464C: Soil Mineralogy
- SWS 6622: Vadose Zone Hydrology
- SWS 6722: Soil-Landscape Modeling
- SWS 6905: Special Problems
- SWS 6910: Supervised Research
- SWS 6931: Seminar
- SWS 6932: Topics in Soils
- SWS 6940: Supervised Teaching
- SWS 6971: Research for Master's Thesis
- SWS 7979: Advanced Research
- SWS 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Wildlife Ecology and Conservation Department

College of Agricultural and Life Sciences

Chair: Eric C. Hellgren
Graduate Coordinator: Kathryn E. Sieving

Complete faculty listing by department: [Follow this link](file:///C:/Users/beloved/AppData/Local/Temp/Temp2_2014-2015-Graduate-Catalog-2015-01-30-16-02-58.zip/14-15-Caitlin-Test-1.html)
The Department of Wildlife Ecology and Conservation offers Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees in wildlife ecology and conservation. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Program emphases include wildlife biology, ecology, and management; landscape ecology and restoration; human dimensions; tropical and international conservation; and conservation education. Graduate students should have appropriate undergraduate training in the biological, social, and physical sciences including physics, chemistry, and mathematics. Students with inadequate backgrounds may be required to take (without credit at the graduate level) remedial undergraduate courses pertinent to their fields of interest.

For more information, please see our website: http://www.wec.ufl.edu.

Other

Wildlife Ecology and Conservation

College

College of Agricultural and Life Sciences

Department/School

Wildlife Ecology and Conservation Department

Wildlife Ecology and Conservation Program

The Department of Wildlife Ecology and Conservation offers a breadth of graduate programs that are designed to prepare students for professional employment in conservation of natural resources in a changing world. WEC faculty teach, conduct research, and provide service and extension in the following areas: avian ecology, behavioral ecology, community ecology, conservation biology, conservation education, conservation genetics, ecosystem management, environmental interpretation, habitat restoration, herpetofaunal ecology, human dimensions of wildlife management, international conservation, introduced species, landscape ecology, mammalian behavior, marine mammal ecology, plant ecology, population biology, range ecology, systems ecology, tropical conservation, urban wildlife relations, wetlands ecology, wildlife diseases, and wildlife management.

The Doctor of Philosophy (PhD) program in Wildlife Ecology and Conservation serves graduate students conducting advanced, original studies of fundamental ecological and social sciences (e.g., ecosystem, community, landscape ecology, human dimensions), usually with applications to further society's understanding of wildlife ecology and to improve conservation of wildlife resources.

The Master of Science (MS) thesis program in Wildlife Ecology and Conservation: (a) prepares graduate students for entry-level professional positions in areas of wildlife biology and ecology, natural resource management, conservation, and (b) provides a solid scientific foundation for further graduate work leading to the PhD degree.

The Master of Science, non-thesis (MS) program in Wildlife Ecology and Conservation provides advanced training for students in technical and professional aspects of wildlife management, conservation, and public education, emphasizing written and oral communication of scientific information.

For more information, please see our website: http://www.wec.ufl.edu.

Degrees Offered with a Major in Wildlife Ecology and Conservation

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences
Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- WIS 5323C: Impact of Diseases on Wildlife Population
- WIS 5496: Research Design in Wildlife Ecology
- WIS 5521: Plant-Animal Interactions
- WIS 5555C: Conservation Biology
- WIS 6444: Advanced Wetlands Ecology
- WIS 6455: Wildlife Population Ecology
- WIS 6466: Wildlife Population Modeling
- WIS 6468C: Pattern and Process in Landscape Ecology
- WIS 6525: Environmental Interpretation
- WIS 6544: Administration in Natural Resources
- WIS 6575: Mammalian Carnivores: Conservation and Management Issues
- WIS 6578: Human Dimensions of Biological Conservation
- WIS 6905: Research Problems in Wildlife and Range Sciences
- WIS 6910: Supervised Research
- WIS 6933: Seminar
- WIS 6934: Topics in Wildlife and Range Sciences
- WIS 6940: Supervised Teaching
- WIS 6971: Research for Master's Thesis
- WIS 6543: Wildlife and Agriculture
- WIS 7979: Advanced Research
- WIS 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

School of Art and Art History

College of the Arts
The School of Art and Art History offers the M.F.A. degree in art with specializations in art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. The school also offers Master of Arts degrees in art education, art history, and museology (museum studies) and the Doctor of Philosophy degree in art history. Requirements for these degrees can be found in the Graduate Degrees section of this catalog, and information about each of these graduate programs can be found at the links below.

For more information, please see our website: http://www.arts.ufl.edu/welcome/art

Other

Art

College

College of the Arts

Department/School

School of Art and Art History

Art Program

Master of Fine Arts degree: The school offers the M.F.A. degree in art with specializations in art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. Enrollment is competitive and limited. Candidates for admission should have adequate undergraduate training in art. Deficiencies may be corrected before beginning graduate study. Applicants must submit a portfolio for admission consideration (for comprehensive admission information: http://www.arts.ufl.edu/programs/grad.aspx). A minimum of 3 years residency is normally needed to complete the requirements for this degree, which for studio students culminates with an M.F.A. exhibition.

The M.F.A. requires a minimum of 60 credit hours. 24 hours must be in an area of specialization. Normal course requirements include:

- 12 hours of studio electives outside the area of specialization
- 6 hours of art history electives
- 3 hours of outside SA+AH electives (research/discipline appropriate)
- 6 hours of electives
- 6 hours of individual project or thesis research.

Although the M.F.A. is a thesis degree, students usually produce a creative project in lieu of thesis. Students should see the graduate program adviser for the School's requirements for the creative project.

Degrees Offered with a Major in Art

Master of Fine Arts

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
ARH 5440: Beginnings of Modernism
ARH 5527: Arts of Central Africa
ARH 5528: Art of West Africa
ARH 5529: Clothing and Textiles in Africa
ARH 5555: Indigenous American Art
ARH 5567: Colonial Andean Art
ARH 5816: Methods of Research and Bibliography
ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
ARH 5905: Individual Study
ARH 6141: Greek Art Seminar
ARH 6292: Medieval Art Seminar
ARH 6394: Renaissance Art Seminar
ARH 6422: Beginnings of Modernism. Realism to Post-Impressionism 1848-1890
ARH 6477: Eighteenth-Century European Art Seminar
ARH 6481: Contemporary Art Seminar
ARH 6496: Modern Art Seminar
ARH 6596: Chinese Art Seminar
ARH 6597: African Art Seminar
ARH 6654: Pre-Columbian Art Seminar
ARH 6686: Colonial Latin American Art Seminar
ARH 6694: Nineteenth-Century Art–Seminar
ARH 6696: American Art Seminar
ARH 6797: Museum Education
ARH 6836: Exhibitions Seminar
ARH 6895: Collections Management Seminar
ARH 6900: Independent Study in Museology
ARH 6910: Supervised Research
ARH 6911: Advanced Study
ARH 6914: Independent Study in Ancient Art History
ARH 6915: Independent Study in Medieval Art History
ARH 6916: Independent Study in Renaissance and Baroque Art History
ARH 6917: Independent Study in Modern Art History
ARH 6918: Independent Study in Non-Western Art History
ARH 6930: Special Topics in Museology
ARH 6938: Seminar in Museum Studies
ARH 6941: Supervised Internship
ARH 6946: Museum Practicum
ARH 6948: Gallery Practicum
ARH 6971: Research for Master's Thesis
ARH 7979: Advanced Research
ARH 7980: Research for Doctoral Dissertation
ART 5674C: Digital Fabrication
ART 5905C: Directed Study
ART 5930C: Special Topics
ART 6410C: Printmaking Seminar: Mastering Process and Content
ART 6411C: Printmaking Seminar: Transformation and Change
ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
ART 6413C: Printmaking Seminar: Interdisciplinary Studio
ART 6671C: Advanced Experiments in Digital Art
ART 6672: Hypermedia
ART 6673C: Video Art
ART 6675C: Digital Art and Animation
ART 6691: Digital Art Studio
ART 6794C: Vessel Aesthetic 1
ART 6795C: Vessel Aesthetic 2
ART 6797C: Ceramic Sculpture 2
ART 6835C: Research in Methods and Materials of the Artist
ART 6849C: Reactive Environments
ART 6897: Professional Practices for the Visual Artist
ART 6910C: Supervised Research
ART 6925C: Art + Technology Workshop
ART 6926C: Advanced Study I
ART 6927C: Advanced Study II
ART 6928C: Advanced Study III
ART 6929C: Advanced Study IV
ART 6933: Area Methods: Rotating Topics
ART 6971: Research for Master's Thesis
ART 6973C: Individual Project
DIG 6746C: Graduate Seminar in Sensors and Electronics
IDC 6505C: Programming for Artists

College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6942: Arts in Medicine Graduate Practicum
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management
Art Education

College

College of the Arts

Department/School

School of Art and Art History

Art Education Program

Master of Arts degree in Art Education: The School offers the M.A. in art education. In addition to meeting requirements of the Graduate School for admission, prospective students should:

- Hold a degree in studio art, art history, design, or art education
- Send up to 10 images of original works of art (on CD or in slide form) and a research paper, article, or other sample of academic writing
- Official transcripts from all colleges/universities previously attended
- Statement of professional goals for attending graduate school and earning an M.A. degree in art education
- Current Curriculum Vitae or Resume
- Submit three current letters of recommendation.

The M.A. in art education requires a minimum of 36 credit hours. ARE 6049, ARE 6148, and ARE 6641 are required. The basic plan of study includes 3 credits of an approved art education elective; 9 credits in studio courses; 3 credits in art history; 6 credits in art history, studio, art education, or education electives; 3 credits of ARE 6746; and 3 credits of ARE 6971 or ARE 6973. To be admitted to candidacy, students must pass a comprehensive examination at the beginning of the second year. The program culminates in an oral examination on the thesis or project in lieu of a thesis.

Degrees Offered with a Major in Art Education

Master of Arts

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5667: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 6905: Individual Study
- ARH 6914: Greek Art Seminar
- ARH 6292: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism. Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
ARH 6496: Modern Art Seminar
ARH 6596: Chinese Art Seminar
ARH 6597: African Art Seminar
ARH 6654: Pre-Columbian Art Seminar
ARH 6666: Colonial Latin American Art Seminar
ARH 6694: Nineteenth-Century Art Seminar
ARH 6696: American Art Seminar
ARH 6797: Museum Education
ARH 6836: Exhibitions Seminar
ARH 6895: Collections Management Seminar
ARH 6900: Independent Study in Museology
ARH 6910: Supervised Research
ARH 6911: Advanced Study
ARH 6914: Independent Study in Ancient Art History
ARH 6915: Independent Study in Medieval Art History
ARH 6916: Independent Study in Renaissance and Baroque Art History
ARH 6917: Independent Study in Modern Art History
ARH 6918: Independent Study in Non-Western Art History
ARH 6930: Special Topics in Museology
ARH 6938: Seminar in Museum Studies
ARH 6941: Supervised Internship
ARH 6946: Museum Practicum
ARH 6948: Gallery Practicum
ARH 6971: Research for Master's Thesis
ARH 7979: Advanced Research
ARH 7980: Research for Doctoral Dissertation
ART 5674C: Digital Fabrication
ART 5905C: Directed Study
ART 5930C: Special Topics
ART 6410C: Printmaking Seminar: Mastering Process and Content
ART 6411C: Printmaking Seminar: Transformation and Change
ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
ART 6413C: Printmaking Seminar: Interdisciplinary Studio
ART 6671C: Advanced Experiments in Digital Art
ART 6672: Hypermedia
ART 6673C: Video Art
ART 6675C: Digital Art and Animation
ART 6691: Digital Art Studio
ART 6794C: Vessel Aesthetic 1
ART 6795C: Vessel Aesthetic 2
ART 6797C: Ceramic Sculpture 2
ART 6835C: Research in Methods and Materials of the Artist
ART 6849C: Reactive Environments
ART 6897: Professional Practices for the Visual Artist
ART 6910C: Supervised Research
ART 6925C: Art + Technology Workshop
ART 6926C: Advanced Study I
ART 6927C: Advanced Study II
ART 6928C: Advanced Study III
ART 6929C: Advanced Study IV
ART 6933: Area Methods: Rotating Topics
ART 6971: Research for Master's Thesis
ART 6973C: Individual Project
DIG 6746C: Graduate Seminar in Sensors and Electronics
IDC 6505C: Programming for Artists

College of the Arts Courses

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Art History

College

College of the Arts

Department/School
School of Art and Art History

Art History Program

Master of Arts and Doctor of Philosophy degrees in Art History: The School offers graduate programs leading to the M.A. and Ph.D. degrees. For complete details of the M.A. and Ph.D. degree requirements, see the Director of Graduate Studies—Art History. Art History students may participate in courses offered by the State University System's programs in Paris, London, and Florence. Other study-abroad programs may be approved by the director of graduate studies.

For the M.A. degree, the School offers areas of emphasis in Ancient, Medieval, Renaissance/Baroque, Modern, and non-Western art history (including African, Asian, and Oceanic). A minimum of 36 credit hours is required: ARH 5816 (3 credits), 27 hours of course work, and ARH 6971 (6 credits). Required course work includes a minimum of 15 hours with 5 different art history Graduate Faculty (at least 12 hours of this course work must be graduate-level seminars). Nine credits may be taken in related areas with the graduate program adviser's approval. Reading proficiency in a foreign language appropriate to the major area of study must be demonstrated before thesis research is begun. Language courses cannot apply toward degree credit.

For the Ph.D. degree, the School offers the same areas of specialization as for the M.A. degree. Up to 30 credits from the M.A. degree may apply toward the 90 credit Ph.D. degree. A program of 60 credit hours beyond the M.A. degree is required. Core courses will consist of a minimum of 30 hours in art history:

- 18 hours in a primary area (5000-level or above)
- 9 hours in a secondary area (5000-level or above)
- 3 hours of theory/methodology of art history (if ARH 5816 or its equivalent has not been taken as part of the M.A.)
- An additional 12 hours of outside electives taken in other schools or departments are required in a discipline(s) related to the primary area of study
- Finally, 27 hours of dissertation research and writing is required.

By the end of the second semester or equivalent full-time study, students should form their supervisory committee that must include a minimum of four Graduate Faculty members; one of whom must agree to serve as primary dissertation adviser and supervisory committee chair. The supervisory committee will also act as the qualifying examination committee. Normally students will take the qualifying examination during the spring term of the third year in residence. The examination is both written and oral. It will cover the major and minor art history areas of emphasis as well as the student's preliminary formulation of a dissertation topic and provisional statement of the approaches to that topic as expressed in the dissertation prospectus. On successful completion of the qualifying examination, the approval by the supervisory committee of the dissertation prospectus, and fulfilling all other course and language requirements, the student makes formal application for a change of status to Ph.D. candidacy. Normally, a student will be expected to present the completed dissertation and defend it at an oral defense conducted by the supervisory committee by the end of the sixth year in the program. For Ph.D. students, reading knowledge of two research languages other than English must be demonstrated by the end of the second year of course work, or by the end of the first semester in the case of transfer students. Language courses are not applicable toward degree credit.

Degrees Offered with a Major in Art History

Doctor of Philosophy

Master of Arts

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5667: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6202: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6942: Arts in Medicine Graduate Practicum
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management

Museology

College

College of the Arts
School of Art and Art History

Museology Program Information

**Master of Arts degree in Museology (Museum Studies):** The School offers this interdisciplinary program that consists of both academic and practical work. The curriculum allows students to do graduate work in a disciplinary emphasis (art history, anthropology, history, education, or the natural sciences, for example) and at the same time complete a concentrated study in professional museum practice. The M.A. degree in museology requires 48 credit hours including:

- 15 credits of museum studies courses (museology seminar, 3 credits; collections management, 3 credits; museum education, 3 credits; exhibitions, 3 credits; special topics, 3 credits)
- 15 graduate credits in a disciplinary focus
- 6 credits of internship
- 6 credits of electives
- 6 credits of individual credit.

Several on-campus sites provide the program with laboratories for training students in museum work, including the University Galleries, Harn Museum of Art, Florida Museum of Natural History, and the gallery at the Reitz Union. Students must complete a 6-credit internship of at least 320 hours at an approved museum. In this experience, students undertake specific projects in which they gain first-hand experience in museum work. The Harn Museum of Art or the Florida Museum of Natural History may be able to oversee a few interns, but students are encouraged to apply for internships at other U.S. institutions or abroad.

A project-in-lieu-of-thesis (or thesis) is selected, researched, and carried out under the direction of a supervisory committee.

**Degrees Offered with a Major in Museology**

**Master of Arts**

- concentration in Historic Preservation

- without a concentration

**School of Art and Art History Departmental Courses**

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6248C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Régime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5667: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6202: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism, Realism to Post-Impressionism 1848-1890
College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6942: Arts in Medicine Graduate Practicum
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management

Digital Worlds Institute

College of the Arts

Director: James C. Oliverio
Graduate Coordinator: Marko Suvajdzic

Complete faculty listing: Follow this link.

The Digital Worlds Institute exists to nurture leading edge education between the arts, communications, engineering and the sciences, utilizing advanced media systems and digital culture. By bringing together the diverse talents of University of Florida faculty, students, and staff in a multifaceted collaborative environment, the Institute serves as a platform for interdisciplinary
research and teaching that would not have occurred within the confines of any one college or department. Through the use of interactive tools and technologies, the Institute promotes interdisciplinary creativity across classrooms, continents and cultures.

For more information, please see the program page below and our website: http://www.digitalworlds.ufl.edu.

Other

Digital Arts and Sciences (Arts)

College

College of the Arts

Department/School

Digital Worlds Institute

Digital Arts and Sciences (Arts) Program Information

The Master of Arts in Digital Arts & Sciences (DAS) degree seeks to allow students from diverse academic backgrounds the opportunity to develop fluency in the technologies, design practices and collaborative interdisciplinary teamwork increasingly required by the media, communications and entertainment industries. Graduates holding the M.A. in DAS degree would typically seek employment in the creative services sector, applying digital techniques and technologies in a variety of professions. Opportunities range from traditional cinema to interactive games; from broadcast media to online international networks to emergent industries.

Although this is a thesis degree, students usually produce a creative project in lieu of thesis. Students should see the graduate coordinator for the requirements for the creative project, which are also provided in the DAS Student Handbook.

Students seeking admission are expected to have an undergraduate background including:

- A degree in one of the fine arts or liberal arts
- A body of work that demonstrates accomplishment in the intended area
- A body of work that can clearly be enhanced with skills to be acquired in the DAS program.

Deficiencies may be corrected before beginning graduate study. In addition to appropriate academic credentials and prior scholastic achievement, admission into the program requires a well-constructed Statement of Purpose and media-related support material (i.e. samples of design, programming, video, web, writing, etc.) that demonstrates both prior interest and/or achievement in New Media/Digital Arts & Sciences.

Degrees Offered with a Major in Digital Arts and Sciences

Master of Arts

Digital Worlds Departmental Courses

- DIG 5555C: Digital Media Projection Design I
- DIG 5931C: Special Topics
- DIG 6027C: Interactive Storytelling
- DIG 6028: Roots of Digital Culture
- DIG 6050C: Entertainment Technology
- DIG 6125C: Digital Design & Visualization
- DIG 6126C: Interaction Design
- DIG 6256C: Audio Design For Digital Production
- DIG 6358C: APPLIED 3D MODELING
- DIG 6590C: Digital Media Projection Design II
- DIG 6596C: Digital Portfolio
- DIG 6719: Videogame Theory and Analysis
- DIG 6744C: Movement, Media and Machines
- DIG 6746C: Graduate Seminar in Sensors and Electronics
- DIG 6751C: Protocols for Multimedia Interfaces
- DIG 6788C: Digital Production & Game Design
College of the Arts Courses

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Music Department

College of the Arts

Director: J. A. Duff.
Graduate Coordinator: L. S. Odom.

Complete faculty listing by department: Follow this link.

The School of Music offers programs leading to the Master of Music degree in music and music education. Program concentrations in music include choral conducting, composition, instrumental conducting, musicology, ethnomusicology, music theory, performance, and sacred music. In addition, the School of Music offers the Doctor of Philosophy degree in music and in music education.

The Ph.D. program in music education emphasizes college music teaching. The Ph.D. program in music includes concentrations in:

- Music history and literature, with options in traditional musicology and ethnomusicology
- Composition, with options in acoustic and electroacoustic specialization

All Ph.D. students are encouraged to find opportunities to teach and lecture in their specializations, and with the assistance of their principal professors, to prepare papers, workshops, and clinics for presentation at professional conferences, in the public schools, and at colleges and universities. Students also are encouraged to publish their research in appropriate journals. For more information, please see our website: http://www.arts.ufl.edu/welcome/music.

Minimum requirements for the M.M. and Ph.D. degrees are given in the General Information section of this catalog. The week before classes begin, students must take placement examinations in music history and in music theory. Students wanting to study privately in a performance studio must be auditioned and accepted by the appropriate area faculty. Voice students must demonstrate appropriate skills in language and diction. All deficiencies must be remedied.

For more information, please see the program pages below and our website: http://www.arts.ufl.edu/welcome/music.

Other

Music

College

College of the Arts

Department/School

Music Department

Music Program Information

The Master of Music (M.M.) degree is offered in music or music education. The music program offers the following concentrations: choral conducting, composition, electronic music, ethnomusicology, instrumental conducting, music education, music history and literature, music theory, performance, and sacred music. The M.M. degree prepares students for careers as teachers in studios, schools, and universities; performers; music historians; music critics; church musicians; composers; conductors; and accompanists.

For more information, please see our website: http://www.arts.ufl.edu/welcome/music.

Degrees Offered with a Major in Music
Doctor of Philosophy

without a concentration

concentration in Composition

concentration in Music History and Literature

Master of Music

without a concentration

concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory
optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Electronic Music

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Ethnomusicology

concentration in Ethnomusicology

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Electronic Music

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

concentration in Instrumental Conducting

optional second concentration in Composition
optional second concentration in Choral Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Music Education

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Music History and Literature

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology
concentration in Music Theory

- optional second concentration in Composition
- optional second concentration in Choral Conducting
- optional second concentration in Instrumental Conducting
- optional second concentration in Music History and Literature
- optional second concentration in Performance
- optional second concentration in Piano Pedagogy
- optional second concentration in Music Education
- optional second concentration in Electronic Music
- optional second concentration in Ethnomusicology

concentration in Performance

- optional second concentration in Composition
- optional second concentration in Choral Conducting
- optional second concentration in Instrumental Conducting
- optional second concentration in Music History and Literature
- optional second concentration in Music Theory
- optional second concentration in Sacred Music
- optional second concentration in Piano Pedagogy
- optional second concentration in Music Education
- optional second concentration in Electronic Music
- optional second concentration in Ethnomusicology

concentration in Sacred Music

- optional second concentration in Composition
- optional second concentration in Choral Conducting
- optional second concentration in Instrumental Conducting
- optional second concentration in Music History and Literature
- optional second concentration in Music Theory
- optional second concentration in Performance
- optional second concentration in Piano Pedagogy
optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Music Departmental Courses

- DIG 6288: Music and Sound Design for Digital Media
- MUC 5315: Introduction to Electroacoustic Music
- MUC 6444: Composition of Electronic Music
- MUC 6445: Electroacoustic Music Composition: Digital I
- MUC 6446: Electroacoustic Music Composition—Digital II
- MUC 6900: Secondary Graduate Composition
- MUC 6930: Graduate Composition
- MUC 6932: Composition Seminar
- MUC 7447: Advanced Seminar in Electroacoustic Music
- MUC 7931: Advanced Graduate Composition
- MUC 7938: Seminar in Digital Sound Processing, Control, and Composition
- MUE 6080: Historical and Philosophical Foundations of Music Education
- MUE 6385: Music in Higher Education
- MUE 6399: Creative Thinking in Music
- MUE 6444: Materials and Methods of String Class Teaching
- MUE 6497: Public School Orchestral Literature
- MUE 6647: Trends in Teaching and Learning Music
- MUE 6696: Technology-Assisted Music Learning
- MUE 6747: Assessing Music Learning
- MUE 6785: Research in Music Education
- MUE 6790: Capstone Project for Music Education
- MUE 6931: Instructional Design in Music Education
- MUE 7746: Measurement and Evaluation of Music
- MUE 7938: Music Education Seminar
Music Education Program Information

The Master of Music (M.M.) degree is offered in music or music education. The music education program offers the following concentrations: choral conducting, composition, electronic music, ethnomusicology, instrumental conducting, music history and literature, music theory, performance, and piano pedagogy. The M.M. degree prepares students for careers as teachers in studios, schools, and universities; performers; music historians; music critics; church musicians; composers; conductors; and accompanists.

For more information, please see our website: http://www.arts.ufl.edu/welcome/music

Degrees Offered with a Major in Music Education

Doctor of Philosophy
Master of Music

Without a Concentration

Concentration in Choral Conducting

optional second concentration in Piano Pedagogy
optional second concentration in Composition
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

Concentration in Composition

optional second concentration in Choral Conducting
optional second concentration in Piano Pedagogy
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

Concentration in Electronic Music

optional second concentration in Choral Conducting
optional second concentration in Composition
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Ethnomusicology

Concentration in Ethnomusicology

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Piano Pedagogy

Concentration in Instrumental Conducting

optional second concentration in Piano Pedagogy

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Music History and Literature

optional second concentration in Choral Conducting

optional second concentration in Piano Pedagogy

optional second concentration in Instrumental Conducting

optional second concentration in Composition

optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

Concentration in Music Theory
optional second concentration in Choral Conducting
optional second concentration in Composition
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Piano Pedagogy
optional second concentration in Performance
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

Concentration in Performance
optional second concentration in Choral Conducting
optional second concentration in Piano Pedagogy
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Composition
optional second concentration in Performance
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

Concentration in Piano Pedagogy
optional second concentration in Choral Conducting
optional second concentration in Composition
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Music Theory
optional second concentration in **Performance**

optional second concentration in **Electronic Music**

optional second concentration in **Ethnomusicology**

**College of the Arts Courses**

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

**Music Departmental Courses**

- DIG 6288: Music and Sound Design for Digital Media
- MUC 5315: Introduction to Electroacoustic Music
- MUC 6444: Composition of Electronic Music
- MUC 6445: Electroacoustic Music Composition: Digital I
- MUC 6446: Electroacoustic Music Composition: Digital II
- MUC 6900: Secondary Graduate Composition
- MUC 6930: Graduate Composition
- MUC 6932: Composition Seminar
- MUC 7447: Advanced Seminar in Electroacoustic Music
- MUC 7931: Advanced Graduate Composition
- MUC 7938: Seminar in Digital Sound Processing, Control, and Composition
- MUE 6080: Historical and Philosophical Foundations of Music Education
- MUE 6385: Music in Higher Education
- MUE 6399: Creative Thinking in Music
- MUE 6444: Materials and Methods of String Class Teaching
- MUE 6497: Public School Orchestral Literature
- MUE 6647: Trends in Teaching and Learning Music
- MUE 6696: Technology Assisted Music Learning
- MUE 6747: Assessing Music Learning
- MUE 6785: Research in Music Education
- MUE 6790: Capstone Project for Music Education
- MUE 6831: Instructional Design in Music Education
- MUE 7746: Measurement and Evaluation of Music
- MUE 7931: Music Education Seminar
- MUG 6105: Graduate Conducting
- MUG 7106: Advanced Graduate Conducting
- MUH 5219: Graduate Music History Review
- MUH 5505: Introduction to Ethnomusicology
- MUH 5684: Introduction to Historical Musicology
- MUH 6526: American Vernacular Music
- MUH 6545: The Guitar in Latin American Culture
- MUH 6548: Seminar in Caribbean Music
- MUH 6549: Seminar in Brazilian Music
- MUH 6635: Seminar in American Music
- MUH 6665: History of Opera
- MUH 6671: Seminar in Renaissance Music
- MUH 6672: Seminar in Baroque Music
- MUH 6673: Seminar in Classical Music
- MUH 6674: Seminar in Nineteenth-Century Music
- MUH 6675: Seminar in Twentieth-Century Music
- MUH 6931: Nationalism in Music
- MUH 6935: Special Topics in Music History
- MUH 7411: Medieval and Renaissance Notation
- MUH 7938: Musicology Seminar
- MUL 6435: String Literature
- MUL 6486: Piano Literature
- MUL 6495: Graduate Organ Literature
- MUL 6555: Survey of Wind Literature
- MUL 6565: Chamber Music Literature
- MUL 6645: Choral Literature
- MUN 6010: Graduate Ensemble
- MUN 6125: Concert Band
- MUN 6135: Symphonic Band
- MUN 6145: Symphonic Wind Ensemble
School of Theatre and Dance

Director: J. Dickey
Graduate Performance Program Coordinator: Ralf Remshardt
Graduate Design Program Coordinator: S. Kaye

Complete faculty listing by department: Follow this link.

The graduate program offered by the School of Theatre and Dance leads to the degree of Master of Fine Arts in Theatre. Minimum requirements for this degree are given in the General Information section of this catalog.

The M.F.A. degree prepares students for professional entry in acting, production, or teaching. Placement in the M.F.A. program is determined by audition/portfolio review, academic credentials, and personal interview. Candidates for admission should have adequate training in theatre. Deficiencies may be corrected before beginning graduate study.

The program emphasizes the study and practice of theatre as an art and discipline. Students of acting and design study concepts of theatre together while working in their areas of specialization. Focus is on the collaboration and synthesis of theatre artistry. Each incoming class is composed of approximately 12 to 18 students in acting and all design areas.

The student's artistic and academic progress will be reviewed at the end of each semester. The School of Theatre Handbook gives details on the form and focus of each review. This information is online at http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp.

During the final year of study, each student must successfully complete the comprehensive examination and oral defense. The project in lieu of thesis includes research, analysis, rehearsal process, and evaluation. Development and execution of the project includes public performance (acting or design). The written document and oral defense of the project which follow must demonstrate the ability to communicate the creative process.

Graduate acting students audition for all departmental productions.

Other

Theatre

College
College of the Arts

Department/School

School of Theatre and Dance

Degrees Offered with a Major in Theatre

Master of Fine Arts

College of the Arts Courses

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 5640: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6442: Arts in Medicine Graduate Practicum
- HUM 6444: Arts in Action: Consulting Project in Performing Arts Management

Theatre and Dance Departmental Courses

- ARC 6670: Lighting Design Seminar
- DAN 6436: Laban Movement Analysis
- DAA 6757: Pilates Technique for the Dancer
- DAA 6905: Graduate Dance Project
- DAN 6949: Dance Clinical Practice
- THE 5238: African-American Theatre History and Practice
- THE 5287: History of Decor and Architecture for the Stage
- THE 5910: Introduction to Graduate Study in Theatre
- THE 6265: Costume History
- THE 6525: History, Literature, and Criticism I
- THE 6526: History, Literature, and Criticism II
- THE 6565: Seminar in Creative Process
- THE 6905: Individual Study
- THE 6940: Supervised Teaching
- THE 6941: Internship
- THE 6950: Applied Theatre
- THE 6955: Summer Repertory Theatre
- THE 6971: Research for Master's Thesis
- THE 6973C: Project in Lieu of Thesis
- TPA 5025: Lighting Design I
- TPA 5047: Costume Design I
- TPA 5067: Scene Design I
- TPA 5072: Drawing and Rendering
- TPA 5079: Graduate Scene Painting
- TPA 5082: Advanced Theatre Graphics
- TPA 5236: Costume Technologies Workshop
- TPA 6005: Design I
- TPA 6006: Design II
- TPA 6009: Design Studio
- TPA 6026: Lighting Design II
- TPA 6048: Costume Design II
- TPA 6054: Detail Design for Costume Designers
- TPA 6069: Scene Design II
- TPA 6235: Costume Construction
- TPA 6237: Pattern Making: Flat Patternmaking
- TPA 6243: Pattern Making: Draping
- TPA 6258: Computer Drafting 2D
- TPA 6357: Programming and Presentation for the Lighting Designer
- TPP 5234: Multi-Cultural Performance Workshop
- TPP 6115: Graduate Acting I: Modern Acting Theory and Practice
- TPP 6116: Graduate Acting II: Shakespeare and High Style
- TPP 6145: Graduate Acting III: Period Styles
- TPP 6149: Acting IV: Contemporary Realism
Fisher School of Accounting

Warrington College of Business Administration

Director: Gary A. McGill
Graduate Coordinators: Dominique DeSantiago, Stephen Asare

Complete faculty listing by department: Follow this link.

As a professional school in a major public research university, the Fisher School of Accounting (FSOA) is committed to scholarly research, teaching, and service to advance knowledge and prepare future leaders for business, professional, and academic careers.

The Fisher School of Accounting offers graduate work leading to the Master of Accounting (M.Acc.) degree with a major in accounting, and the Ph.D. degree with a major in business administration and an accounting concentration. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below, or visit our website: http://warrington.ufl.edu/accounting.

Other

Accounting

College

Warrington College of Business Administration

Department/School

Fisher School of Accounting

Accounting Program Information

Master of Accounting: Three variations of the Master of Accounting degree program are available. These allow students to select one of three tracks: Audit, Tax, and Generalist. Minimum admission requirements include an acceptable score on the Graduate Management Admission Test (GMAT), with a minimum score of 550 and completion of essays with a minimum score of 4. International students must submit a satisfactory score on the following: TOEFL (Test of English as a Foreign Language: paper-based=570, internet-based=86). Additional information, including minimum GPA standards for admission, may be viewed at http://warrington.ufl.edu/accounting/academics/macc.

Combined degree program: The recommended curriculum to prepare for a professional career in accounting is the 3/2 five-year program with a joint awarding of the Bachelor of Science in Accounting and Master of Accounting degrees upon completion of the 150-hour program. The entry point into the 3/2 program is the beginning of the senior year.

Traditional Master of Accounting program: Students who have already completed an undergraduate degree in accounting may enter the 1-year M.Acc. degree program which requires satisfactory completion of 34 hours of course work. A minimum of 28 credits must be in graduate-level courses; a minimum of 20 credits must be in graduate-level accounting courses. The remaining credits are selected from recommended elective courses that vary by area of specialization. Students are cautioned to seek early advisement, since many graduate courses are offered only once a year.

J.D./M.Acc. program: A joint program leading to the Juris Doctor and Master of Accounting degrees is offered by the Fisher School of Accounting and Levin College of Law. Specific details for the M.Acc., J.D./M.Acc., and Ph.D. programs are available at http://warrington.ufl.edu/accounting/academics/id-macc.

Degrees Offered with a Major in Accounting

Master of Accounting
Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6226: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Business Administration (Accounting)

College

Warrington College of Business Administration

Department/School

Fisher School of Accounting

Business Administration (Accounting) Program Information

The Ph.D. program offers a broad-based interdisciplinary training that prepares students to conduct both empirical and analytical research. The curriculum consists of course work of four types: the major field, a breadth requirement, a research foundation requirement, and a minor or supporting field. In addition, students must demonstrate competence in conducting research and teaching, and must complete a dissertation on an accounting topic.

The major field in accounting consists of at least 18 credit hours of course work including research analysis, archival research, analytical research, experimental research, readings, and a research project. The breadth requirement consists of at least 13 credit hours of course work including microeconomic theory, corporate finance theory, game theory, asset pricing, and information economics. The research foundation requirement consists of at least 12 hours of graduate course work in mathematical economics, statistics, or econometrics. The minor or supporting field requirement is met by completing a minimum of 12 hours of graduate course work in the selected field.

Students demonstrate competency in conducting research by completing a research project in the summers of the first and second year. The teaching competence is demonstrated by completing at least 1 hour (but no more than 5 hours) of supervised teaching, and by teaching for at least 2 semesters. Admission requirements include a history of academic excellence, adequate score on the GMAT (the average score of recently admitted applicants is 690 for GMAT), competence in written and spoken English (TOEFL Internet-Based test (iBT) required for applicants whose native language is not English), appreciation of accounting issues, and institutional and math competency. The school requires a total score of 91, including a minimum of 26 on the speaking section.

Degrees Offered with a Major in Business Administration
Doctor of Philosophy

concentration in Accounting

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6885: Forensic Accounting
- ACG 6891: International Auditing
- ACG 6997: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax I
- TAX 5027: Federal Income Tax II
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy; Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7227: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
ECO 7516: Tax Theory and Public Policy
ECO 7525: Welfare Economics and The Second Best
ECO 7534: Empirical Public Economics I
ECO 7535: Empirical Public Economics II
ECO 7536: Theoretical Public Economics
ECO 7706: Theory of International Trade
ECO 7707: International Economic Relations
ECO 7925: Research Skills Workshop
ECO 7938: Advanced Economics Seminar
ECO 7979: Advanced Research
ECO 7980: Research for Doctoral Dissertation
ECP 5415: Antitrust Policy and Managerial Decisions
ECP 5702: Managerial Economics
ECP 5705: Economics of Business Decisions
ECP 6417: Public Policy and Social Control
ECP 6701: Competitive Strategies in Expanding Markets
ECP 6708: Cases in Competitive Strategy
ECP 6407: Economics for Managing Information for Electronic Commerce
ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
ECP 7408: Empirical Industrial Organization
ECP 7418: Economics of Regulation
ECP 7419: Current Research in Regulation
ECP 7979: Advanced Research
ECP 7980: Research for Doctoral Dissertation
HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

ENT 5275: Family Business Management
ENT 6006: Entrepreneurship
ENT 6008: Entrepreneurial Opportunity
ENT 6016: Venture Analysis
ENT 6116: Business Plan Formation
ENT 6416: Venture Finance
ENT 6506: Social Entrepreneurship
ENT 6616: Creativity in Entrepreneurship
ENT 6905: Individual Work in Entrepreneurship
ENT 6930: Special Topics
ENT 6933: Entrepreneurship Lecture Series
ENT 6946: Entrepreneurial Consulting Project
ENT 6950: Integrated Technology Ventures
ENT 6957: International Studies in Entrepreneurship
FIN 5405: Business Financial Management
FIN 5437: Finance I: Asset Valuation, Risk, and Return
FIN 5438: Finance II: Capital Structure and Risk Management Issues
FIN 6106: Personal Financial Management
FIN 6246: Money and Capital Markets
FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analysis
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6056: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
- REE 6910: Supervised Research
- REE 6930: Special Topics in Real Estate
- REE 6935: Real Estate Case Studies
- REE 6940: Supervised Teaching
- REE 6948: Capstone Seminar and Applied Project
- REE 6957: International Studies in Real Estate
- REE 7979: Advanced Research
- REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6238: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5011: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6526: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
• QMB 6359: Statistical Analysis for Managerial Decisions II
• QMB 6607: Decision Processes Under Uncertainty I
• QMB 6616: Business Process Analysis
• QMB 6693: Quality Management and Control Systems
• QMB 6697: Optimization in Simulation Modeling I
• QMB 6755: Managerial Quantitative Analysis I
• QMB 6756: Managerial Quantitative Analysis II
• QMB 6905: Individual Work in Information Systems and Operations Management
• QMB 6910: Supervised Research
• QMB 6930: Special Topics in Information Systems and Operations Management
• QMB 6940: Supervised Teaching
• QMB 6941: Internship
• QMB 6957: International Studies in Quantitative Methods
• QMB 6971: Research for Master's Thesis
• QMB 7931: Special Topics in Information Systems and Operations Management
• QMB 7933: Seminar in Information Systems and Operations Management
• QMB 7979: Advanced Research
• QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

• BUL 5445: Ethical Role of the Manager
• BUL 5810: Legal Environment of Business
• BUL 5811: Managers and Legal Environment of Business
• BUL 5831: Commercial Law
• BUL 5832: Commercial Law for Accountants
• BUL 6440: Business Ethics and Corporation Social Responsibility
• BUL 6441: Business Ethics and Corporate Social Responsibility
• BUL 6516: Law of Real Estate Transactions
• BUL 6652: Law and Ethics of Corporate Governance
• BUL 6656: Law for Entrepreneurs
• BUL 6821: Cyberlaw and Ethics
• BUL 6841: Employment Law
• BUL 6851: International Business Law
• BUL 6852: International Business Law
• BUL 6891: Legal Aspects of Technology Management
• BUL 6905: Individual Work
• BUL 6930: Special Topics
• ENT 6706: Global Entrepreneurship
• MAN 5141: Leadership Skills
• MAN 5245: Organizational Behavior
• MAN 5246: Organizational Behavior
• MAN 5265: Managing Groups and Teams
• MAN 6107: Motivation in Organizational Setting
• MAN 6128: Management Skills and Personal Development
• MAN 6149: Developing Leadership Skills
• MAN 6257: Power and Politics in Organizations
• MAN 6266: Managing Groups and Teams in Organizations
• MAN 6286: Managing Strategic Processes and Change in Organizations
• MAN 6326: Designing Effective Organizations
• MAN 6321: Human Resource Management
• MAN 6331: Compensation in Organizations
• MAN 6351: Training and Development in Organizations
• MAN 6365: Organizational Staffing
• MAN 6366: Organizational Staffing
• MAN 6385: Strategic Human Resource Management
• MAN 6446: Negotiations
• MAN 6447: Art and Science of Negotiation
• MAN 6537: Managing Technology in Organizations
• MAN 6627: Cross Cultural Negotiation
• MAN 6635: International Aspects of Human Resource Management
• MAN 6636: Global Strategic Management
• MAN 6637: Global Strategic Management
• MAN 6721: Business Policy
• MAN 6724: Strategic Management
• MAN 6905: Individual Work in Management
• MAN 6910: Supervised Research
• MAN 6930: Special Topics
• MAN 6940: Supervised Teaching
• MAN 6957: International Studies in Management
• MAN 6958: International Study Program
• MAN 6973: Project in Lieu of Thesis
• MAN 7108: Seminar in Research Concepts and Methods in Management
• MAN 7109: Seminar in Motivation and Attitudes
• MAN 7146: Seminar in Leadership
• MAN 7207: Seminar on Foundations of Organizational Theory
• MAN 7208: Seminar in Contemporary Approaches to Organizations
• MAN 7267: Seminar on Groups and Teams Research
• MAN 7275: Organizational Behavior
• MAN 7328: Seminar on Staffing and Selection
• MAN 7778: Seminar in Strategic Adaptation to Environment
• MAN 7779: Strategic Processes and Structure in Organizations
Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6881: Customer Relationship Management
- MAR 6882: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Economics Department

Chair: R. D. Blair
Graduate Coordinator: S. M. Slutsky.
Complete faculty listing: Follow this link.

The department offers the Master of Arts (thesis and nonthesis option) and Doctor of Philosophy degrees in economics with specializations in econometrics, economic theory, industrial organization, international economics, monetary economics, and public finance.

MA requirements: A minimum of 36 credits of course work is required for the M.A. with and without thesis. A minimum of six credits of the research course ECO 6971 may be included for a master’s degree with thesis. The following core courses are required: ECO 7408 and ECO 7404 or equivalent, ECO 7415 or equivalent, ECO 7115, and ECO 7206.

Ph.D. requirements: Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) an acceptable score on the GRE, and (c) for nonnative speakers of English, an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.
All core courses must be completed in the first year. In addition, students must complete courses in three fields of specializations and pass qualifying examinations in two of those fields.

Complete descriptions of the minimum requirements for the M.A. and Ph.D. degrees are provided elsewhere in this catalog.

Other

Economics

College

Warrington College of Business Administration

Department/School

Economics Department

Degrees Offered with a Major in Economics

Doctor of Philosophy

Master of Arts

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5920: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Finance, Insurance, and Real Estate Department

Chair: Michael D. Ryngaert
Graduate Coordinator: Mahen Nimalendran

Complete faculty listing: Follow this link

The Department of Finance, Insurance, and Real Estate offers graduate work leading to the Master of Science degree with major programs in finance and real estate; the Master of Science in Entrepreneurship (M.S.E.); and the Doctor of Philosophy degree in business administration with a concentration in finance, insurance, quantitative analysis, or real estate. Complete descriptions of the minimum requirements for the M.S., M.S.E, and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

Finance, Real Estate, and Entrepreneurship are also available as concentrations within the M.B.A program. For information about the M.B.A. program, please consult that listing in the Graduate Degrees section.

For more information see the program pages below, and visit our website: http://warrington.ufl.edu/departments/fire

Other

Business Administration (Finance, Insurance, and Real Estate)

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Business Administration (Finance, Insurance, and Real Estate) Program Information

The Ph.D. in Business Administration - Finance and Real Estate program prepares students to engage in productive scholarly research and teaching in the broad area of financial and real estate economics. Graduates of this program typically are placed with major universities in the United States, although some students choose to work in research positions at non-academic institutions.

The Ph.D. program has a strong emphasis on scholarly research training. Admission requirements include (a) minimum grade point average of 3.5 in the last two years of an undergraduate program and in any previous graduate-level work, (b) minimum GRE score of 1300 or GMAT score of 600 (both verbal and quantitative scores must exceed the sixtieth percentile), and (c) (for native speakers of English) a minimum score of 550 on the TOEFL. Generally students will not be admitted to the Ph.D. program unless they have been offered financial assistance by the University.

Finance
The student pursuing a concentration in finance typically specializes in corporate finance, financial markets and institutions, or investments. The Ph.D. curriculum consists of course work of four types: research foundations, the major field, a minor or supporting field, and a breadth requirement.

The research foundation requirements are comprised of courses in microeconomic theory, macroeconomic theory, mathematical methods and applications to economics, mathematical statistics, and econometrics. The actual courses will depend on the student's background and proposed thesis research.

The major field in finance consists of at least 16 credit hours in graduate course work in finance including financial theory, corporate finance, and seminars in empirical methods, market microstructure, and special topics. Students may elect to have one "strong" minor (16 credit hours), two "weak" minors (8 credit hours each), or a supporting field which is not declared as a minor. If a supporting field is chosen, at least 16 hours of course work acceptable to the student's supervisory committee must be taken. The supporting field option is selected when a student wishes to take courses across a number of departments. The department offers a combined B.S.M.S. program. Contact the graduate coordinator for information.

The breadth requirement applies only to students with no prior course work in business and consists of financial and managerial accounting or their equivalents, plus two courses out of the following areas: managerial economics, production operations management, or problems and methods in marketing management.

Real Estate

The research foundations are identical to those listed above for finance. The major field, minor, and supporting field requirements have the same credit stipulation as those outlined above for finance, except that the major work is in real estate.

The breadth requirement, as in all concentrations for the business administration program, applies only to students entering without prior course work in business. It consists of at least three courses from the following list (two or more fields must be represented): managers and legal environment of business, finance, money and capital markets, problems and methods of marketing management, consumer behavior, and financial and managerial accounting.

Other degree requirements are listed in the Graduate Degrees section of this catalog.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/phd-fre.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

- concentration in Finance

- concentration in Insurance

- concentration in Quantitative Finance

- concentration in Real Estate and Urban Analysis

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
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FIN 6246: Money and Capital Markets
FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics in Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7890: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary/Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

ACG 5005: Financial Accounting
ACG 5065: Financial and Managerial Accounting
ACG 5075: Managerial Accounting
* ACG 5226: Advanced Accounting
* ACG 5505: Governmental Accounting
* ACG 5637: Auditing I
* ACG 5647: Auditing II
* ACG 5815: Accounting Regulation
* ACG 6136: Accounting Theory
* ACG 6175: Financial Reporting and Analysis
* ACG 6207: Accounting for Risk
* ACG 6265: International Accounting and Taxation
* ACG 6635: Issues in Audit Practice
* ACG 6685: Forensic Accounting
* ACG 6691: International Auditing
* ACG 6697: Information Systems Assurance
* ACG 6905: Individual Work in Accounting
* ACG 6935: Special Topics in Accounting
* ACG 6940: Supervised Teaching
* ACG 7885: Accounting Research I
* ACG 7886: Accounting Research II
* ACG 7887: Research Analysis in Accounting
* ACG 7939: Theoretical Constructs in Accounting
* ACG 7979: Advanced Research
* ACG 7980: Research for Doctoral Dissertation
* TAX 5005: Introduction to Federal Income Taxation
* TAX 5025: Federal Income Tax 1
* TAX 5027: Federal Income Tax 2
* TAX 5065: Tax Professional Research
* TAX 6105: Corporate Taxation
* TAX 6115: Advanced Corporate Taxation
* TAX 6205: Partnership Taxation
* TAX 6526: International Taxation
* TAX 6726: Executive Tax Planning
* TAX 6877: State and Local Taxation

Economics Departmental Courses

* ECO 5715: Open Economy Macroeconomics
* ECO 6075: Economics/Consumer Education
* ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
* ECO 6409: Game Theory Applied to Business Decisions
* ECO 6716: International Macroeconomics
* ECO 6906: Individual Work in Economics
* ECO 6910: Supervised Research
* ECO 6936: Special Topics
* ECO 6940: Supervised Teaching
* ECO 6967: International Studies in Economics
* ECO 6971: Research for Master's Thesis
* ECO 7113: Information Economics
* ECO 7115: Microeconomic Theory
* ECO 7118: Markets and Institutions
* ECO 7119: Information, Incentives, and Agency Theory
* ECO 7120: General Equilibrium and Welfare Economics
* ECO 7206: Macroeconomic Theory I
* ECO 7272: Economic Growth I
* ECO 7404: Game Theory for Economists
* ECO 7405: Mathematical Economics: Game Theory
* ECO 7406: Dynamic Economics: Theory and Applications
* ECO 7408: Mathematical Methods and Applications to Economics
* ECO 7415: Statistical Methods in Economics
* ECO 7424: Econometric Models and Methods
* ECO 7426: Econometric Methods I
* ECO 7427: Econometric Methods II
* ECO 7452: Best Empirical Practices in Economics
* ECO 7516: Tax Theory and Public Policy
* ECO 7525: Welfare Economics and The Second Best
* ECO 7534: Empirical Public Economics I
* ECO 7535: Empirical Public Economics II
* ECO 7536: Theoretical Public Economics
* ECO 7706: Theory of International Trade
* ECO 7707: International Economic Relations
* ECO 7925: Research Skills Workshop
* ECO 7938: Advanced Economics Seminar
* ECO 7979: Advanced Research
* ECO 7980: Research for Doctoral Dissertation
* ECP 5415: Antitrust Policy and Managerial Decisions
* ECP 5702: Managerial Economics
* ECP 5705: Economics of Business Decisions
* ECP 6417: Public Policy and Social Control
* ECP 6701: Competitive Strategies in Expanding Markets
* ECP 6708: Cases in Competitive Strategy
* ECP 6807: Economics for Managing Information for Electronic Commerce
* ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
* ECP 7408: Empirical Industrial Organization
Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6506: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
• BUL 6841: Employment Law
• BUL 6851: International Business Law
• BUL 6852: International Business Law
• BUL 6891: Legal Aspects of Technology Management
• BUL 6905: Individual Work
• BUL 6930: Special Topics
• ENT 6706: Global Entrepreneurship
• MAN 5141: Leadership Skills
• MAN 5245: Organizational Behavior
• MAN 5246: Organizational Behavior
• MAN 5265: Managing Groups and Teams
• MAN 6107: Motivation in Organizational Setting
• MAN 6128: Management Skills and Personal Development
• MAN 6149: Developing Leadership Skills
• MAN 6257: Power and Politics in Organizations
• MAN 6266: Managing Groups and Teams in Organizations
• MAN 6286: Managing Strategic Processes and Change in Organizations
• MAN 6296: Designing Effective Organizations
• MAN 6321: Human Resource Management
• MAN 6331: Compensation in Organizations
• MAN 6351: Training and Development in Organizations
• MAN 6365: Organizational Staffing
• MAN 6366: Organizational Staffing
• MAN 6385: Strategic Human Resource Management
• MAN 6446: Negotiations
• MAN 6447: Art and Science of Negotiation
• MAN 6537: Managing Technology in Organizations
• MAN 6627: Cross Cultural Negotiation
• MAN 6635: International Aspects of Human Resource Management
• MAN 6636: Global Strategic Management
• MAN 6637: Global Strategic Management
• MAN 6721: Business Policy
• MAN 6724: Strategic Management
• MAN 6905: Individual Work in Management
• MAN 6910: Supervised Research
• MAN 6930: Special Topics
• MAN 6940: Supervised Teaching
• MAN 6957: International Studies in Management
• MAN 6958: International Study Program
• MAN 6973: Project in Lieu of Thesis
• MAN 7108: Seminar in Research Concepts and Methods in Management
• MAN 7109: Seminar in Motivation and Attitudes
• MAN 7146: Seminar in Leadership
• MAN 7207: Seminar on Foundations of Organizational Theory
• MAN 7208: Seminar in Contemporary Approaches to Organizations
• MAN 7267: Seminar on Groups and Teams Research
• MAN 7275: Organizational Behavior
• MAN 7328: Seminar on Staffing and Selection
• MAN 7778: Seminar in Strategic Adaptation to Environment
• MAN 7779: Strategic Processes and Structure in Organizations
• MAN 7933: Seminar in Management
• MAN 7979: Advanced Research
• MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Customer Analysis
• MAR 6646: Marketing Research for Managerial Decision Making
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6725: Introduction to Electronic Commerce
• MAR 6816: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6833: Product Development and Management
• MAR 6834: Marketing of Science and Technology
• MAR 6835: Marketing of Science and Technology
• MAR 6837: Consumer-Centered Product Design
• MAR 6861: Customer Relationship Management and IT
• MAR 6862: Customer Relationship Management
• MAN 6905: Individual Work
• MAN 6910: Supervised Research
• MAR 6930: Special Topics in Marketing
• MAR 6940: Supervised Teaching
• MAR 6957: International Studies in Marketing
Entrepreneurship

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Entrepreneurship Program Information

The Masters of Science in Entrepreneurship (M.S.E.) program is a one-year, 36-credit, campus-based program designed for young and aspiring entrepreneurs and change-makers. Offered to both business and non-business majors alike, the program is a combination of classroom delivery and experiential learning activities with a focus on opportunity assessment, feasibility analysis, lean entrepreneurial concept testing, business plan development, entrepreneurial leadership, and the sourcing of capital. Students are exposed to cutting edge entrepreneurial theory, which they apply immediately by consulting for small business, commercializing UF technology, and creating their own businesses.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/ mse.

Degrees Offered with a Major in Entrepreneurship

Master of Science in Entrepreneurship

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5229: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Finance

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Finance Program Information

The student pursuing a major in finance typically specializes in corporate finance, financial markets and institutions, or investments.

**Master of Science degree in Finance, nonthesis option**: This M.S. program option consists of at least 32 credits in letter-graded courses. It is designed to ensure that each student acquires a basic knowledge of the major financial economics subject areas: corporate finance, derivatives, fixed income securities, investments, international finance, and real estate. The program is designed to prepare students with an undergraduate background in finance for positions in commercial banking, money management, investment banking, and securities markets.

The Department also offers a combined bachelor's/master's program. Contact the admissions director for information.

**Master of Science degree in Finance/juris doctorate joint degree program**: This joint degree program culminates in the M.S. and J.D. degrees. Applicants must meet the entrance requirements for both the Warrington College of Business Administration and the Levin College of Law. Admission to the second degree program is required no later than the end of the second consecutive semester after beginning one degree in the joint program.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/msf](http://warrington.ufl.edu/graduate/academics/msf).

Degrees Offered with a Major in Finance

Master of Science

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
Real Estate

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Real Estate Program Information

The ten-month, full-time in residence, Nathan S. Collier Master of Science in Real Estate (MSRE) Program, housed in the Warrington College of Business Administration (WCBA), thrives on innovation, a dynamic student body, significant interaction with high-level working professionals, and nationally recognized professors. The program is a unique combination of theory and practice that will both enhance your real estate education and develop your professional skills.

Master of Science degree in real estate, nonthesis option: This M.S. option consists of at least 34 credits of letter-graded courses. It is designed to ensure that each student acquires a basic knowledge of the various functional areas in real estate, real estate finance and investment, real estate development, real estate law and institutions, real estate asset management, international real estate, and advanced training in specialized areas. The capstone course (REE 6948) involves actual projects in which students work in teams to undertake a real estate problem for real clients. This two-tiered program of study provides both a firm theoretical foundation for later professional effectiveness and an applied bridge to professional practice.

Master of Science degree in real estate/juris doctorate joint program: This joint degree program culminates in the M.S. and J.D. degrees. Applicants must meet the entrance requirements for both the Warrington College of Business Administration and the Levin College of Law. Admission to the second degree program is required no later than the end of the second consecutive semester after beginning one degree of the joint program.

The Department also offers a combined bachelor's / master's program for all undergraduate disciplines.

For more information, please contact the admissions director and see our website: http://warrington.ufl.edu/graduate/academics/msre.

Degrees Offered with a Major in Real Estate

Master of Science

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
ENT 6957: International Studies in Entrepreneurship
FIN 5405: Business Financial Management
FIN 5437: Finance I: Asset Valuation, Risk, and Return
FIN 5439: Finance II: Capital Structure and Risk Management Issues
FIN 6106: Personal Financial Management
FIN 6246: Money and Capital Markets
FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6695: Investment Analysis
FIN 6696: Introduction to Computational Methods & Derivative Pricing
FIN 6698: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics in Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7890: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary/Mortgage Markets and Institutions
REE 6208: Secondary/Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation
Information Systems and Operations Management Department

Warrington College of Business Administration

Chair: Haldun Aytug
Graduate Coordinator: Praveen Pathak

Complete faculty listing: Follow this link.

The primary mission of the Department of Information Systems & Operations Management is a commitment to scholarly research, teaching and service to advance the state of knowledge in information systems and supply chain management and to train future leaders for professional and academic careers.

The Department offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Combined Bachelor/Master of Science: The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.

For more information, please see the program pages below and our website: http://warrington.ufl.edu/departments/isom.

Other

Business Administration (Information Systems and Operations Management)

College

Warrington College of Business Administration

Department/School

Information Systems and Operations Management Department

Business Administration (Information Systems and Operations Management)

The Department of Information Systems & Operations Management offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Doctor of Philosophy: The mission of the Ph.D. Program is to educate scholars who will make substantial contributions in their field of research. Our primary goal is to train graduate students to make such contributions. To achieve this goal, we attempt to place students in productive academic research environments. The major areas of study within the department are Information Systems/Information Technology (IS/IT) and Operations Management (OM).

Students come from a variety of backgrounds, with the most common being engineering computer sciences, mathematics, business, and statistics. Students admitted for the Ph.D. choose to specialize either in information systems/information technology or in operations management. The course schedule taken by each student is always personalized to fit the background of the student and is developed in consultation with the Ph.D. program coordinator and/or chair of the dissertation committee. Additionally, doctoral students will be required to attend all ISOM Workshops and the Department Seminar Series (regardless of area of specialization) held at the University of Florida.

Admission requirements for the Ph.D. include

- A minimum grade point average of 3.2
- A minimum GMAT score of 650, or GRE scores acceptable to the program
- For nonnative speakers of English, submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/phd-isom.

Degrees Offered with a Major in Business Administration
Doctor of Philosophy

classification in Information Systems and Operations Management

Information Systems and Operations Management Departmental Courses

- ISM5021: Information Systems in Organizations
- ISM6022: Management Information Systems
- ISM6123: Systems Analysis and Design
- ISM6128: Advanced Business Systems Design and Development I
- ISM6129: Advanced Business Systems Design and Development II
- ISM6215: Business Database Systems I
- ISM6216: Business Database Systems II
- ISM6217: Database Management Systems
- ISM6222: Business Telecom Strategy and Applications I
- ISM6223: Business Telecom Strategy and Applications II
- ISM6224: Business Telecom Strategy and Applications III
- ISM6228: Business Telecom Strategy and Applications
- ISM6236: Business Objects I
- ISM6239: Business Objects II
- ISM6257: Intermediate Business Programming
- ISM6258: Advanced Business Programming
- ISM6259: Business Programming
- ISM6405: Business Intelligence
- ISM6423: Data Analysis for Decision Support
- ISM6485: Electronic Commerce and Logistics
- ISM6486: eCommerce Technologies
- ISM6487: Risks and Controls in eCommerce
- ISM6942: Electronic Commerce Practicum
- ISM7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Accounting Departmental Courses
- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax I
- TAX 5027: Federal Income Tax II
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Microeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics In Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6126: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
• MAN 7275: Organizational Behavior
• MAN 7328: Seminar on Staffing and Selection
• MAN 7778: Seminar in Strategic Adaptation to Environment
• MAN 7779: Strategic Processes and Structure in Organizations
• MAN 7933: Seminar in Management
• MAN 7979: Advanced Research
• MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Consumer Analysis
• MAR 6646: Marketing Research for Managerial Decision Making
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6725: Introduction to Electronic Commerce
• MAR 6818: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6833: Product Development and Management
• MAR 6834: Marketing of Science and Technology
• MAR 6835: Marketing of Science and Technology
• MAR 6837: Consumer-Centered Product Design
• MAR 6861: Customer Relationship Management
• MAR 6862: Customer Relationship Management
• MAR 6905: Individual Work
• MAR 6910: Supervised Research
• MAR 6930: Special Topics in Marketing
• MAR 6940: Supervised Teaching
• MAR 6957: International Studies in Marketing
• MAR 6971: Research for Master's Thesis
• MAR 6973: Project in Lieu of Thesis
• MAR 7507: Perspectives on Consumer Behavior
• MAR 7588: Consumer Information Processing and Decision Making
• MAR 7589: Judgment and Decision Making
• MAR 7626: Multivariate Statistical Methods in Marketing
• MAR 7836: Research Methods in Marketing
• MAR 7886: Marketing Decision Models
• MAR 7796: Marketing Literature
• MAR 7925: Workshop in Marketing Research
• MAR 7979: Advanced Research
• MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

• GEB 5212: Professional Writing in Business
• GEB 5215: Professional Communication in Business
• GEB 5217: Executive Communication
• GEB 5225: Advanced Business Writing
• GEB 5929: Foundations Review
• GEB 6229: Professional Communication for Accountants
• GEB 6365: International Business
• GEB 6368: Globalization and the Business Environment
• GEB 6905: Individual Work
• GEB 6926: Professional Development Module IV
• GEB 6930: Special Topics
• GEB 6941: Internship
• GEB 6957: International Studies in Business

Information Systems and Operations Management

College

Warrington College of Business Administration

Department/School
Information Systems and Operations Management Program Information

The Department of Information Systems & Operations Management offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

**Master of Science:** The M.S.ISOM program provides computing, analytical, and application skills to be used in a business setting. The primary areas of emphasis in the M.S.ISOM program are business intelligence and analytics, information systems/information technology, and supply chain management. Requirements span traditional academic disciplines to produce a multiple-discipline focus. Typical positions for graduates include decision support specialist, information systems specialist, systems analyst, and logistic support specialist.

For a student with a bachelor's degree in business or economics, the M.S.ISOM non-thesis on-campus program consists of a minimum of 36 credit hours, normally requiring a minimum of three semesters of study, not including summer. For students without a bachelor's degree in business or economics, the M.S.ISOM non-thesis on-campus program consists of a minimum of 40 credit hours, normally requiring a minimum of four semesters of study, not including summer.

All M.S.ISOM candidates must complete 26 credits of core coursework:

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6485: Electronic Commerce and Logistics (capstone course)
- MAN 6581: Project Management
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II

All M.S.ISOM candidates must also complete 6 credits of track coursework for the information technology, supply chain management, or business intelligence and analytics track:

Information Technology Track
- ISM 6216: Business Database Systems II
- ISM 6236: Business Objects I
- ISM 6259: Business Programming

Supply Chain Management Track
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management

Business Intelligence and Analytics Track
- ISM 6216: Business Database Systems II
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support

These required courses total 32 credit hours. In addition, each M.S.ISOM student with an undergraduate major or minor in business must take a minimum of 4 additional hours of approved graduate business electives for a total of 36 credit hours required for the M.S.ISOM degree. For students without an undergraduate business degree or minor, instead of graduate business electives, they must complete four of the following core business courses: ACG 5005, ACG 5075, ECP 5702, FIN 5437, FIN 5439, MAN 5246, MAR 5806.

**Bachelor/Master of Science:** The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/ms-isom](http://warrington.ufl.edu/graduate/academics/ms-isom).

Degrees Offered With a Major in Information Systems and Operations Management

**Master of Science in Information Systems and Operations Management**

without a concentration

concentration in Supply Chain Management

Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Management Department

Warrington College of Business Administration

Chair: Robert E. Thomas
Graduate Coordinator: Amir Erez
Complete faculty listing: Follow this link.

The Management Department offers graduate work leading to a Ph.D. degree with a major in Business Administration and a concentration in Management; a Master of Business Administration degree with a concentration in Management; a Master of Science degree with a major in Management; and a Master of International Business (M.I.B.). Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees Section of this catalog.

The Department participates in combined bachelor's/master's degree programs for the Master of International Business (M.I.B.) and Master of Science (M.S.) with a major in management. The Master of International Business is open to students pursuing a bachelor's degree in a business discipline or minor in business administration. The M.S. with a major in management program is only open to non-business majors. Contact the graduate coordinator for information.

For more information, please see our website: http://warrington.ufl.edu/departments/mgt.

Other

Business Administration (Management)

College

Warrington College of Business Administration

Department/School

Management Department

Business Administration (Management) Program Information

Doctor of Philosophy

The Ph.D. program in business administration in the Department of Management prepares students for careers as faculty members of universities that emphasize teaching and research. The program is designed so that the student will (1) develop strong competence in the base discipline crucial to the study of organizations and organization processes and (2) follow a field of specialization in organizational behavior, organizational theory, human resource management, and strategic studies. Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) a minimum GRE score of 1000, and (c) for nonnative speakers of English, a minimum score of 550 on the TOEFL.

The research interests of the faculty are quite broad. For example, work is being done on defining the domain of performance in organizations, employee selection, performance appraisal, goal setting and incentives, aging, dispositions and job satisfaction, corporate governance, health care, innovation processes, organizational control and executive compensation practices, agency theory, and organizational processes. Faculty often work on interdisciplinary projects with other departments.

In addition, the student has exposure to scholars and faculty members from other universities, and from other departments in the University, who are invited to give workshops in the Department.

Breadth Requirement: All students pursuing the Ph.D. are expected to be well versed in the structure and functioning of business organizations and the environment within which they operate. This requirement may be met through undergraduate or master's level work in business administration. The student who does not meet the breadth requirement before entering the Ph.D. program must take at least three graduate courses in different functional areas in the Warrington College of Business Administration but outside of the Department of Management. These courses should complement the major area of study selected by the student.

Research Skills Requirement: The general nature of the research requirement has been specified by the Graduate Committee of the Warrington College of Business. Students must take six approved courses to satisfy it. For the typical student in the Department of Management, the research foundation courses include at least 18 credits in courses such as philosophy of social science (e.g., PHI 5425 or PHI 5405), basic statistical methods (e.g., STA 6126), research methods (e.g., MAR 7786, EDF 7486, or PPE 6308), psychometrics (e.g., EDF 6436, EDF 7439), multivariate analysis (EDF 7932), experimental design (MAR 7622), field research methods (POS 6757), and qualitative research (EDF 6475, SYA 6315). The specific program is determined by the student's supervisory committee and will be tailored to fit the student's prior preparation and the specialization that the student chooses.

Major Course Requirements: The program of study for each student will include required seminars in Organizational Behavior, Organizational Theory, Strategic Management, and Human Resource Management Research, and the Management Workshop.

Specialization Requirements: Each student selects a specialization area. Courses must provide the depth of knowledge required to teach and conduct research successfully in the area of specialization. This part of the program will be developed by the supervisory committee in conjunction with the student. The specialization courses are primarily offered within the Department of Management, although it is quite common for students to take courses in related disciplines, such as Marketing, Finance, Economics, Psychology, Statistics, and Decision and Information Systems. Procedures for the qualifying examinations, dissertation, and final examination are given in the Requirements for the Ph.D. section of this catalog.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/phd-mgt.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

concentration in Management
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6368: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in lieu of Thesis
- MAN 7109: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 6815: Accounting Regulation
Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Macroeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6840: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6956: International Studies in Entrepreneurship
- ENT 6968: Entrepreneurship Experiential Learning Project
- ENT 6993: Special Topics
- ENT 6995: Research for Master's Thesis
- ENT 6996: Special Topics in Finance
- ENT 6997: Research for Doctoral Dissertation
- ENT 7514: Entrepreneurship and Venture Finance
- ENT 7518: New Venture Creation
- ENT 6157: Entrepreneurship Experiential Learning Project
- ENT 6366: Fundamentals of International Business
- ENT 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6222: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
The Master of International Business (M.I.B.) is a non-thesis interdisciplinary graduate business program designed to enhance a student's knowledge and understanding of global business trends and problems.

All M.I.B. candidates must complete the 30-credit curriculum, which consists of 14 core credits and 16 elective credits, with a grade point average (major and overall) of 3.0 or higher. The curriculum includes a mandatory global immersion experience and a non-thesis capstone project.

Combined Degree: The Master of International Business offers a combined bachelor's/master's degree option for students pursuing a bachelor's degree in a business discipline or minor in
Degrees Offered with a Major in International Business

Master of International Business

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6286: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation
Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Microeconomics
- ECO 6908: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6436: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6796: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7806: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
Information Systems and Operations Management Departmental Courses

- ISM5021: Information Systems in Organizations
- ISM622: Management Information Systems
- ISM6123: Systems Analysis and Design
- ISM6128: Advanced Business Systems Design and Development I
- ISM6129: Advanced Business Systems Design and Development II
- ISM6215: Business Database Systems I
- ISM6216: Business Database Systems II
- ISM6217: Database Management Systems
- ISM6222: Business Telecom Strategy and Applications I
- ISM6223: Business Telecom Strategy and Applications II
- ISM6224: Business Telecom Strategy and Applications III
- ISM6226: Business Telecom Strategy and Applications
- ISM6236: Business Objects I
- ISM6239: Business Objects II
- ISM6257: Intermediate Business Programming
- ISM6258: Advanced Business Programming
- ISM6259: Business Programming
- ISM6405: Business Intelligence
- ISM6423: Data Analysis for Decision Support
- ISM6485: Electronic Commerce and Logistics
- ISM6486: eCommerce Technologies
- ISM6487: Risks and Controls in eCommerce
- ISM6942: Electronic Commerce Practicum
- ISM7166: Advanced Business Systems Design and Development III
- MAN5501: Management
- MAN5502: Production and Operations Management
- MAN6508: Management of Service Operations
- MAN6511: Production Management Problems
- MAN6528: Principles of Logistics/Transportation Systems
- MAN6573: Purchasing and Materials Management
- MAN6575: Purchasing and Supplier Relationship Management
- MAN6581: Project Management
- MAN6586: Project Management
- MAN6598: Logistics and Distribution Management
- MAN6599: Tactical Logistics Planning
- MAN6617: International Operations/Logistics
- MAN6619: International Logistics
- QMB5303: Managerial Statistics
- QMB5304: Introduction to Managerial Statistics
- QMB5305: Advanced Managerial Statistics
- QMB6358: Statistical Analysis for Managerial Decisions I
- QMB6359: Statistical Analysis for Managerial Decisions II
- QMB6507: Decision Processes Under Uncertainty I
- QMB6616: Business Process Analysis
- QMB6693: Quality Management and Control Systems
- QMB6697: Optimization in Simulation Modeling I
- QMB6755: Managerial Quantitative Analysis I
- QMB6756: Managerial Quantitative Analysis II
- QMB6805: Individual Work in Information Systems and Operations Management
- QMB6910: Supervised Research
- QMB6930: Special Topics in Information Systems and Operations Management
- QMB6940: Supervised Teaching
- QMB6941: Internship
- QMB6957: International Studies in Quantitative Methods
- QMB6971: Research for Master's Thesis
• QMB 7931: Special Topics in Information Systems and Operations Management
• QMB 7933: Seminar in Information Systems and Operations Management
• QMB 7979: Advanced Research
• QMB 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Customer Analysis
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6649: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6725: Introduction to Electronic Commerce
• MAR 6816: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6833: Product Development and Management
• MAR 6834: Marketing of Science and Technology
• MAR 6835: Marketing of Science and Technology
• MAR 6837: Consumer-Centered Product Design
• MAR 6861: Customer Relationship Management
• MAR 6862: Customer Relationship Management
• MAR 6905: Individual Work
• MAR 6910: Supervised Research
• MAR 6930: Special Topics in Marketing
• MAR 6940: Supervised Teaching
• MAR 6957: International Studies in Marketing
• MAR 6971: Research for Master's Thesis
• MAR 6973: Project in Lieu of Thesis
• MAR 7507: Perspectives on Consumer Behavior
• MAR 7588: Consumer Information Processing and Decision Making
• MAR 7589: Judgment and Decision Making
• MAR 7626: Multivariate Statistical Methods in Marketing
• MAR 7636: Research Methods in Marketing
• MAR 7666: Marketing Decision Models
• MAR 7786: Marketing Literature
• MAR 7925: Workshop in Marketing Research
• MAR 7979: Advanced Research
• MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

• GEB 5212: Professional Writing in Business
• GEB 5215: Professional Communication in Business
• GEB 5217: Executive Communication
• GEB 5225: Advanced Business Writing
• GEB 5929: Foundations Review
• GEB 6226: Professional Communication for Accountants
• GEB 6365: International Business
• GEB 6368: Globalization and the Business Environment
• GEB 6905: Individual Work
• GEB 6928: Professional Development Module IV
• GEB 6930: Special Topics
• GEB 6941: Internship
• GEB 6957: International Studies in Business

Management

College

Warrington College of Business Administration

Department/School

Management Department
Management Program Information

Master of Science degree with a major in Management, non-thesis option: This M.S. program is designed to afford general business competency to students who possess little or no educational business background. The M.S. with a major in management program is only open to non-business majors. Students must complete the 32-credit curriculum, which consists of 22 core credits and 10 elective credits, with a grade point average (major and overall) of 3.0 or higher.

Combined Degree Program: The M.S. with a major in management offers a combined bachelor's/master's degree option.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/msm

Degrees Offered with a Major in Management

Master of Science

without a concentration

concentration in Health Care Risk Management

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
ECO 7272: Economic Growth I
ECO 7404: Game Theory for Economists
ECO 7405: Mathematical Economics: Game Theory
ECO 7406: Dynamic Economics: Theory and Applications
ECO 7408: Mathematical Methods and Applications to Economics
ECO 7415: Statistical Methods in Economics
ECO 7424: Econometric Models and Methods
ECO 7426: Econometric Methods I
ECO 7427: Econometric Methods II
ECO 7452: Best Empirical Practices in Economics
ECO 7516: Tax Theory and Public Policy
ECO 7525: Welfare Economics and The Second Best
ECO 7534: Empirical Public Economics I
ECO 7535: Empirical Public Economics II
ECO 7536: Theoretical Public Economics
ECO 7706: Theory of International Trade
ECO 7707: International Economic Relations
ECO 7925: Research Skills Workshop
ECO 7938: Advanced Economics Seminar
ECO 7979: Advanced Research
ECO 7980: Research for Doctoral Dissertation
ECP 5415: Antitrust Policy and Managerial Decisions
ECP 5702: Managerial Economics
ECP 5705: Economics of Business Decisions
ECP 6417: Public Policy and Social Control
ECP 6701: Competitive Strategies in Expanding Markets
ECP 6708: Cases in Competitive Strategy
ECP 6407: Economics for Managing Information for Electronic Commerce
ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
ECP 7408: Empirical Industrial Organization
ECP 7418: Economics of Regulation
ECP 7419: Current Research in Regulation
HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

ENT 5275: Family Business Management
ENT 6006: Entrepreneurship
ENT 6008: Entrepreneurial Opportunity
ENT 6016: Venture Analysis
ENT 6116: Business Plan Formation
ENT 6416: Venture Finance
ENT 6506: Social Entrepreneurship
ENT 6616: Creativity in Entrepreneurship
ENT 6905: Individual Work in Entrepreneurship
ENT 6930: Special Topics
ENT 6933: Entrepreneurship Lecture Series
ENT 6946: Entrepreneurial Consulting Project
ENT 6950: Integrated Technology Ventures
ENT 6957: International Studies in Entrepreneurship
FIN 5405: Business Financial Management
FIN 5437: Finance I: Asset Valuation, Risk, and Return
FIN 5439: Finance II: Capital Structure and Risk Management Issues
FIN 6106: Personal Financial Management
FIN 6246: Money and Capital Markets
FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6505: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7936: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GE 5114: Entrepreneurship and Venture Finance
GE 5118: New Venture Creation
GE 6157: Entrepreneurship Experiential Learning Project
GE 6366: Fundamentals of International Business
GE 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary/Mortgage Markets and Institutions
REE 6208: Secondary/Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6126: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
ISM 6223: Business Telecom Strategy and Applications II
ISM 6224: Business Telecom Strategy and Applications III
ISM 6226: Business Telecom Strategy and Applications
ISM 6236: Business Objects I
ISM 6239: Business Objects II
ISM 6257: Intermediate Business Programming
ISM 6258: Advanced Business Programming
ISM 6259: Business Programming
ISM 6405: Business Intelligence
ISM 6423: Data Analysis for Decision Support
ISM 6485: Electronic Commerce and Logistics
ISM 6486: eCommerce Technologies
ISM 6487: Risks and Controls in eCommerce
ISM 6942: Electronic Commerce Practicum
ISM 7166: Advanced Business Systems Design and Development III
MAN 5501: Management
MAN 5502: Production and Operations Management
MAN 6508: Management of Service Operations
MAN 6511: Production Management Problems
MAN 6528: Principles of Logistics/Transportation Systems
MAN 6573: Purchasing and Materials Management
MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6817: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
Marketing Department

Chair: Joseph W. Alba
Graduate Coordinator: Lyle A. Brenner

The Marketing Department at the University of Florida is a recognized leader in the discipline of marketing. For over a decade, our faculty has ranked as one of the most productive and influential in the field. Our faculty is known for conducting provocative, cutting-edge research that contributes both to the scientific understanding and practice of marketing. Our Ph.D. program has produced many leading researchers in the discipline. And the David F. Miller Center for Retailing Education and Research is known as one of the foremost centers for developing the science of retailing.

The Marketing Department offers graduate work leading to the Ph.D. degree in business administration, the M.S. degree in business administration, and a concentration in the Master of Business Administration (M.B.A.) program. Requirements for the M.B.A., M.S., and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

For more information, please see our website: http://warrington.ufl.edu/departments/mkt.

Other

Business Administration (Marketing - Master's)

College

Warrington College of Business Administration

Department/School

Marketing Department

Business Administration (Marketing - Master's)

The Masters of Business Administration (M.B.A) with a concentration in marketing focuses on consumer behavior, marketing management, and marketplace phenomenon. Students study the critical linkages between an organization and its environment, particularly customers and competitors.

The M.S. degree in Business Administration with a concentration in marketing is intended for students whose ultimate objective is to earn a Ph.D. in marketing at another institution. Applicants must have (a) an undergraduate degree from a nationally accredited program, (b) a minimum 3.5 undergraduate GPA, (c) a minimum 600 GMAT (1250 GRE), and (d) evidence of a strong interest in academic research in marketing. The concentration requires 30 credits of graduate-level courses, at least half of which must be in marketing.

Degrees Offered with a Major in Business Administration

Master of Arts

concentration in Marketing

Master of Science

concentration in Marketing
Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6647: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6881: Customer Relationship Management
- MAR 6882: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Business Administration (Marketing - Ph.D.)

College

Warrington College of Business Administration

Department/School

Marketing Department

Business Administration (Marketing - Ph.D.)
The doctoral program is research-focused and offers the opportunity for concentrated study in consumer behavior, marketing management, and quantitative or analytical modeling of marketplace phenomena.

The Ph.D. curriculum consists of course work in three areas: research foundations, the major field, and electives. In addition, students are required to complete a first-year summer research project, a third-year review paper, and a dissertation. Other requirements are outlined in the Graduate Degrees section of this catalog.

The research foundations requirement comprises a set of research methods and data analysis courses chosen from statistics, psychology, and/or economics. The major field course work is made up of a set of four required marketing seminars that are completed during the student's first 2 years in the program. Electives are selected from both advanced marketing seminars and other related disciplines to complement the student's research program.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

concentration in Marketing

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6867: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7796: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
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ACG 5647: Auditing II
ACG 5815: Accounting Regulation
ACG 6136: Accounting Theory
ACG 6175: International Accounting and Taxation
ACG 6635: Issues in Audit Practice
ACG 6685: Forensic Accounting
ACG 6891: International Auditing
ACG 6897: Information Systems Assurance
ACG 6905: Individual Work in Accounting
ACG 6935: Special Topics in Accounting
ACG 6940: Supervised Teaching
ACG 7885: Accounting Research I
ACG 7886: Accounting Research II
ACG 7887: Research Analysis in Accounting
ACG 7939: Theoretical Constructs in Accounting
ACG 7979: Advanced Research
ACG 7980: Research for Doctoral Dissertation
TAX 5005: Introduction to Federal Income Taxation
TAX 5025: Federal Income Tax I
TAX 5027: Federal Income Tax II
TAX 5065: Tax Professional Research
TAX 6105: Corporate Taxation
TAX 6115: Advanced Corporate Taxation
TAX 6205: Partnership Taxation
TAX 6526: International Taxation
TAX 6726: Executive Tax Planning
TAX 6877: State and Local Taxation

Economics Departmental Courses

ECO 5715: Open Economy/Macroeconomics
ECO 6075: Economics/Consumer Education
ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
ECO 6409: Game Theory Applied to Business Decisions
ECO 6716: International Macroeconomics
ECO 6906: Individual Work in Economics
ECO 6910: Supervised Research
ECO 6936: Special Topics
ECO 6940: Supervised Teaching
ECO 6957: International Studies in Economics
ECO 6971: Research for Master's Thesis
ECO 7113: Information Economics
ECO 7115: Macroeconomic Theory
ECO 7118: Markets and Institutions
ECO 7119: Information, Incentives, and Agency Theory
ECO 7120: General Equilibrium and Welfare Economics
ECO 7206: Microeconomic Theory I
ECO 7272: Economic Growth I
ECO 7404: Game Theory for Economists
ECO 7405: Mathematical Economics: Game Theory
ECO 7406: Dynamic Economics: Theory and Applications
ECO 7408: Mathematical Methods and Applications to Economics
ECO 7415: Statistical Methods in Economics
ECO 7424: Econometric Models and Methods
ECO 7426: Econometric Methods I
ECO 7427: Econometric Methods II
ECO 7452: Best Empirical Practices in Economics
ECO 7516: Tax Theory and Public Policy
ECO 7525: Welfare Economics and The Second Best
ECO 7534: Empirical Public Economics I
ECO 7535: Empirical Public Economics II
ECO 7536: Theoretical Public Economics
ECO 7706: Theory of International Trade
ECO 7707: International Economic Relations
ECO 7925: Research Skills Workshop
ECO 7938: Advanced Economics Seminar
ECO 7979: Advanced Research
ECO 7980: Research for Doctoral Dissertation
ECP 5415: Antitrust Policy and Managerial Decisions
ECP 5702: Managerial Economics
ECP 5705: Economics of Business Decisions
ECP 6417: Public Policy and Social Control
ECP 6701: Competitive Strategies in Expanding Markets
ECP 6708: Cases in Competitive Strategy
ECP 6840: Economics for Managing Information for Electronic Commerce
ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
ECP 7408: Empirical Industrial Organization
ECP 7418: Economics of Regulation
ECP 7419: Current Research in Regulation
HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6495: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analysis
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics In Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- GEB 6954: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary/Mortgage Markets and Institutions
Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6942: Supervised Teaching
- QMB 6944: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business
Dental Sciences Department

College of Dentistry

Endodontics Chair and Graduate Coordinator: Roberta Pileggi
Orthodontics Chair and Graduate Coordinator: Calogero Dolce
Periodontology Chair: Ikramuddin Aukhil; Graduate Coordinator: Rodrigo Neiva
Restorative Dental Sciences Interim Chair: William Willis; Graduate Coordinator: Edgar O'Neill

Complete faculty listing: Follow this link.

The College of Dentistry offers the Master of Science degree in dental sciences with concentrations in endodontics, orthodontics, periodontics, and prosthodontics. These concentrations include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include:

- Satisfactory completion of all course work
- Meeting the requirements for clinical certification in the respective dental specialty
- Thesis or project based on research.

Prerequisites for admission, in addition to those of the Graduate School, include:

- D.D.S. or D.M.D. degree
- Completion of Parts I and II of the American Dental Association's National Board of Dental Examinations.

The application deadline for Endodontics, Periodontics, and Prosthodontics is August 1
The application deadline of Orthodontics is September 2

Send applications to:

Master of Science Program,
College of Dentistry,
P.O. Box 100402,
Health Science Center,
University of Florida,
Gainesville, FL 32610-0402

Requirements for the M.S. degree are provided in the Graduate Degrees section of this catalog.

For further information, see the Dental Science program link below.

Other

Dental Sciences

College

College of Dentistry

Department/School

Dental Sciences Department

Dental Sciences Program Information

The College of Dentistry offers the Master of Science degree in dental sciences with concentrations in endodontics, orthodontics, periodontics, and prosthodontics. These concentrations include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include:

- Satisfactory completion of all course work
- Meeting the requirements for clinical certification in the respective dental specialty
- Thesis or project based on research.

Prerequisites for admission, in addition to those of the Graduate School, include:

- D.D.S. or D.M.D. degree
- Completion of Parts I and II of the American Dental Association's National Board of Dental Examinations.

The application deadline for Endodontics, Periodontics, and Prosthodontics is August 1
The application deadline of Orthodontics is September 2

Send applications to:

Master of Science Program,
College of Dentistry,
P.O. Box 100402,
Health Science Center,
University of Florida,
Gainesville, FL 32610-0402.
Those not in Dentistry are given in-department graduate credit. Registration in the courses listed below is restricted to students currently admitted to a program in the College of Dentistry.

Degrees Offered with a Major in Dental Sciences

Master of Science

without a concentration

concentration in Endodontics

concentration in Orthodontics

concentration in Periodontics

concentration in Prosthodontics

General Courses

- DEN 6937
- DEN 6674: Advanced Oral Pathology
- DEN 6675: Craniofacial Pain
- DEN 6678: Advanced Oral Medicine and Drug Interactions in Dentistry
- DEN 6679: Advanced Radiology and Interpretation
- DEN 6905: Individual Study
- DEN 6910: Supervised Research
- DEN 6934: Special Topics in Dentistry
- DEN 6935: Special Topics in Dentistry
- DEN 6936: Practice Management
- DEN 6940: Supervised Teaching
- DEN 6941: Clinical Teaching in Dentistry
- DEN 6942: Grand Rounds
- DEN 6971: Research for Master's Thesis
- DEN 6973: Project in Lieu of Thesis

Endodontics Courses

- DEN 6642: Introduction to Advanced Endodontics
- DEN 6643: Treatment Planning/Cases Presentation
- DEN 6644: Nonsurgical Endodontic Care I
- DEN 6645: Nonsurgical Endodontic Care II
- DEN 6646: Surgical Endodontics I
- DEN 6647: Surgical Endodontics II

Orthodontics Courses
DEN 6602: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 1: Class I Treatment
DEN 6603: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 2: Class II Treatment
DEN 6604: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 3: Class II Treatment and Overbite Treatments
DEN 6605: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 4: Class II Treatment and Overbite Treatments
DEN 6606: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 5: Class III and Crossbite Treatments and Soft Tissue Considerations
DEN 6607: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 6: Impactions, Transplantations and Stability
DEN 6608: Analysis, Diagnosis, and Treatment Planning: Part I
DEN 6609: Analysis, Diagnosis, and Treatment Planning: Part II
DEN 6610: Biology of Tooth Movement: Part I
DEN 6612: Orthodontic Biomechanics: Part I
DEN 6613: Orthodontic Biomechanics: Part II
DEN 6614: Ortho-Perio Relationships: Part I
DEN 6615: Ortho-Perio Relationships: Part II
DEN 6616: Orthognathic Surgery Part I
DEN 6617: Orthognathic Surgery Part II
DEN 6618: Prenatal Growth and Development
DEN 6670: Craniofacial Anomalies
DEN 6671: Prenatal Growth and Development
DEN 6672: Materials in Orthodontics

Periodontics Courses

DEN 6652: Review of Periodontics Literature I
DEN 6653: Review of Periodontics Literature II
DEN 6654: Review of Periodontics Literature III
DEN 6655: Review of Periodontics Literature IV
DEN 6656: Introduction to Advanced Periodontology
DEN 6657: Periodontal Histology and Histopathology
DEN 6658: Treatment Planning in Periodontal Therapy

Prosthodontics Courses

DEN 6622: Principles of Occlusion
DEN 6623: Maxillofacial Prosthetics
DEN 6624: Dental Implant Restoration
DEN 6625: Fixed Prosthodontic Ceramics
DEN 6626: Advanced Removable Partial Dentures
DEN 6627: Treatment Planning Seminar

School of Architecture

Director: M. Gold.
Graduate Coordinator: N. M. Clark.
Complete faculty listing Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization in this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, Box 115701.

Master of Architecture: The School of Architecture offers graduate work leading to the first professional degree, Master of Architecture. During graduate studies, each student has the opportunity to focus on one or more areas, including design, history and theory, urban design, preservation, structures, and technology. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design. The student's overall college experience, both undergraduate and graduate programs, is intended to be a complete unit of professional education leading to practice in architecture or related fields.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Florida School of Architecture offers the following NAAB-accredited degree programs:

Master of Architecture (pre-professional degree + 52 graduate credits) Master of Architecture (professional degree + 30 graduate credits) Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits)

Master of Architecture (pre-professional degree + 52 graduate credits): For those students who have a 4-year baccalaureate degree from an accredited architectural program, 2 years in residence (52 credits) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and
Master of Architecture (professional degree + 30 graduate credits): For students who have a baccalaureate degree with an architecture or related major (interior design, landscape architecture) and who have completed 4 or 6 architecture or design studies courses, three years of residence (83 credits, approximately) are normally required to complete the Master of Architecture degree. Notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or master's project. Undergraduate courses 3000 and 4000 level in the major do not count toward the minimum requirements for the graduate degree. Course sequences in history and theory, materials and methods, technology, structures, and practice must also be completed.

Master of Architecture (non-professional degree + 54 undergraduate credits + 52 graduate credits): For students with a baccalaureate degree in a nonrelated academic area and have completed fewer than 4 design studies courses, 4 years of residence (112 credits, approximately) are normally required to complete the Master of Architecture degree. Notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 4071, ARC 4072, ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or project. Undergraduate courses 3000 and 4000 level in the major do not count toward the 52-hour minimum requirements for the graduate degree. Course sequences in history and theory, materials and methods, technology, structures, and practice must also be completed.

Accredited 5-year professional base: For students with a baccalaureate degree in architecture from an accredited 5-year professional degree program, a 1-year degree program is available. In these cases, a specialized curriculum is developed that complments the needs of the applicant. Minimum registration is 30 credits; however, the minimum may increase if transcript reviews show that further course work is needed to meet registration and curriculum requirements. ARC 6356 is a prerequisite for the thesis or master's project.

Most states require individuals intending to become architects to hold an accredited degree. The National Architectural Accrediting Board acknowledges two types of degrees: the Bachelor of Architecture (minimum 5 five years of study); and the Master of Architecture (minimum 3 years of study after an unrelated bachelor's degree, or 2 years after a related pre-professional bachelor's degree). These professional degrees educate those who aspire to registration and licensure to practice as architects.

Student work: The College may retain student work for the purpose of record, exhibition, or instruction.

Master of Science in Architectural Studies: The M.S.A.S. is a nonprofessional degree for advanced investigations in specialized areas of architectural history, architectural pedagogy, theory, technology, design, preservation, or practice. Students with a bachelor's degree in any discipline from an accredited university are eligible to apply to this program; the proposed area of focus should be precisely defined in the application. This is a 3- to 4-semester program (32 hours minimum) that includes a thesis. (No more than 6 hours of ARC 6971 may be counted in the minimum credit hours for the degree.) Interdisciplinary study is encouraged. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design.

The School sponsors special curricula in architecture to enhance the academic program. Preservation Institute: Caribbean, Preservation Institute: Nantucket, and Vicenza Institute of Architecture (Italy) accepts students from the University of Florida and also from academic circles throughout the United States and the world for year-round study. Any student in a graduate architecture program at the University of Florida may apply for one or more of these programs.

Requirements for the M.Arch., M.S.A.S., and Ph.D. degrees are described in the General Information section of this catalog.

The School also participates in a program granting an Interdisciplinary Concentration and Certificate in Sustainable Architecture. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

Applications: All applications for fall term graduate admission (including official transcripts, GRE scores, and TOEFL scores, if necessary) must be received by the Office of the Registrar by January 15. In addition to satisfying University requirements for admission, applicants are required to submit to the Graduate Program Assistant, School of Architecture, 231 ARCH, Box 115702, the following: a portfolio of their creative work; a scholarly statement of intent and objectives; and three letters of recommendation. This material must be received by January 15 to be considered for admission in the next fall term. Students may apply after the January 15 deadline but will only be considered if spaces become available. (Updates of portfolios are accepted after January 15; however, applications will not be considered until they are complete.)

The School reserves the right to retain student work for purposes of record, exhibition, or instruction. Field trips are required of all students; students should plan to have adequate funds available. It may be necessary to assess studio fees to defray costs of base maps and other generally used materials.
concentration in Historic Preservation

concentration in Sustainable Architecture

concentration in Sustainable Design

Master of Architecture

without a concentration

concentration in Historic Preservation

concentration in Sustainable Architecture

concentration in Sustainable Design

Courses

- ARC 6512: Structural Modeling
- ARC 6116: Drawing toward Architecture
- ARC 6311C: Building Information Modeling
- ARC 6383: St. Augustine Interdisciplinary Design Studio
- DCP 6710: History and Theory of Historic Preservation
- DCP 6715: Preservation Building Technology
- DCP 6971: Research for Master's Thesis
- URP 6272: Advanced Planning Information Systems

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6357: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Connections
- ARC 6399: Advanced Topics in Urban Design

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The college offers an interdisciplinary doctoral program in design, construction, and planning. Areas of specialization in the program include architecture, construction management, interior design, landscape architecture, and urban and regional planning. Within the area of construction management, specialization options include sustainable construction, information systems, construction safety, affordable housing, productivity, and human resource management. These specializations prepare students to assume college-level faculty positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning, University of Florida, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Master's Programs, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115703.

M.E. Rinker, Sr., School of Construction Management

Director: Robert Ries
Director of Master's Programs: Robert E. Minchin

Complete faculty listing: Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary doctoral program in design, construction, and planning. Areas of specialization in the program include architecture, construction management, interior design, landscape architecture, and urban and regional planning. Within the area of construction management, specialization options include sustainable construction, information systems, construction safety, affordable housing, productivity, and human resource management. These specializations prepare students to assume college-level faculty positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115703.

The M.E. Rinker Sr. School offers courses leading to the degrees of Master of Science in Construction Management (thesis), Master of Construction Management (nonthesis), and Master of International Construction Management (nonthesis distance education program for experienced professionals). An individual plan of study is prepared for each student to ensure that the student's goals are achieved within the broad policy guidelines of the Rinker School. Specialization may be in such areas as construction management, sustainable construction, information systems, construction safety, and construction law. Requirements for the M.B.C., M.S.B.C., M.I.C.M., and Ph.D. degrees are given in the General Information section of this catalog.

Master of Construction Management (M.C.M.) or Master of Science in Construction Management (M.S.C.M.): To be eligible for admission to the M.C.M. or M.S.C.M. programs, a student must hold a 4-year undergraduate degree in building construction or its equivalent in related fields. "Equivalent in related fields" should include studies in construction materials and methods, structures, and management. Students with deficiencies in these related fields may need longer residence for the master's degree, as they will be required to take specified basic courses to provide a foundation for advanced courses. There is no foreign language requirement.

No more than 3 credits of BCN 6971 may be used to satisfy the credit requirements for the M.S.C.M. degree without written permission of the Director of Master's Programs.
Master of International Construction Management (M.I.C.M.): This program prepares students to assume upper-level management responsibilities in a multinational company. To be eligible for admission to the M.I.C.M. program, a student must have:

- A 4-year undergraduate degree
- At least 5 years of meaningful, supervisory-level construction management experience
- Acceptable GRE scores (verbal and quantitative)
- A grade point average of 3.0 on a 4.0 scale
- Employer sponsorship
- International students must submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

No more than 3 credits of ICM 6934 may be used to satisfy the credit requirements for the M.I.C.M. without written permission of the Director. All candidates are required to take ICM 6930. In addition to these 6 research-oriented graduate credit hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses and special electives. All candidates are required to pass a comprehensive oral and/or written examination at the completion of the course work and their master's research report/project.

The M.E. Rinker Sr. School reserves the right to retain student work for purposes of record, exhibition, or instruction.

Research facilities: The Shimberg Center for Housing Studies, operating within the School, researches the problems and possible solutions associated with developing and producing affordable housing. The Powell Center for Construction and the Environment conducts research on implementing sustainability in creating, operating, and constructing a built environment. The Fluor Program for Construction Safety researches and disseminates information on matters related to construction safety and health. The Center for Advanced Construction Information Modeling educates members of the AECO industry about new and emerging technologies in virtual design and construction.

Combined program: The School offers a combined bachelor's/master's degree program. Contact the Director of Master's Programs for information.

For more information, please see our website: [http://www.bcn.ufl.edu](http://www.bcn.ufl.edu).

Other

Construction Management

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr., School of Construction Management

Degrees Offered with a Major in Construction Management

Master of Construction Management

without a concentration

concentration in Historic Preservation

concentration in Sustainable Construction

concentration in Sustainable Design

Master of Science in Construction Management

without a concentration

concentration in Historic Preservation

concentration in Sustainable Construction

concentration in Sustainable Design

Construction Management Departmental Courses
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
Fire and Emergency Services

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr., School of Construction Management

Fire and Emergency Services Program Information

The Master of Fire and Emergency Services degree program focuses on Emergency Services/Disaster Management (ES/DM) and is designed for individuals who are seeking knowledge in emergency planning, hazard mitigation and preparedness, disaster response and recovery, and homeland security. The goal is to create broad experience that includes the many elements of current cases in ES/DM and emphasize both the critical thinking and leadership skills necessary to advance in the field.

The M.F.E.S. degree provides post-professional advancement for the critical technical issues beyond the initial fire science practices and administrative studies. Major research topics include interdisciplinary studies in materials sciences, suppression systems, advanced planning and geographic systems, pre- and post-disaster mitigation planning, computer applications, and technological innovations.

The M.F.E.S. is an online distance education program. All courses are conveniently delivered utilizing a web-based e-Learning system.

For more information, please see our website: http://www.bcn.ufl.edu/academics/masters/mfesesdm

Degrees Offered with a Major in Fire and Emergency Services

Master of Fire and Emergency Services

without a concentration

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Methods and Management for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
• BCN 6905: Directed Independent Study in Construction
• BCN 6910: Supervised Research
• BCN 6933: Advanced Construction Management
• BCN 6934: Construction Research
• BCN 6940: Supervised Teaching
• BCN 6971: Research for Master's Thesis
• FES 6705: Communications in Emergency Management
• FES 6724: Fire and Emergency Services Response Planning
• FES 6726: Hazard Mitigation and Preparedness
• FES 6735: International Emergency/Disaster Management
• FES 6736: Homeland Security and Emergency Management
• FES 6766: Research Methods in FES
• FES 6806: Disaster Response and Recovery
• FES 6826: Emergency Services - Disaster Planning
• FES 6827: Business Continuity and Disaster Planning
• FES 6836: Impacts of Natural and Man-made Disasters on Buildings
• FES 6916: Research for Master's Report
• FES 6940: Practicum in FES
• ICM 5905: Special Studies
• ICM 6420: Commercial Management and Cost Control
• ICM 6440: Construction Value Management
• ICM 6680: Principles of International Sustainable Construction
• ICM 6682: Construction Ecology and Metabolism
• ICM 6684: High-Performance Green Building Delivery Systems
• ICM 6710: Construction Human Resource Management
• ICM 6750: Managing Construction Information Technology
• ICM 6751: International Construction Management
• ICM 6752: Construction Finance and Investment
• ICM 6761: Advanced Planning, Scheduling, and Logistics
• ICM 6762: Construction Risk Management
• ICM 6770: Advanced Project Safety Management
• ICM 6772: International Strategic Management
• ICM 6905: Directed Independent Study in International Construction
• ICM 6910: Supervised Research
• ICM 6930: Construction Communication and Research
• ICM 6934: International Construction Research

College of Design, Construction, and Planning Courses

• DCP 6205: Ecological Issues in Sustainability and the Built Environment
• DCP 6211: Preservation Topics, Issues, and Practice
• DCP 6212: Sustainable Design Issues: Ecology, Architecture, and Planning
• DCP 6710: History and Theory of Historic Preservation
• DCP 6711: History of the Built Environment for Preservation Practice
• DCP 6712: Preservation Technology: Conserving Modern Buildings
• DCP 6713: Historic Preservation: Principles, Practice, and Engineering
• DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
• DCP 6715: Preservation Building Technology
• DCP 6716: Cultural Resource Management
• DCP 6730: Preservation Policy
• DCP 6905: Independent Study
• DCP 6931: Special Topics in Design, Construction, and Planning
• DCP 6943: Practicum in Historic Preservation
• DCP 6971: Research for Master's Thesis
• DCP 7790: Doctoral Core I
• DCP 7792: Doctoral Core II
• DCP 7794: Doctoral Seminar
• DCP 7911: Advanced Design, Construction, and Planning Research I
• DCP 7940: Supervised Teaching
• DCP 7949: Professional Internship
• DCP 7979: Advanced Research
• DCP 7980: Research for Doctoral Dissertation

International Construction Management

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr., School of Construction Management

Degrees Offered with a Major in International Construction Management
Master of International Construction Management

without a concentration

concentration in Historic Preservation

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
- ICM 5905: Special Studies
- ICM 6420: Commercial Management and Cost Control
- ICM 6440: Construction Value Management
- ICM 6680: Principles of International Sustainable Construction
- ICM 6682: Construction Ecology and Metabolism
- ICM 6684: High-Performance Green Building Delivery Systems
- ICM 6710: Construction Human Resource Management
- ICM 6750: Managing Construction Information Technology
- ICM 6751: International Construction Management
- ICM 6752: Construction Finance and Investment
- ICM 6761: Advanced Planning, Scheduling, and Logistics
- ICM 6762: Construction Risk Management
- ICM 6770: Advanced Project Safety Management
- ICM 6772: International Strategic Management
- ICM 6905: Directed Independent Study in International Construction
- ICM 6910: Supervised Research
- ICM 6930: Construction Communication and Research
ICM 6934: International Construction Research

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Sustainable Construction

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr., School of Construction Management

Degrees Offered with a Major in Sustainable Construction

Master of Science in Construction Management

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5798C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Interior Design Department

Chair: M. Portillo
Graduate Coordinator: N. Park

Complete faculty listing by department: Follow this link.

Doctor of Philosophy:
The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning, Doctoral Program, 331 ARCH, P.O. Box 115701.

Master of Interior Design:
The Master of Interior Design (M.I.D.) provides opportunities for students to direct their attention toward a variety of topics, including
Degrees Offered with a Major in Interior Design

Each student must select a two-member supervisory committee to guide course selection and to guide thesis selection, study, and production. Building Construction offers both collaborative study and research opportunities for M.I.D. students. Leading to a certificate would strengthen the research and design effort. Likewise, existing appropriate courses in Architecture, Landscape Architecture, Urban and Regional Planning, and Construction and Planning offer the Certificate in Historic Preservation. If the focus of a student is the renovation and preservation of built environments, then historic preservation courses from such academic units as Psychology, Anthropology, Sociology, Engineering, Education, and Business Administration provide possible electives. The College of Design, Graduate statistics and 9 hours of multidisciplinary graduate electives that reinforce and extend the research.

Program requirements: After leveling courses are completed and with approval by the graduate coordinator and supervisory committee chair, a student completes 24 hours of departmentally approved graduate work in the Department of Interior Design. In addition, with the graduate coordinator's approval, the student is required to take 3 hours of course work in graduate statistics and 9 hours of multidisciplinary graduate electives that reinforce and extend the research.

Courses from such academic units as Psychology, Anthropology, Sociology, Engineering, Education, and Business Administration provide possible electives. The College of Design, Construction and Planning offers the Certificate in Historic Preservation. If the focus of a student is the renovation and preservation of built environments, then historic preservation courses leading to a certificate would strengthen the research and design effort. Likewise, existing appropriate courses in Architecture, Landscape Architecture, Urban and Regional Planning, and Building Construction offer both collaborative study and research opportunities for M.I.D. students.

Each student must select a two-member supervisory committee to guide course selection and to guide thesis selection, study, and production.

Other

Interior Design

College

College of Design, Construction, and Planning

Department/School

Interior Design Department

Degrees Offered with a Major in Interior Design
Master of Interior Design

without a concentration

concentration in Historic Preservation

concentration in Sustainable Design

Courses

- IND 5326: Color Theory Planning and Practice

Interior Design Departmental Courses

- IND 5023: Introduction to Architectural Interiors
- IND 5106: History of Interior Design I
- IND 5136: History of Interior Design II
- IND 5212C: Architectural Interiors I
- IND 5213C: Introduction to Architectural Interiors Lab
- IND 5227C: Advanced Architectural Interiors I
- IND 5231C: Architectural Interiors II
- IND 5232C: Advanced Architectural Interiors II
- IND 5317C: Interior Design Communication Systems
- IND 5427C: Interior Design Construction Documents
- IND 5428: Materials for Interior Design
- IND 5434C: Interior Lighting
- IND 5445C: Furniture Design
- IND 5484C: Advanced Interior Design Detailing and Construction Documents
- IND 5484C: Computer Applications in Three-Dimensional Design
- IND 5486: Interior Environmental Technology
- IND 5508: Business and Professional Practices for Interior Designers
- IND 5638: Design Environments and Human Interaction
- IND 5937: Current Topics in Interior Design
- IND 6239: Advanced Topics in Interior Design Studio
- IND 6639: Methods of Interior Design Research
- IND 6906: Independent Studies and Readings
- IND 6940: Supervised Teaching
- IND 6941: Interior Design Internship
- IND 6971: Research for Master's Thesis

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
College of Design, Construction, and Planning

Chair: Gina Gurucharri
Graduate Coordinator: Kevin Thompson

Complete faculty listing by department: Follow this link

Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio's selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

Design studios: Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio's selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

Thesis or terminal project: The Department recognizes that students have different professional goals and personal strengths and interests. A thesis is appropriate for students interested in further research or teaching, or in pursuing advanced degrees. A project (with a significant research component) is appropriate for students interested in design or project-oriented aspects of landscape architecture, or if their specific areas of interest suggest a nontraditional approach.

Programs, centers, and institutes: The College of Design, Construction, and Planning has several research centers and institutes. The course work and summer sessions afforded by these programs offer both required and elective course work for graduate students in landscape architecture:

- **The Center for Landscape Conservation Planning**: The Center for Landscape Conservation Planning conducts applied research on the relationship between conservation and land use while providing learning opportunities for students.
- **The Center for International Design and Planning**: The Center for International Design and Planning conducts interdisciplinary research with a focus on emerging design and planning trends in an era of globalization with a focus on resilient development systems and adaptive design and planning strategies.
- **The Preservation Institute**: Nantucket gives students an opportunity to receive specialized educational experience in a broad range of preservation topics using Nantucket as a resource for case-study projects.
- **The Preservation Institute**: Caribbean gives students an opportunity to conduct and apply research regarding the conservation of the rich cultural traditions of the Greater Caribbean basin.
- **The GEOPLAN Center**: The GEOPLAN Center is dedicated to the development of geographic and spatial information systems. Graduate students receive instruction in geographic information systems and are involved in a multidisciplinary studio that applies the tools and systems understanding afforded by GIS.

Graduate advisement: Students are initially advised by the Graduate Coordinator. He or she has guided the student's application through the acceptance process and is familiar with the student's background and needs. A plan of study is developed that includes required and optional courses. By the end of the second semester of study, each student is required to form a supervisory committee composed of two faculty members. The primary purpose of the graduate committee is to advise the student on educational objectives and the thesis or terminal project course work.

Application Procedure: Details of application procedure are found on the Department of Landscape Architecture's website. Applicants are encouraged to familiarize themselves with the details of the application procedures and the application requirements. Applications will only be considered for the track for which they have been submitted. Make certain you are applying to the correct track based on your background and credentials and the criteria detailed above.

COMPLETE GRADUATE DEGREE REQUIREMENTS

The mission of the Department of Landscape Architecture is to advance the ethical, creative, and skillful application of the art and the science of planning and designing urban, rural and natural environments. The Master of Landscape Architecture seeks excellence through professional practice and service, and through research and scholarly pursuit.

Intermediate field trips are required as a part of the normal program curriculum. Students should plan to have adequate funds for field trips and for studio materials. Students are also required to own a laptop computer meeting minimum department requirements. These specifications are available through the department of Landscape Architecture's website at URL: http://www.dcp.ufl.edu/landscape.

The Graduate program in Landscape Architecture offers flexibility in meeting the needs of applicants with varied backgrounds. Students entering the graduate program in landscape architecture follow one of the four following tracks:

**Pre MLA Program**
Graduate students who do not possess an LAAB accredited professional degree in landscape architecture are invited to enroll in the Pre MLA program.

The Pre MLA Program aids the development of basic analytical, design and graphic skills. Upon successful completion of the Pre MLA Summer term, students advance into a two-semester sequence of art courses that provide a foundation of applied landscape design and planning theory as well as competencies in landscape construction.

**MLA Advanced Graduate Studies Program**
Graduate students having completed the Pre MLA program or entering the MLA program with an LAAB accredited professional baccalaureate degree in Landscape Architecture commence a two year program of advanced graduate coursework towards the completion of the MLA degree.

**MLA Program + Construction**
Graduate students with a non-accredited or non-LAAB accredited degree in Landscape Architecture may apply directly to the MLA program but may be required to take additional coursework to develop core competencies required for advanced graduate study.

**MLA Research Degree**
Graduate students with an LAAB accredited professional degree in Landscape Architecture and a significant history of achievement in professional practice may tailor a program of advanced study to meet their specific needs. Proposals for the MLA Research Degree option are reviewed by the Graduate Coordinator and an approved course of study is determined through consultation with the Graduate Committee.

The normal tenure of advanced graduate study is five semesters which includes a summer semester internship. Students complete a minimum of 52 credit hours composed of lecture courses, seminars, design and construction studios, internship and individual study (special studies, supervised research and thesis or terminal project).

This time period would be extended should a student elect to expand the course work or seek a concurrent degree in a related field.

**Design studios**: Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio's selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

**Thesis or terminal project**: The Department recognizes that students have different professional goals and personal strengths and interests. A thesis is appropriate for students interested in further research or teaching, or in pursuing advanced degrees. A project (with a significant research component) is appropriate for students interested in design or project-oriented aspects of landscape architecture, or if their specific areas of interest suggest a nontraditional approach.

Graduate students with an LAAB accredited professional degree in Landscape Architecture and a significant history of achievement in professional practice may tailor a program of advanced study to develop core competencies required for advanced graduate study.

Graduate students with a non-accredited or non-LAAB accredited degree in Landscape Architecture may apply directly to the MLA program but may be required to take additional coursework to develop core competencies required for advanced graduate study.

**MLA Program + Construction**
Graduate students with a non-accredited or non-LAAB accredited degree in Landscape Architecture may apply directly to the MLA program but may be required to take additional coursework to develop core competencies required for advanced graduate study.

**MLA Research Degree**
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**Design studios**: Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio's selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

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**Programs, centers, and institutes**: The College of Design, Construction, and Planning has several research centers and institutes. The course work and summer sessions afforded by these programs offer both required and elective course work for graduate students in landscape architecture:

- **The Center for Landscape Conservation Planning**: The Center for Landscape Conservation Planning conducts applied research on the relationship between conservation and land use while providing learning opportunities for students.
- **The Center for International Design and Planning**: The Center for International Design and Planning conducts interdisciplinary research with a focus on emerging design and planning trends in an era of globalization with a focus on resilient development systems and adaptive design and planning strategies.
- **The Preservation Institute**: Nantucket gives students an opportunity to receive specialized educational experience in a broad range of preservation topics using Nantucket as a resource for case-study projects.
- **The Preservation Institute**: Caribbean gives students an opportunity to conduct and apply research regarding the conservation of the rich cultural traditions of the Greater Caribbean basin.
- **The GEOPLAN Center**: The GEOPLAN Center is dedicated to the development of geographic and spatial information systems. Graduate students receive instruction in geographic information systems and are involved in a multidisciplinary studio that applies the tools and systems understanding afforded by GIS.

Graduate advisement: Students are initially advised by the Graduate Coordinator. He or she has guided the student's application through the acceptance process and is familiar with the student's background and needs. A plan of study is developed that includes required and optional courses. By the end of the second semester of study, each student is required to form a supervisory committee composed of two faculty members. The primary purpose of the graduate committee is to advise the student on educational objectives and the thesis or terminal project course work.

Application Procedure: Details of application procedure are found on the Department of Landscape Architecture's website. Applicants are encouraged to familiarize themselves with the details of the application procedures and the application requirements. Applications will only be considered for the track for which they have been submitted. Make certain you are applying to the correct track based on your background and credentials and the criteria detailed above.
Application Dates
Applications are to be completed and submitted prior to the deadline noted on the Department's website. Unless otherwise noted, international applications must be received by November 1st. Applications from within the US are to be received no later than February 1st. Early applications are encouraged.

Application materials to be submitted online and/or to the Office of the Registrar
Application materials include the online application form accompanied by official transcripts, Letters of Recommendation, GRE scores, and TOEFL scores (applicants with English as a second language) to Office of the Registrar: Admissions Section, Criser Hall, University of Florida, Gainesville, Florida 32611.

Application Materials to be submitted directly to the Department
In addition to the materials submitted to the registrar's office, applicants must also submit a letter of intention to the Department of Landscape Architecture (Graduate Program Assistant).

Application Portfolio
All applicants are encouraged to submit a portfolio of creative works.
Post professional degree applicants applying for either the Pre MLA Fall Start or MLA Advanced Graduate Study program are required to submit a portfolio that both exhibits creative work experience and shows evidence of acquired technical proficiencies in the practice of landscape architecture.
All portfolio must be digital. PDF is preferred.

Application Status
Applications will be processed once all material has been received and must be complete prior to the application deadline. Applicants will be contacted by the Program Assistant if their application is incomplete. Please respond quickly if you have been contacted to increase the chances of your application being considered in the current review period. Only completed applications will be processed for review.

Once the application has been processed for review, applicants will receive written notification of their application status, generally sometime in the middle of March. Please do not contact the department with inquiries of your application status prior to the end of March.

Preparatory courses (see Undergraduate Catalog): LAA 2330, LAA 2350, LAA 2360, LAA 2370, LAA 3420, LAA 3350, LAA 3352, LAA 3421, LAA 3550, LAA 6716, and ORH 3513.

Other

Landscape Architecture

College

College of Design, Construction, and Planning

Department/School

Landscape Architecture Department

Landscape Architecture Program

The Department of Landscape Architecture offers graduate programs leading to the Master of Landscape Architecture (M.L.A.) degree in Landscape Architecture. A Ph.D. degree with a concentration in Landscape Architecture is also offered through the College of Design, Construction and Planning. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Master of Landscape Architecture: The MLA is a Landscape Architecture Accreditation Board (LAAB) accredited professional Master's degree in Landscape Architecture. Graduation from an accredited program is an essential first step toward licensing in Florida and other states that regulate the practice of landscape architecture.

For more information, please see our website: http://www.dcp.ufl.edu/landscape.

Degrees Offered with a Major in Landscape Architecture

Master of Landscape Architecture

without a concentration

concentration in Geographic Information Systems
concentration in Historic Preservation

concentration in Sustainable Design

concentration in Wetland Sciences

Landscape Architecture Departmental Courses

- LA 5331: Site Design Methodologies
- LA 5366: Principles of Landscape Architecture
- LA 6231: Landscape Architecture Theory
- LA 6322: Project Management for Landscape Architects
- LA 6342: Landscape Architecture Criticism
- LA 6349C: Design Communications for Landscape Architects
- LA 6382: Ecological and Environmental Policy
- LA 6525L: Advanced Landscape Construction Design
- LA 6536: Landscape Management
- LA 6568C: Advanced Landscape Architectural Design
- LA 6713: Cultural Landscapes
- LA 6716: History of Landscape Architecture
- LA 6905: Directed Study
- LA 6931: Water Conservation through Site Design and Green Roofs
- LA 6931C: Special Topics
- LA 6933: Topics in European Design: Paris, France
- LA 6935: Gardens of the World
- LA 6941: Supervised Internship
- LA 6952C: European Landscape Architecture Studio
- LA 6971: Research for Master's Thesis
- LA 6979: Terminal Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Urban and Regional Planning Department

Director of School of Landscape Architecture and Planning: Kristin Larsen
Chair: Joseli Macedo
Graduate Coordinator: Stanley Latimer
Graduate Coordinator of Online Degree Program: Ferdinand Lewis

Complete faculty listing by department: Follow this link.

Doctor of Philosophy: The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in Design, Construction, and Planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

Master of Arts in Urban and Regional Planning: The Department of Urban and Regional Planning offers graduate work leading to the degree of Master of Arts in Urban and Regional Planning (M.A.U.R.P.). Students are encouraged to enter the program in the fall semester. The program is usually completed in two academic years. The student entering with an undergraduate degree and no graduate study must complete 52 hours of credit for the M.A.U.R.P. degree. Students who have a master's degree in a related field may transfer up to 18 graduate semester hours toward the 52 hour requirement. Such a transfer of credit requires the approval of the Department. The Department encourages students with any undergraduate degree who are interested in the field of planning to apply for admission.

Complete descriptions of the requirements for the M.A.U.R.P. and Ph.D. degrees are provided in the General Information section of this catalog.

The urban and regional planning curriculum is designed to provide a set of core studies and contextual projects which prepare the graduate for the practice of planning in public or private agencies at both national and international levels. The core studies include history and theory of planning, planning methods, growth management at local, regional, and state levels, and related studies in community and regional social, natural, and economic systems. Contextual projects include, among many subject areas, urban design, transportation, regional planning, community redevelopment and preservation, housing, real estate, and economic development. The program emphasizes planning, policies, and design for the physical environment. Current specializations include growth management and transportation, urban design, housing, community and economic development, information technologies for planning, and environmental planning. Students are also encouraged to take advantage of the extensive faculty, course offerings, and other resources available in the College of Design, Construction, and Planning and throughout the University. The Department has two research centers: The Geo-facilities Planning and Information Center (GeoPlan), the Center for Building Better Communities (CBBC), and the Center for Health and the Built Environment (CHBE).

The curriculum is supported by an extensive GIS laboratory, and a visual aid library. Variation from the core studies may be approved by the Department if the student can demonstrate education and experience to the faculty that would support such an alternative. The M.A.U.R.P. degree is accredited by the Planning Accreditation Board, a joint undertaking of the American Institute of Certified Planners and the Association of Collegiate Schools of Planning, for having achieved the highest applicable standards for graduate education in the field of planning. Graduates of the Department are prepared to practice urban and regional planning.

The Department of Urban and Regional Planning and the College of Law offer a joint degree program (see Requirements for Master’s Degrees in the General Information section of this catalog). Areas of concentration with other programs in the Graduate School may be developed to meet the individual needs of students. In addition to course work the student is required to complete an internship with a public or private planning office and the student must complete a thesis.

The Department reserves the right to retain student work for purposes of record, exhibition, or instruction.

Other

Urban and Regional Planning

College

College of Design, Construction, and Planning

Department/School

Urban and Regional Planning Department

Degrees Offered with a Major in Urban and Regional Planning

Master of Arts in Urban and Regional Planning

without a concentration

concentration in Geographic Information Systems

concentration in Historic Preservation
concentration in Sustainable Design

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- URP 6276: Internet Geographic Information Systems
- URP 6277: Land Use Visioning and Analysis
- URP 6610: International Development Planning
- URP 6711: Transportation and Land Use Coordination
- URP 6743: Affordable Housing Law
- URP 6855: Urban Form in Cities throughout the Americas
- URP 6887: Advanced Defensible Space in Urban Design

Urban and Regional Planning Departmental Courses

- URP 6042: Urban Economy
- URP 6061: Planning Administration and Ethics
- URP 6100: Planning Theory and History
- URP 6122: Alternative Conflict Management
- URP 6131: Growth Management Powers I
- URP 6132: Growth Management Seminar
- URP 6203: Planning Research Design
- URP 6231: Quantitative Data Analysis for Planners
- URP 6270: Survey of Planning Information Systems
- URP 6272: Advanced Planning Information Systems
- URP 6274: GPS for Planners: Introduction to Global Positioning System
- URP 6275: Spatial Database Design and Development
- URP 6312: Land Development Planning and Evaluation
- URP 6341: Urban Planning Project
- URP 6421: Environmental Impact Statements
- URP 6424: Sustainable Urbanism in the Americas
- URP 6428: Advanced Environmental Planning
- URP 6429: Natural Resources Planning and Management
- URP 6445: Planning for Climate Change
- URP 6526: Health and the Built Environment
- URP 6541: Economic Development Planning
- URP 6542: Urban Land Economics
- URP 6543: Seminar in Capital Improvement Finance
- URP 6547: Local Public Finance for Urban Planners
- URP 6601: State Planning
- URP 6603: Development Review
- URP 6610: International Development Planning
- URP 6716: Transportation Policy and Planning
- URP 6718: Bikeways Planning and Design
- URP 6745: Housing, Public Policy, and Planning
- URP 6746: Topical Debates in Housing
- URP 6821: Transportation and Land-Use Modeling
- URP 6871: Planning and Design I
- URP 6872: Planning and Design II
- URP 6880: Defensible Space and CPTED in Urban Design
- URP 6884: Community Conservation and Revitalization
- URP 6905: Exploration and Directed Study
- URP 6910: Supervised Research
- URP 6920: Colloquium
- URP 6931: Topical Seminar
- URP 6933: Planning Information Seminar
- URP 6940: Supervised Teaching
- URP 6941: Urban Planning Internship
- URP 6971: Research for Master's Thesis
- URP 6979: Terminal Project
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7942: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Human Development and Organizational Studies in Education Department

Director: Linda B. Eldridge
Graduate Coordinator: Patricia Ashton

Complete faculty listing by department: Follow this link.

Programs leading to the Master of Arts in Education (M.A.E.), Master of Education (M.Ed.), Education Specialist (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees are offered through this school with programs in Counseling and Counselor Education, Educational Leadership, Higher Education Administration, Marriage and Family Counseling, Mental Health Counseling, Research and Evaluation Methodology, School Counseling and Guidance, and Student Personnel in Higher Education.

Requirements for these degrees are given in the Graduate Degrees section of this catalog.

More information can be found at our website: http://education.ufl.edu/hdose

Other

Counseling and Counselor Education

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Counseling and Counselor Education Program

The doctoral program in Counseling and Counselor Education prepares students for careers in academia and advanced clinical and administrative positions. Our program aligns with the University of Florida mission to prepare the next generation of scholars and professional leaders. Thus, our doctoral program is a good fit for individuals who want to fulfill the roles of counselor educators – research, writing, teaching, service, securing external funding to support scholarship, assuming professional leadership positions, etc. The doctoral program is ideally suited for individuals with previously earned masters and at least two years of clinical experience. Doctoral students complete coursework, a doctoral clinical internship, participate in teaching and supervision, and conduct research leading to the completion of a dissertation. Students average 3 to 5 years to complete the doctorate, many of whom balance work and school commitments.

Degrees Offered with a Major in Counseling and Counselor Education
Doctor of Education

without a concentration

concentration in Marriage and Family Counseling

concentration in Mental Health Counseling

concentration in School Counseling and Guidance

Doctor of Philosophy

without a concentration

concentration in Marriage and Family Counseling

concentration in Mental Health Counseling

concentration in School Counseling and Guidance

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6061: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA6192: Educational Leadership: The Individual
- EDA6193: Educational Leadership: Instruction
- EDA6195: Educational Policy Development
- EDA6215: Communications in Educational Leadership
- EDA6222: Administration of School Personnel
- EDA6225: Labor Relations in Public Education
- EDA6232: Public School Law
- EDA6242: Public School Finance
- EDA6271: Technology Leadership for Educational Administrators
- EDA6423: Data-Driven Decision Making in Educational Organizations
- EDA6503: The Principalship
- EDA6905: Individual Work
- EDA6931: Special Topics
- EDA6935: Problems in School Administration and Supervision
- EDA6948: Supervised Practice in School Administration
- EDA6971: Research for Master's Thesis
- EDA7206: Organizational Leadership in Education
- EDA7945: Practicum in Supervision and Administration
EDA 7979: Advanced Research
EDA 7980: Research for Doctoral Dissertation
EDA 7985: Research Design in Educational Administration
EDF 7413: Advanced Topics in Structural Equation Modeling
EDF 7482: Quasi-experimental Design and Analysis in Educational Research
EDG 6250: The School Curriculum
EDG 6285: Evaluation in the School Program
EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7222: Curriculum: Theory and Research
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7665: Bases of Curriculum and Instruction Theory
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EDH 6040: Theory of College Student Development
EDH 6046: Diversity Issues in Higher Education
EDH 6049: Domestic and International College Student Services
EDH 6051: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community Junior College in America
EDH 6066: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6503: Resource Development in Higher Education
EDH 6632: Current Issues in Community College Leadership
EDH 6637: Crisis Management in Higher Education
EDH 6931: Special Topics in Higher Education
EDH 6935: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7505: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDS 6140: Supervision of Instruction
MHS 5005: Introduction to Counseling
MHS 6000: Assessment and Treatment of Family Violence
MHS 6020: Counseling in Community Settings
MHS 6031: Spiritual Issues in Multicultural Counseling
MHS 6071: Diagnosis and Treatment of Mental Disorders
MHS 6200: Assessment in Counseling
MHS 6340: Career Development
MHS 6401: Counseling Theories and Applications
MHS 6421: Play Counseling and Play Process with Children
MHS 6428: Multicultural Counseling
MHS 6430: Introduction to Family Counseling
MHS 6440: Marriage Counseling
MHS 6450: Substance Abuse Counseling
MHS 6464: Introduction to Disaster Mental Health Counseling
MHS 6466: Trauma and Crisis Intervention: Theory and Practice
MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
MHS 6468: Multicultural issues in disaster mental health counseling
MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
MHS 6471: Sexuality and Mental Health
MHS 6480: Developmental Counseling Over the Life Span
MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
MHS 6500: Group Counseling: Theories and Procedures
MHS 6602: Educational Mediation
MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
MHS 6720: Professional Identity and Ethics in Counseling
MHS 6831: Supervision for a Split Internship
MHS 6905: Individual Work
MHS 6910: Supervised Research
MHS 6940: Supervised Teaching
MHS 6971: Research for Master's Thesis
MHS 7402: Brief Therapy
MHS 7407: Advanced Counseling Theories
MHS 7431: Advanced Family Counseling
MHS 7600: Consultation Procedures
MHS 7610: Practicum in Counseling Supervision
MHS 7730: Counseling Research
MHS 7740: Research in Counseling
Educational Leadership

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Educational Leadership Program Information

Programs in Educational Leadership provide opportunities for professional educators and those who would like to become professional educators to receive quality coursework, mentorship, and degrees in educational administration, policy, and leadership. The programs provided are ideal for vice principals, principals, district directors and supervisors, assistant superintendents, school business managers, teachers aspiring to acquire administrative roles within the K-12 system and educational leaders of other organizations.

Degrees Offered with a Major in Educational Leadership

Doctor of Education

without a concentration

concentration in Educational Policy

Doctor of Philosophy

without a concentration
concentration in Educational Policy

Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7222: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7665: Bases of Curriculum and Instruction Theory
- EDG 7943: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6063: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
Higher Education Administration

College
College of Education

Department/School

Human Development and Organizational Studies in Education Department

Higher Education Administration Program Information

The Higher Education Administration program has been established for students aspiring to become community college and university administrators, deans, presidents, and professors. America's community colleges and universities will soon face a critical leadership gap. As the baby boom generation approaches retirement age, many provosts, deans and college presidents are getting ready to add "emeritus" to their titles. As a result, openings in top leadership positions are expected to exceed the number of appropriately-trained individuals for many years to come.

The University of Florida's College of Education is helping fill the gap. Our nationally recognized Higher Education Administration Program prepares future leaders for their roles in administrative positions in higher education. Our faculty and alumni shaped the community and state college system as we know it, and our graduates have gone on to crucial administrative positions at two- and four-year institutions. Join us in shaping the future of higher education.

Degrees Offered with a Major in Higher Education Administration

Doctor of Education

without a concentration

concentration in Educational Policy

Doctor of Philosophy

without a concentration

concentration in Educational Policy

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7222: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7665: Bases of Curriculum and Instruction Theory
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
- EDH 7505: The Financing of Higher Education
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7942: Group Supervision in Student Personnel
- EDH 7948: Internship in Student Personnel
- EDS 6140: Supervision of Instruction
- MHS 5005: Introduction to Counseling
- MHS 6000: Assessment and Treatment of Family Violence
- MHS 6020: Counseling in Community Settings
- MHS 6061: Spiritual Issues in Multicultural Counseling
- MHS 6071: Diagnosis and Treatment of Mental Disorders
- MHS 6200: Assessment in Counseling
- MHS 6340: Career Development
- MHS 6401: Counseling Theories and Applications
- MHS 6421: Play Counseling and Play Process with Children
- MHS 6428: Multicultural Counseling
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marriage Counseling
- MHS 6450: Substance Abuse Counseling
- MHS 6464: Introduction to Disaster Mental Health Counseling
- MHS 6466: Trauma and Crisis Intervention: Theory and Practice
- MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
- MHS 6468: Multicultural issues in disaster mental health counseling
- MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
- MHS 6471: Sexuality and Mental Health
- MHS 6480: Developmental Counseling Over the Life Span
- MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
- MHS 6500: Group Counseling: Theories and Procedures
- MHS 6602: Educational Mediation
- MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
- MHS 6720: Professional Identity and Ethics in Counseling
- MHS 6831: Supervision for a Split Internship
- MHS 6905: Individual Work
- MHS 6910: Supervised Research
- MHS 6940: Supervised Teaching
- MHS 6971: Research for Master's Thesis
- MHS 7402: Brief Therapy
Marriage and Family Counseling

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Marriage and Family Counseling Program Information

The Marriage & Family Counseling/Therapy program specialization emphasizes an eco-systemic approach to understanding human problems and generating solution opportunities: Students learn to moderate solution-oriented conversations among interested parties (i.e., stakeholders) who are invited to seek "double descriptions" of mutual concerns and problems, to listen carefully to each other, to entertain and invent multiple solution possibilities, and to construct new narratives of cooperation and commitment.

Degrees Offered with a Major in Marriage and Family Counseling

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education
Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6081: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6281: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7222: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7665: Bases of Curriculum and Instruction Theory
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
- EDH 7505: The Financing of Higher Education
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7942: Group Supervision in Student Personnel
- EDH 7945: Practicum in Student Personnel
- EDH 7973: Project in Lieu of Thesis
- EDH 7979: Advanced Research
Mental Health Counseling

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Mental Health Counseling Program Information

The M.Ed./Ed.S. and M.AE./Ed.S. program in Mental Health Counseling is designed to equip students with the pre-professional competencies required for Registered Intern status and, after a minimum number of years of post-degree supervised clinical experience, (a) licensure in the State of Florida as Mental Health Counselors and (b) clinical membership in NBCC's Academy of Certified Clinical Mental Health Counselors. Additionally, some students may choose to continue their studies in a doctoral program. These students often elect the thesis option (M.A.E.) to complete their studies.
Degrees Offered with a Major in Mental Health Counseling

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education

Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6226: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Work
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7202: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7665: Bases of Curriculum and Instruction Theory
- EDG 7914: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
- EDH 7505: The Financing of Higher Education
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7918: Group Supervision in Student Personnel
- EDH 7948: Internship in Student Personnel
- EDS 6140: Supervision of Instruction
- MHS 5005: Introduction to Counseling
- MHS 6000: Assessment and Treatment of Family Violence
- MHS 6020: Counseling in Community Settings
- MHS 6061: Spiritual Issues in Multicultural Counseling
- MHS 6071: Diagnosis and Treatment of Mental Disorders
- MHS 6200: Assessment in Counseling
- MHS 6340: Career Development
- MHS 6401: Counseling Theories and Applications
- MHS 6421: Play Counseling and Play Process with Children
- MHS 6428: Multicultural Counseling
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marriage Counseling
- MHS 6450: Substance Abuse Counseling
- MHS 6464: Introduction to Disaster Mental Health Counseling
- MHS 6466: Trauma and Crisis Intervention: Theory and Practice
- MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
- MHS 6468: Multicultural issues in disaster mental health counseling
- MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
- MHS 6471: Sexuality and Mental Health
- MHS 6480: Developmental Counseling Over the Life Span
- MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
- MHS 6500: Group Counseling: Theories and Procedures
- MHS 6602: Educational Mediation
- MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
- MHS 6720: Professional Identity and Ethics in Counseling
- MHS 6831: Supervision for a Split Internship
- MHS 6905: Individual Work
- MHS 6910: Supervised Research
- MHS 6940: Supervised Teaching
- MHS 6971: Research for Master's Thesis
- MHS 7402: Brief Therapy
- MHS 7407: Advanced Counseling Theories
- MHS 7431: Advanced Family Counseling
- MHS 7600: Consultation Procedures
- MHS 7610: Practicum in Counseling Supervision
- MHS 7730: Seminar in Counseling Research
- MHS 7740: Research in Counseling
- MHS 7800: Practicum in Counseling
- MHS 7804: Group Supervision in Agency Counseling
- MHS 7805: Practicum in Agency Counseling
- MHS 7806: Practicum in Marriage and Family Counseling
- MHS 7807: Group Supervision in Marriage and Family Counseling
- MHS 7830: Internship in Counseling and Development-600 Hours
- MHS 7840: Internship in Counselor Education
- MHS 7948: Internship in Agency Program Management
- MHS 7979: Advanced Research
- MHS 7980: Research for Doctoral Dissertation
- SDS 6401: Counseling Skills for Non-Counselors
- SDS 6411: Counseling with Children
- SDS 6413: Counseling Adolescents
- SDS 6436: Family-School Intervention
- SDS 6520: Family, Student Development and Role of Teacher as Adviser
- SDS 6620: Organization and Administration of School Counseling Programs
- SDS 6831: Supervision for a Split Internship
- SDS 6905: Individual Work
- SDS 6936: Seminar in Counselor Education
- SDS 6998: Special Topics
Research and Evaluation Methodology

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Research and Evaluation Methodology Program Information

The mission of the Research and Evaluation Methodology program is to generate, evaluate, apply, and disseminate knowledge about educational research methodology, to prepare exemplary educational research methodologists, and to collaborate with others to provide methodology for the advancement of educational research. This mission aligns with College of Education's and University of Florida's missions because it results in research strategies for knowledge discovery to solve critical educational and human problems in a diverse global community.

- Learn to evaluate educational programs, analyze educational data, develop assessment instruments, and conduct research about the efficacy of research methodologies.
- Work as an educational researcher, an educational data analyst, or a psychometrician (an expert in testing and assessment).
- Find jobs in testing companies; research and evaluation companies; research centers; and assessment centers at universities, school districts, and state and federal agencies.
- Complete a master's degree (M.A.E. or M.Ed.) in two years or a Ph.D. in four years with classes focusing on research methodology, statistics applied to education, program evaluation, and psychometrics.
- We admit students with some undergraduate research experience. Our students come from a variety of backgrounds, including psychology, sociology, statistics, mathematics, mathematics education, political science, marketing, economics, and engineering.

Degrees Offered with a Major in Research and Evaluation Methodology

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Research and Evaluation Methodology

- EDF 5441: Assessment in General and Exceptional Student Education
- EDF 6113: Educational Psychology: Human Development
- EDF 6211: Educational Psychology: General
- EDF 6215: Educational Psychology: Learning Theory
- EDF 6232: Principles of Learning and Instructional Practice
- EDF 6400: Quantitative Foundations of Education Research Overview
- EDF 6401: Educational Statistics
- EDF 6403: Quantitative Foundations of Educational Research
EDF 6434: Educational Measurement
EDF 6436: Theory of Measurement
EDF 6471: Survey/Design and Analysis in Educational Research
EDF 6475: Qualitative Foundations of Educational Research
EDF 6481: Qualitative Research Methods in Education
EDF 6905: Individual Study
EDF 6910: Supervised Research
EDF 6938: Special Topics
EDF 6940: Supervised Teaching
EDF 6941: Practicum in Educational Research
EDF 6971: Research for Master's Thesis
EDF 7117: Affective Development and Education
EDF 7405: Advanced Quantitative Foundations of Educational Research
EDF 7412: Structural Equation Models
EDF 7435: Rating Scale Design and Analysis in Educational Research
EDF 7439: Item Response Theory
EDF 7474: Multilevel Models
EDF 7479: Qualitative Data Analysis: Approaches and Techniques
EDF 7483: Qualitative Data Collection: Approaches and Techniques
EDF 7486: Methods of Educational Research
EDF 7491: Evaluation of Educational Products and Systems
EDF 7639: Research in Educational Sociology
EDF 7931: Seminar in Educational Research
EDF 7932: Multivariate Analysis in Educational Research
EDF 7979: Advanced Research
EDF 7980: Research for Doctoral Dissertation
EDF 6052: Cognitive Psychology Applied to Education

Human Development and Organizational Studies in Education Departmental Courses

EDA 5938: Special Topics
EDA 6051: Educational Organization and Administration
EDA 6107: Leading Change in Educational Organizations
EDA 6102: Educational Leadership: The Individual
EDA 6103: Educational Leadership: Instruction
EDA 6195: Educational Policy Development
EDA 6215: Communications in Educational Leadership
EDA 6222: Administration of School Personnel
EDA 6225: Labor Relations in Public Education
EDA 6232: Public School Law
EDA 6242: Public School Finance
EDA 6271: Technology Leadership for Educational Administrators
EDA 6423: Data-Driven Decision Making in Educational Organizations
EDA 6503: The Principalship
EDA 6905: Individual Work
EDA 6931: Special Topics
EDA 6935: Problems in School Administration and Supervision
EDA 6948: Supervised Practice in School Administration
EDA 6971: Research for Master's Thesis
EDA 7206: Organizational Leadership in Education
EDA 7945: Practicum in Supervision and Administration
EDA 7979: Advanced Research
EDA 7980: Research for Doctoral Dissertation
EDA 7985: Research Design in Educational Administration
EDA 7413: Advanced Topics in Structural Equation Modeling
EDA 7482: Quasi-experimental Design and Analysis in Educational Research
EDG 6250: The School Curriculum
EDG 6285: Evaluation in the School Program
EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7222: Curriculum: Theory and Research
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7665: Bases of Curriculum and Instruction Theory
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7982: Research for Doctoral Dissertation
EDH 6040: Theory of College Student Development
EDH 6046: Diversity Issues in Higher Education
EDH 6049: Domestic and International College Student Services
EDH 6051: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community Junior College in America
EDH 6066: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6503: Resource Development in Higher Education
School Counseling and Guidance

College
School Counseling and Guidance Program Information

The M.Ed./Ed.S. and M.AE./Ed.S. program in School Counseling is designed to equip students with the pre-professional competencies required for Florida Department of Education Certification in School Counseling. The 72-credit hour program provides students with the specialized knowledge and skills required for placements as school counselors in public or private elementary, middle, or secondary schools.

Students enrolled in the School Counseling program, a state-approved and NCATE (National Council for the Accreditation of Teacher Education) and CACREP (Council for the Accreditation of Counseling and Related Educational Programs) accredited school counselor preparation program, must provide passing scores for all pertinent sections of the Florida Teacher Certification Examination (FTCE) including the General Knowledge test (math, English language skills, reading comprehension, and essay), the Professional Education examination, and the Subject Area Examination in Guidance and Counseling K-12 prior to graduation from the program. Questions about this requirement or any other certification related questions may be addressed to the College of Education Office of Student Services.

Degrees Offered with a Major in School Counseling and Guidance

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6061: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA6192: Educational Leadership: The Individual
- EDA6193: Educational Leadership: Instruction
- EDA6195: Educational Policy Development
- EDA6215: Communications in Educational Leadership
- EDA6222: Administration of School Personnel
- EDA6225: Labor Relations in Public Education
- EDA6232: Public School Law
- EDA6242: Public School Finance
- EDA6271: Technology Leadership for Educational Administrators
- EDA6423: Data-Driven Decision Making in Educational Organizations
- EDA6503: The Principalship
- EDA6905: Individual Work
- EDA6931: Special Topics
- EDA6935: Problems in School Administration and Supervision
EDA 6948: Supervised Practice in School Administration
EDA 6971: Research for Master's Thesis
EDA 7206: Organizational Leadership in Education
EDA 7945: Practicum in Supervision and Administration
EDA 7979: Advanced Research
EDA 7980: Research for Doctoral Dissertation
EDA 7985: Research Design in Educational Administration
EDF 7413: Advanced Topics in Structural Equation Modeling
EDF 7482: Quasi-experimental Design and Analysis in Educational Research
EDG 6250: The School Curriculum
EDG 6285: Evaluation in the School Program
EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7222: Curriculum: Theory and Research
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7665: Bases of Curriculum and Instruction Theory
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EDG 7985: Research Design in Educational Administration
EDH 6040: Theory of College Student Development
EDH 6046: Diversity Issues in Higher Education
EDH 6049: Domestic and International College Student Services
EDH 6051: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community Junior College in America
EDH 6066: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6503: Resource Development in Higher Education
EDH 6652: Current Issues in Community College Leadership
EDH 6653: Crisis Management in Higher Education
EDH 6931: Special Topics in Higher Education
EDH 6935: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7505: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDS 6140: Supervision of Instruction
HHS 5005: Introduction to Counseling
HHS 6000: Assessment and Treatment of Family Violence
HHS 6020: Counseling in Community Settings
HHS 6051: Spiritual Issues in Multicultural Counseling
HHS 6071: Diagnosis and Treatment of Mental Disorders
HHS 6200: Assessment in Counseling
HHS 6340: Career Development
HHS 6401: Counseling Theories and Applications
HHS 6421: Play Counseling and Play Process with Children
HHS 6428: Multicultural Counseling
HHS 6430: Introduction to Family Counseling
HHS 6440: Marriage Counseling
HHS 6450: Substance Abuse Counseling
HHS 6464: Introduction to Disaster Mental Health Counseling
HHS 6466: Trauma and Crisis Intervention: Theory and Practice
HHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
HHS 6468: Multicultural issues in disaster mental health counseling
HHS 6469: Traumatic Stress and Disaster Mental Health Counseling
HHS 6471: Sexuality and Mental Health
HHS 6480: Developmental Counseling Over the Life Span
HHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
HHS 6500: Group Counseling: Theories and Procedures
HHS 6602: Educational Mediation
HHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
HHS 6720: Professional Identity and Ethics in Counseling
HHS 6831: Supervision for a Split Internship
HHS 6905: Individual Work
HHS 6910: Supervised Research
HHS 6940: Supervised Teaching
HHS 6971: Research for Master's Thesis
HHS 7402: Brief Therapy
HHS 7407: Advanced Counseling Theories
HHS 7431: Advanced Family Counseling
Student Personnel in Higher Education

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Student Personnel in Higher Education Program Information

The University of Florida Student Personnel in Higher Education program is a master's program designed to prepare students to enter Student Affairs leadership positions in two- and four-year institutions of higher education. The program integrates academic coursework with practitioner-based experience. The SPHE master's degree consists of 36 credit hours of core classes and 10 credit hours of supervised practicum and internship experiences (total = 46 credit hours). Students enter the graduate program in the fall semester as members of a cohort group. The group provides support and builds a sense of community for the students. All students are assigned a faculty advisor at the time of admission.

The student affairs profession is increasingly diverse and is engaged in a variety of activities and programs. The emphasis in UF's master's degree program in SPHE is upon the promotion, design, and assessment of student learning in a variety of campus and community settings.

Degrees Offered with a Major in Student Personnel in Higher Education

Master of Arts in Education

Master of Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6081: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EGD 6250: The School Curriculum
- EGD 6285: Evaluation in the School Program
- EGD 6356: Teaching, Learning and Assessment
- EGD 6905: Individual Work
- EGD 6910: Supervised Research
- EGD 6931: Special Topics
- EGD 6940: Supervised Teaching
- EGD 6971: Research for Master's Thesis
- EGD 6973: Project in Lieu of Thesis
- EGD 7222: Curriculum: Theory and Research
- EGD 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EGD 7665: Bases of Curriculum and Instruction Theory
- EGD 7941: Field Experience in Curriculum and Instruction
- EGD 7979: Advanced Research
- EGD 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
- EDH 7503: The Financing of Higher Education
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7942: Group Supervision in Student Personnel
- EDH 7948: Internship in Student Personnel
- EDS 6140: Supervision of Instruction
- MHS 5005: Introduction to Counseling
- MHS 6000: Assessment and Treatment of Family Violence
- MHS 6020: Counseling in Community Settings
- MHS 6061: Spiritual Issues in Multicultural Counseling
- MHS 6071: Diagnosis and Treatment of Mental Disorders
- MHS 6200: Assessment in Counseling
- MHS 6340: Career Development
- MHS 6401: Counseling Theories and Applications
- MHS 6421: Play Counseling and Play Process with Children
- MHS 6428: Multicultural Counseling
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marriage Counseling
- MHS 6450: Substance Abuse Counseling
- MHS 6464: Introduction to Disaster Mental Health Counseling
- MHS 6466: Trauma and Crisis Intervention: Theory and Practice
- MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
- MHS 6468: Multicultural issues in disaster mental health counseling
- MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
- MHS 6471: Sexuality and Mental Health
Special Education, School Psychology and Early Childhood Studies Department

Director: Jean Crockett

Complete faculty listing by department Follow this link.

The School of Special Education, School Psychology and Early Childhood Studies offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 3 areas of specialization: Special Education, School Psychology, and Early Childhood Studies. Programs are accredited by the Florida Department of Education and approved by the National Council for Accreditation of Teacher Education (NCATE). The School Psychology program is approved by the NCATE and the National Association of School Psychologists (NASP). The Ph.D. program in School Psychology is accredited by the American Psychological Association (APA).

Other

Early Childhood Education

College

College of Education

Department/School

Special Education, School Psychology and Early Childhood Studies Department

Degrees Offered with a Major in Early Childhood Education
Master of Arts in Education

Master of Education

Early Childhood Education Courses

- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6940: Supervised Teaching
- EEC 7056: Early Childhood Policy and Advocacy
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7866: Theory and Research in Early Childhood Studies
- EEC 7979: Advanced Research

Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7866: Theory and Research in Early Childhood Studies
- EEX 6053: Foundations of Special Education
- EEX 6098: Students with Disabilities in Higher Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
- EEX 6299: Understanding Assessment for Postsecondary Students with Disabilities
- EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
- EEX 6786: Transdisciplinary and Transition Services in Special Education
- EEX 6788: Methods for Integrating Education-Health Care Transition
- EEX 6789: Legal Aspects and Policy in Education-Healthcare Transition
- EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
- EEX 6863: Supervised Practice in Special Education
- EEX 7709: Social-Emotional Learning & Play in Early Childhood
- SPS 7980: Research for Doctoral Dissertation

School Psychology

College

College of Education

Department/School

Special Education, School Psychology and Early Childhood Studies Department

Degrees Offered with a Major in School Psychology
Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

School Psychology Courses

- SPS 6052: Issues and Problems in School Psychology
- SPS 6191: Psychoeducational Assessment I
- SPS 6192: Psychoeducational Assessment II
- SPS 6193: Academic Assessment & Intervention
- SPS 6195: Developmental Psychopathology
- SPS 6197: Psychoeducational Assessment III
- SPS 6410: Direct Interventions I: Applied Behavior Analysis for School Psychologists
- SPS 6707: Interventions in School Psychology II: Cognitive Behavioral Interventions
- SPS 6708: Interventions in School Psychology III: System Level Interventions for Children and Youths
- SPS 6815: Law and Ethics in Psychology
- SPS 6937: Special Topics in School Psychology
- SPS 6941: Practicum in School Psychology
- SPS 6942: School Psychology Practicum II
- SPS 6945: Advanced Practicum in School Psychology
- SPS 7205: School Psychology Consultation
- SPS 7931: Seminar in School Psychology
- SPS 7949: Internship in School Psychology
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation

Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7666: Theory and Research in Early Childhood Studies
- EEX 6053: Foundations of Special Education
- EEX 6056: Students with Disabilities in Higher Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
- EEX 6299: Understanding Assessment for Postsecondary Students with Disabilities
- EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
- EEX 6785: Introduction to Education-Healthcare Transition
- EEX 6786: Transdisciplinary and Transition Services in Special Education
Special Education

College

College of Education

Department/School

Special Education, School Psychology, and Early Childhood Studies Department

Degrees Offered with a Major in Special Education

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Special Education Courses

- EEX 6788: Methods for Integrating Education-Health Care Transition
- EEX 6789: Legal Aspects and Policy in Education-Healthcare Transition
- EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
- EEX 6841: Practicum in Special Education: Mild Disabilities
- EEX 6863: Supervised Practice in Special Education
- EEX 7709: Social-Emotional Learning & Play in Early Childhood
- SPS 7980: Research for Doctoral Dissertation

- EEX 5940: Supervised Student Teaching in Special Education
- EEX 6053: Foundations of Special Education
- EEX 6072: Accessing Academic and Social Communities for Students with Disabilities
- EEX 6125: Interventions for Language and Learning Disabilities
- EEX 6219: Reading Assessment and Intervention for Students with Disabilities
- EEX 6222: Evaluation in Special Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6234: Assessment, Curriculum, and Instruction for Students with Severe Disabilities
- EEX 6249: Advanced Strategies for Teaching Students with Disabilities
- EEX 6661: Teaching and Managing Behavior for Student Learning
- EEX 6750: Families and Transition for Students with Disabilities
- EEX 6766: Transdisciplinary and Transition Services in Special Education
- EEX 6835: Practicum in Special Education: Severe Disabilities
- EEX 6841: Practicum in Special Education: Mild Disabilities
- EEX 6863: Supervised Practice in Special Education
Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7664: Theory and Research in Early Childhood Studies
- EEX 6053: Foundations of Special Education
- EEX 6098: Students with Disabilities in Higher Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
- EEX 6299: Understanding Assessment for Postsecondary Students with Disabilities
- EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
- EEX 6785: Introduction to Education-Healthcare Transition
- EEX 6796: Transdisciplinary and Transition Services in Special Education
- EEX 6788: Methods for Integrating Education-Health Care Transition
- EEX 6789: Legal Aspects and Policy in Education-Healthcare Transition
- EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
- EEX 6841: Practicum in Special Education: Mild Disabilities
- EEX 6863: Supervised Practice in Special Education
- EEX 6905: Individual Work
- EEX 6910: Supervised Research
- EEX 6971: Research for Master's Thesis
- EEX 6973: Project in Lieu of Thesis
- EEX 6979: Advanced Research
- EEX 6980: Research for Doctoral Dissertation
- EEX 7428: Teacher Education in Special Education
- EEX 7709: Social-Emotional Learning & Play in Early Childhood
- EGI 6051: Education of the Gifted Child
- EGI 6245: Program Development for the Gifted

School of Teaching and Learning

Director: E. Bondy.
Graduate Coordinator: S. G. Terzian.

Complete faculty listing by department: Follow this link.

The School of Teaching and Learning (http://education.ufl.edu/school) offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis or project in lieu of thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees in curriculum and instruction. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 10 areas of specialization: curriculum, teaching, and teacher education; educational technology; elementary education; mathematics education; language and literacy education (including children’s literature, English education, ESL/bilingual education, language arts, and reading education); science and environmental education; social foundations of education; social studies education; and teacher leadership for school improvement.

The nationally recognized Proteach graduate program leads to the M.Ed. degree and state certification as a classroom teacher. Unified Elementary Proteach admits undergraduates who complete the five-year program with a master’s degree. Secondary Proteach (English, Science, Social Studies) prepares teachers who have completed a bachelor’s degree in the discipline they will teach. Prospective elementary teachers who already hold a bachelor’s degree in a non-education field may wish to consider the School’s SITE program (Site-based Implementation of Teacher Education), which leads to the M.Ed. degree in curriculum and instruction. Students may apply to the state for alternative certification.

Beyond the Graduate School and College of Education admission requirements, students should have academic preparation and teaching experience appropriate to the program being pursued. Students having deficiencies in their preparation will be required to follow a program to remove such deficiencies. A limited amount of support is available for graduate studies through fellowships, scholarships, research assistantships, and teaching assistantships.

Other

Curriculum and Instruction (CCD)

College
Degrees Offered with a Major in Curriculum and Instruction

Doctor of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher InquiryAction Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice
Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6936: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6385: Foreign Languages Teaching Methods
- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
MAE 5332: Secondary School Mathematics Methods and Assessment
MAE 5395: Multicultural Mathematics Methods
MAE 5396: Using Formative Assessment to Improve Mathematical Learning
MAE 5347: Teaching K-8 Mathematics for Understanding
MAE 5945: Secondary School Mathematics Practicum
MAE 6313: Problem Solving in School Mathematics
MAE 6615: Individualizing Instruction in Mathematics
MAE 6641: Readings and Research in Mathematics Education
MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies
Teacher Leadership for School Improvement

- EDE 6325: Teacher InquiryAction Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Curriculum and Instruction (ISC)

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Curriculum and Instruction

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EME 6076: Virtual School Philosophy and Pedagogy
EME 6156: Games and Simulations for Teaching and Learning
EME 6235: Managing Educational Projects
EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

EDE 5940: Integrated Teaching and Learning
EDE 6225: Practices in Childhood Education
EDE 6266: Teaching and Learning in Elementary Classrooms
EDE 6325: Teacher Inquiry/Action Research
EDE 6905: Individual Work
EDE 6910: Supervised Research
EDE 6932: Special Topics
EDE 6948: Internship in Elementary Schools
EDE 7047: Issues in Teacher Education
EDE 7935: Seminar in Curriculum & Instruction
EDG 6356: Teaching, Learning and Assessment
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
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Educational Technology

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EME 5433: Integrating Technology into Science Classroom
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EME 6209: Designing Integrated Media Environments II
EME 6405: Educational Technology and Teaching
EME 6458: Distance Teaching and Learning
EME 6505: Educational Television Design and Production
EME 6602: Human-Computer Interactivity and the Learner
EME 6606: Advanced Instructional Design
EME 6609: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

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FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
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TSL 5325: Secondary ESOL Teaching Strategies
TSL 6145: Curriculum and Materials Development for ESOL K-12
TSL 6171: TESL I: Materials and Techniques
TSL 6172: TESL II: Materials for Special Purposes
TSL 6245: Language Principles for ESOL Teachers
TSL 6373: Methods of Teaching ESOL K-12
TSL 6440: Testing and Evaluation of ESOL
TSL 6790: Issues in ESOL for School Counselors and Psychologists
Language and Literacy Education

- LAE 6208: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
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- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6938: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Elementary Education

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Elementary Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses
• EDG 5666: Knowing and Learning in STEM
• EDG 6017: Writing for Academic Purposes
• EDG 6225: Global Studies Methods in K-12 Education
• EDG 6348: Instructional Coaching for Enhanced Student Learning
• EDG 6445: Meeting the Educational Needs of Students Living in Poverty
• EDG 7359: Professional Development and Teacher Learning
• EEC 6946: Practicum in Early Childhood Education
• EME 6059: Blended Learning Environments
• MNE 6916: Inquiry in Mathematics Teaching

General Courses

• EDG 6047: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6226: Foundations of Research in Curriculum & Instruction
• EDG 6356: Teaching, Learning and Assessment
• EDG 6905: Individual Work
• EDG 6910: Supervised Research
• EDG 6931: Special Topics
• EDG 6940: Supervised Teaching
• EDG 6971: Research for Master's Thesis
• EDG 6973: Project in Lieu of Thesis
• EDG 7224: Critical Pedagogy
• EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
• EDG 7303: Teacher Learning and Socialization in High Poverty Schools
• EDG 7326: Differentiated Supervision and Teacher Professional Development
• EDG 7941: Field Experience in Curriculum and Instruction
• EDG 7979: Advanced Research
• EDG 7980: Research for Doctoral Dissertation
• EME 6076: Virtual School Philosophy and Pedagogy
• EME 6156: Games and Simulations for Teaching and Learning
• EME 6235: Managing Educational Projects
• EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

• EDE 5940: Integrated Teaching and Learning
• EDE 6225: Practices in Childhood Education
• EDE 6266: Teaching and Learning in Elementary Classrooms
• EDE 6325: Teacher InquiryAction Research
• EDE 6905: Individual Work
• EDE 6910: Supervised Research
• EDE 6932: Special Topics
• EDE 6948: Internship in Elementary Schools
• EDE 7047: Issues in Teacher Education
• EDE 7935: Seminar in Curriculum & Instruction
• EDE 6356: Teaching, Learning and Assessment
• EDE 7224: Critical Pedagogy
• EDE 7252: Perspectives in Curriculum, Teaching, and Teacher Education
• EDE 7303: Teacher Learning and Socialization in High Poverty Schools
• EDE 7326: Differentiated Supervision and Teacher Professional Development
• EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

• EME 5054: Foundations of Educational Technology
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• EME 5315: Communicating with Technology
• EME 5316: Educational Technology Management Issues
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• EME 5432: Integrating Technology into Social Science Classroom
• EME 5433: Integrating Technology into Science Classroom
• EME 6086: Issues and Trends in Educational Technology Research
• EME 6205: Digital Photography and Visual Literacy
• EME 6208: Designing Integrated Media Environments I
• EME 6209: Designing Integrated Media Environments II
• EME 6405: Educational Technology and Teaching
• EME 6456: Distance Teaching and Learning
• EME 6505: Educational Television Design and Production
• EME 6602: Human-Computer Interactivity and the Learner
• EME 6606: Advanced Instructional Design
• EME 6609: Seminar: Distance Education Issues and Applications
• EME 6945: Practicum in Educational Media and Instructional Design
• EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

• FLE 6165: Bilingual-Bicultural Education
• FLE 6167: Cross-Cultural Communication for Teachers
• FLE 6336: Teaching Foreign Languages in Elementary Schools
• FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
• FLE 6365: Foreign Languages Teaching Methods
• FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
• TSL 5142: ESOL Curriculum, Methods, and Assessment
• TSL 5325: Secondary ESOL Teaching Strategies
• TSL 6145: Curriculum and Materials Development for ESOL K-12
• TSL 6171: TESL I: Materials and Techniques
• TSL 6172: TESL II: Materials for Special Purposes
• TSL 6245: Language Principles for ESOL Teachers
• TSL 6373: Methods of Teaching ESOL K-12
• TSL 6440: Testing and Evaluation of ESOL
• TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

• LAE 6298: Literacy & Language Instruction
• LAE 6319: Language Arts in the Elementary School
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• LAE 6348: Teaching Multiliteracies
• LAE 6365: Language Arts: Language and Composition
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• LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
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• LAE 7006: Language Acquisition and Education
• LAE 7519: Language and Inquiry
• LAE 7715: Research in Children's Literature
• LAE 7934: Seminar in Composition Theory and Practice
• LAE 7936: Seminar in English Language Arts

Mathematics Education

• MAE 5327: Middle School Mathematics Methods
• MAE 5332: Secondary School Mathematics Methods and Assessment
• MAE 5395: Multicultural Mathematics Methods
• MAE 5396: Using Formative Assessment to Improve Mathematical Learning
• MAE 5347: Teaching K-8 Mathematics for Understanding
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• MAE 6313: Problem Solving in School Mathematics
• MAE 6615: Individualizing Instruction in Mathematics
• MAE 6641: Readings and Research in Mathematics Education
• MAE 7899: Mathematics Education Seminar

Reading Education

• RED 5046: Foundations of Reading in Grades PreK-12
• RED 5316: Reading in the Primary Grades
• RED 5337: Reading in the Secondary School
• RED 5355: Reading Instruction in the Intermediate Grades
• RED 5399: Practicum in Beginning Reading Instruction
• RED 6346: Seminar in Reading
• RED 6520: Classroom Literacy Assessment and Instruction
• RED 6546C: Diagnosis of Reading Difficulties
• RED 6548C: Remediation of Reading Difficulties
• RED 6647: Trends in Reading
• RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
• RED 7019: Foundations of Literacy
• RED 7817: Understanding Reading Difficulties
Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
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- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7556: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher InquiryAction Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

English Education

College

- College of Education

Department/School

- School of Teaching and Learning
Degrees Offered with a Major in English Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
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General Courses

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EME 7938: Seminar in Educational Media and Instructional Design

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TSL 5325: Secondary ESL Teaching Strategies
TSL 6145: Curriculum and Materials Development for ESOL K-12
TSL 6171: TESL I: Materials and Techniques
TSL 6172: TESL II: Materials for Special Purposes
TSL 6245: Language Principles for ESL Teachers
TSL 6373: Methods of Teaching ESOL K-12
TSL 6440: Testing and Evaluation of ESOL
TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

LAE 6298: Literacy & Language Instruction
LAE 6319: Language Arts in the Elementary School
LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
LAE 6348: Teaching Multiliteracies
LAE 6365: Language Arts: Language and Composition
LAE 6366: Language Arts: Literature
LAE 6407: Early Childhood Children's Literature
LAE 6446: Multicultural Literature for Children and Adolescents
LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
LAE 6455: International Children's Literature
LAE 6616: Seminar in Children's Literature
LAE 6635: Teaching Adolescent Literature in the Secondary School
LAE 6714: Children's Literature in the Childhood Curriculum
LAE 6861: Technology and Media Literacy
LAE 6865: Teaching Media Literacy with the Internet
LAE 6869: Teaching Digital Storytelling
LAE 6939: Literacy, Family, and Culture
LAE 6945: Practicum and Assessment for Teachers of Secondary School English
LAE 6946: Children's Literature in Educational Settings
LAE 7006: Language Acquisition and Education
LAE 7519: Language and Inquiry
LAE 7715: Research in Children's Literature
LAE 7934: Seminar in Composition Theory and Practice
LAE 7936: Seminar in English Language Arts

Mathematics Education

MAE 5327: Middle School Mathematics Methods
MAE 5332: Secondary School Mathematics Methods and Assessment
MAE 5395: Multicultural Mathematics Methods
MAE 5396: Using Formative Assessment to Improve Mathematical Learning
MAE 5347: Teaching K-8 Mathematics for Understanding
MAE 5945: Secondary School Mathematics Practicum
MAE 6313: Problem Solving in School Mathematics
MAE 6615: Individualizing Instruction in Mathematics
MAE 6641: Readings and Research in Mathematics Education
MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM6005: The Emergent Middle School
- EDM6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher InquiryAction Research
- EDG 6047: Teacher Leadership for Educational Change
Mathematics Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Mathematics Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6365: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education
- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6366: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6088: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
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- EME 7938: Seminar in Educational Media and Instructional Design

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- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
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- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
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RED 7019: Foundations of Literacy
RED 7817: Understanding Reading Difficulties

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Secondary Education

EDM 6005: The Emergent Middle School
EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
ESE 6215: The Secondary School Curriculum
ESE 6344: Classroom Practices and Assessment in Secondary Education
ESE 6345: Effective Teaching and Classroom Management
ESE 6905: Individual Work
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Social Studies Education

• SSE 5320: Middle School Social Studies Methods
• SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
• SSE 6046: Perspectives in Social Studies Education
• SSE 6117: Social Studies Education—Elementary School
• SSE 6133: Secondary School Social Studies Methods and Assessment
• SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

• EDE 6325: Teacher InquiryAction Research
• EDG 6047: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6415: Culturally Responsive Classroom Management
• EDG 6953: TLSI Online Portfolio Preparation

Reading Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Reading Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

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• EDG 6225: Global Studies Methods in K-12 Education
• EDG 6348: Instructional Coaching for Enhanced Student Learning
• EDG 6445: Meeting the Educational Needs of Students Living in Poverty
• EDG 7369: Professional Development and Teacher Learning
• EEC 6946: Practicum in Early Childhood Education
• EME 6059: Blended Learning Environments
• MAE 6916: Inquiry in Mathematics Teaching

General Courses

• EDG 6047: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6226: Foundations of Research in Curriculum & Instruction
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EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7224: Critical Pedagogy
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EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

EDE 5940: Integrated Teaching and Learning
EDE 6225: Practices in Childhood Education
EDE 6266: Teaching and Learning in Elementary Classrooms
EDE 6325: Teacher Inquiry Action Research
EDE 6910: Supervised Research
EDE 6932: Special Topics
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EDE 7047: Issues in Teacher Education
EDE 735: Seminar in Curriculum & Instruction
EDG 6356: Teaching, Learning and Assessment
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
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EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

EME 5054: Foundations of Educational Technology
EME 5207: Designing Technology-Rich Curricula
EME 5315: Communicating with Technology
EME 5316: Educational Technology Management Issues
EME 5403: Instructional Computing I
EME 5404: Instructional Computing II
EME 5405: Internet in K-12 Instruction
EME 5431: Integrating Technology in the Mathematics Classroom
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EME 6066: Issues and Trends in Educational Technology Research
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EME 6609: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

FLE 6165: Bilingual-Bicultural Education
FLE 6167: Cross-Cultural Communication for Teachers
FLE 6336: Teaching Foreign Languages in Elementary Schools
FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
FLE 6305: Foreign Languages Teaching Methods
FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
TSL 5142: ESOL Curriculum, Methods, and Assessment
TSL 5325: Secondary ESL Teaching Strategies
TSL 6145: Curriculum and Materials Development for ESOL K-12
TSL 6171: TESL I: Materials and Techniques
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Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6467: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
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- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment
Secondary Education

- EDM6005: The Emergent Middle School
- EDM6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
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- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

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- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
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Master of Education
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- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAF 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
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- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
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Reading Education

• RED 5046: Foundations of Reading in Grades PreK-12
• RED 5316: Reading in the Primary Grades
• RED 5337: Reading in the Secondary School
• RED 5355: Reading Instruction in the Intermediate Grades
• RED 5399: Practices in Beginning Reading Instruction
• RED 6346: Seminar in Reading
• RED 6520: Classroom Literacy Assessment and Instruction
• RED 6546C: Diagnosis of Reading Difficulties
• RED 6548C: Remediation of Reading Difficulties
• RED 6647: Trends in Reading
• RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
• RED 7019: Foundations of Literacy
• RED 7817: Understanding Reading Difficulties

Science Education

• SCE 5316: Inquiry-Based Science Teaching
• SCE 5355: Foundations of Science Teaching
• SCE 5695: Diversity and Equity in Science Teaching
• SCE 5765: Data-Driven Science Instruction
• SCE 6045: Environmental Education Methods and Materials
• SCE 6117: Science Education in the Elementary School
• SCE 6246: Science Instruction in Informal Settings
• SCE 6338: Secondary Science Methods and Assessment
• SCE 6947: Global Studies Methods in Science Education
• SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

• EDM6005: The Emergent Middle School
• EDM6235: Interdisciplinary Planning, Teaching, and Assessment
• ESE 6215: The Secondary School Curriculum
• ESE 6344: Classroom Practices and Assessment in Secondary Education
• ESE 6345: Effective Teaching and Classroom Management
• ESE 6905: Individual Work
• ESE 6939: Special Topics
• ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

• EDF 5552: Role of School in Democratic Society
• EDF 6520: History of Education
• EDF 6544: Philosophical Foundations of Education
• EDF 6606: Socioeconomic Foundations of Education
• EDF 6616: Education and American Culture
• EDF 6630: Educational Sociology
• EDF 6812: Comparative Education
• EDF 6820: Education in Latin America
• EDF 7555: Values and Ethics in Education
• EDF 7934: Seminar in Educational Foundations

Social Studies Education

• SSE 5320: Middle School Social Studies Methods
• SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
• SSE 6046: Perspectives in Social Studies Education
• SSE 6117: Social Studies Education—Elementary School
• SSE 6133: Secondary School Social Studies Methods and Assessment
• SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

• EDE 6325: Teacher Inquiry/Action Research
• EDG 6407: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6415: Culturally Responsive Classroom Management
• EDG 6953: TLSI Online Portfolio Preparation

Social Studies Education

College

College of Education

Department/School
School of Teaching and Learning

Degrees Offered with a Major in Social Studies Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher InquiryAction Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice
Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6806: Advanced Instructional Design
- EME 6809: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6385: Foreign Languages Teaching Methods
- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6938: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
MAE 5395: Multicultural Mathematics Methods
MAE 5396: Using Formative Assessment to Improve Mathematical Learning
MAE 5347: Teaching K-8 Mathematics for Understanding
MAE 5945: Secondary School Mathematics Practicum
MAE 6313: Problem Solving in School Mathematics
MAE 6615: Individualizing Instruction in Mathematics
MAE 6641: Readings and Research in Mathematics Education
MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
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- RED 6647: Trends in Reading
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- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

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- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
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- SCE 6045: Environmental Education Methods and Materials
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- SCE 6246: Science Instruction in Informal Settings
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- SCE 6647: Global Studies Methods in Science Education
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Secondary Education

- EDM 6005: The Emergent Middle School
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- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement
Agricultural and Biological Engineering Department

College of Agricultural and Life Sciences

Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the department website at http://www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

- **Agricultural production** includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

- **Biological engineering** includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

- **Information systems** includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

- **Land and water resources** includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Other

Agricultural and Biological Engineering (Engineering)

College

- College of Agricultural and Life Sciences
- College of Engineering

Department/School

Agricultural and Biological Engineering Department

Agricultural and Biological Engineering Program

The degrees of Master of Science, Master of Engineering, and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences.

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Information systems includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

Land and water resources includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

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For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Degrees Offered with a Major in Agricultural and Biological Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems
concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Agricultural and Biological Engineering Courses

- ABE 5015: Empirical Models of Crop Growth and Yield Response
- ABE 5038: Recent Developments and Applications in Biosensors
- ABE 5152: Electro-Hydraulic Circuits and Controls
- ABE 5332: Advanced Agricultural Structures
- ABE 5442: Advanced Agricultural Process Engineering
- ABE 5643C: Biological Systems Modeling
- ABE 5646: Biological and Agricultural Systems Simulation
- ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials
- ABE 5663: Advanced Applied Microbial Biotechnology
- ABE 5707C: Agricultural Waste Management
- ABE 5815C: Food and Bioprocess Engineering Design
- ABE 6005: Applied Control for Automation and Robots
- ABE 6031: Instrumentation in Agricultural Engineering Research
- ABE 6035: Advanced Remote Sensing: Science and Sensors
- ABE 6037C: Remote Sensing in Hydrology
- ABE 6252: Advanced Soil and Water Management Engineering
- ABE 6254: Simulation of Agricultural Watershed Systems
- ABE 6265: Vadose Zone Modeling
- ABE 6266: Nanotechnology in Water Research
- ABE 6615: Advanced Heat and Mass Transfer in Biological Systems
- ABE 6644: Agricultural Decision Systems
- ABE 6816: Food and Bioprocess Sterilization
- ABE 6905: Individual Work in Agricultural and Biological Engineering
- ABE 6910: Supervised Research
- ABE 6931: Seminar
- ABE 6933: Special Topics in Agricultural and Biological Engineering
- ABE 6940: Supervised Teaching
- ABE 6971: Research for Master's Thesis
- ABE 6972: Research for Engineer's Thesis
- ABE 6974: Nonthesis Project
- ABE 6986: Applied Mathematics in Agricultural and Biological Engineering
- ABE 7979: Advanced Research
- ABE 7980: Research for Doctoral Dissertation
- AOM 5334C: Agricultural Chemical Application Technology
- AOM 5431: GIS and Remote Sensing in Agriculture and Natural Resources
Biomedical Engineering Department

Chair: C. Schmidt  
Graduate Coordinator: D. Hinterlang

Complete faculty listing by department: Follow this link.

The mission of the J. Crayton Pruitt Family Department of Biomedical Engineering (BME) is to educate students with strong engineering and science backgrounds for Master's and/or Ph.D. degrees in biomedical engineering. Graduates in BME typically apply their skills and training directly to engineering solutions to clinical problems in medicine. The BME mission is accomplished through a core program of study that has strong collaborations with faculty in the Colleges of Engineering and Medicine. The Biomedical Engineering Department faculty members work collaboratively with joint, affiliate, and adjunct faculty from many other departments in the College of Engineering, the College of Medicine, and local industry. This diversity ensures students the highest-quality education and varied opportunities for cutting-edge research. The BME Department currently focuses in: neural engineering, biomaterials, tissue engineering, biomechanics, nanomedicine, biomedical imaging and medical physics. A concentration in Medical Physics is available at both the M.S. and Ph.D. level and prepares students for clinical or research careers in medical imaging or radiation therapy. The Medical Physics concentration is fully accredited by CAMPEP. Additional information on admissions requirements, faculty, and research projects is available at: http://www.bme.ufl.edu.

BME graduate students are admitted directly through the BME Department. The BME Graduate Academic Committee reviews and makes all decisions regarding admission. Each student's research adviser must hold a Graduate Faculty appointment in the BME Department. Supervisory committees for BME students normally include at least one member from the College of Engineering and one from the College of Medicine to emphasize the need for a clinical focus in the research.

Biomedical Engineering Program Information

The master’s degree (thesis or nonthesis) requires at least 30 semester hours. The Ph.D. degree requires at least 90 semester credit hours beyond the bachelor’s degree. No more than 30 hours of a master’s degree from another institution will be transferred to the Ph.D. degree. If a student holds a master’s degree in a discipline different from the doctoral program, the master’s work will not be counted toward the doctoral degree unless the BME Department successfully petitions the Dean of the Graduate School. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Complete BME program details and courses available are listed in the Biomedical Engineering Graduate Guidelines, on the BME web site (which also offers information on available areas of study). Graduate-level courses in either the College of Engineering or the College of Medicine may be applied toward the BME degree programs with the approval of the supervisory committee chair and the graduate coordinator.

Combined program: Biomedical Engineering also offers a combined bachelor's/master's degree program in collaboration with the other departments in the College of Engineering. This program allows qualified students to earn both a bachelor's degree and a master's degree within 5 years for a net savings of 1 year. Contact the BME academic services office for more information or see http://www.bme.ufl.edu/academics/combined.
Degrees Offered with a Major in Biomedical Engineering

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

concentration in Medical Physics

Master of Engineering

Master of Science

without a concentration

concentration in Medical Physics

Courses

- BME 5052L: Biomedical Engineering Laboratory
- BME 5085: Patents, Product Development, and Technology Transfer
- BME 5401: Biomedical Engineering and Physiology I
- BME 5407: Molecular Biomedical Engineering
- BME 5500: Biomedical Instrumentation
- BME 5703: Statistical Methods for Biomedical Engineering
- BME 5704: Advanced Computational Methods for Biomedical Engineering
- BME 5937: Special Topics
- BME 6010: Clinical Preceptorship
- BME 6324: Stem Cell Engineering
- BME 6330: Cell and Tissue Engineering
- BME 6360: Neural Engineering
- BME 6502: Introduction to Medical Imaging
- BME 6505: Advanced Diagnostic Radiological Physics
- BME 6522: Biomedical Multivariate Signal Processing
- BME 6533: Radiologic Anatomy
- BME 6534: Advanced Therapeutic Radiological Physics
- BME 6535: Radiological Physics, Measurements and Dosimetry
- BME 6590: Medical Physics
- BME 6591: Therapeutic Radiological Physics I
- BME 6592: Therapeutic Radiological Physics II
- BME 6593: Therapeutic Radiological Physics III
- BME 6705: Mathematical Modeling of Biological and Physiological Systems
- BME 6905: Individual Work in Biomedical Engineering
Chemical Engineering Department

Chair: R. Dickinson.
Graduate Coordinator: A. Chauhan.

Complete faculty listing by department: Follow this link.

The Ph.D., M.E., and M.S. degrees in chemical engineering require course work in three core areas:

- The chemical engineering basis area, consisting of three core courses in the mathematical, the molecular, and the continuum bases of chemical engineering
- The chemical engineering science and systems area, consisting of a selection of courses in such areas as transport phenomena, electrochemical engineering, thermodynamics, kinetics, reaction engineering, process control, separation processes, and heat and mass transfer
- The research specialty area, consisting of courses designed to build depth in a field of specialization. Courses may be from other academic units, or may be chemical engineering courses such as colloid science, corrosion, polymer science, advanced materials, and biochemical engineering

Other

Chemical Engineering

College

College of Engineering

Department/School

Chemical Engineering Department

Degrees Offered with a Major in Chemical Engineering

Doctor of Philosophy

Master of Engineering
Master of Science

Courses

- BME 6221: Biomolecular Cell Mechanics
- BME 6322: Dynamics of Cellular Processes
- ECH 5708: Disinfection, Sterilization, and Preservation
- ECH 5938: Topics in Colloid Science
- ECH 6126: Thermodynamics of Reaction and Phase Equilibria
- ECH 6207
- ECH 6270: Continuum Basis of Chemical Engineering
- ECH 6272: Molecular Basis of Chemical Engineering
- ECH 6285: Transport Phenomena
- ECH 6326: Computer Control of Processes
- ECH 6506: Chemical Engineering Kinetics
- ECH 6526: Reactor Design and Optimization
- BME 6644: Pharmacokinetics
- ECH 6709: Electrochemical Engineering Fundamentals and Design
- ECH 6726: Interfacial Phenomena I
- ECH 6727: Interfacial Phenomena II
- ECH 6843: Experimental Basis of Chemical Engineering
- ECH 6847: Mathematical Basis of Chemical Engineering
- ECH 6851: Impedance Spectroscopy
- ECH 6905: Individual Work
- ECH 6910: Supervised Research
- ECH 6926: Graduate Seminar
- ECH 6937: Advanced Special Chemical Engineering Topics for Doctoral Candidates
- ECH 6939: Topics in Chemical Engineering III
- ECH 6940: Supervised Teaching
- ECH 6979: Advanced Research
- ECH 6990: Research for Doctoral Dissertation

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Civil and Coastal Engineering Department

Chair: K. Hatfield
Graduate Coordinator: A. Drescher
Complete faculty listing by department: Follow this link.

The Department of Civil and Coastal Engineering offers two distinct graduate programs: civil engineering and coastal and oceanographic engineering. All degrees except the Ph.D. are available in a thesis or nonthesis option. The nonthesis option has two formats: report and 30-hour non-report. Students who elect the nonthesis report must successfully complete a document of substantial engineering content for a minimum of two hours credit in CGN 6974 for civil engineering majors, or EOC 6905 for coastal and oceanographic engineering majors.

Civil and Coastal Engineering degree programs include areas of specialization in construction, civil engineering management, geotechnical engineering, water resources and hydrology, public works, structural engineering, civil engineering materials, geosensing systems engineering, coastal engineering, oceanographic engineering and offshore structures, and transportation engineering.

Minor or supporting work is encouraged from a variety of related or allied fields of study. Ph.D. students are required to take a preliminary examination. Requirements for the M.S., M.E., and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Other

Civil Engineering

College
Civil Engineering Program

The civil engineering program is offered through the Department of Civil and Coastal Engineering with the following degrees: Master of Engineering, Master of Science, and Doctor of Philosophy. The master's degree in civil engineering is also offered through the Electronic Delivery of Graduate Engineering (EDGE) program, which is a distance learning program delivered either via streaming video or DVD directly to the students. Subject to approval by the supervisory committee, graduate-level courses taken through the Departments of Environmental Engineering Sciences, Geological Sciences, and Mechanical and Aerospace Engineering are considered as major credit.

For courses taken through the Department of Civil and Coastal Engineering, credit hours graded SU will not count toward graduation except for:

- 6 hours of CGN 6971 or EOC 6971 for thesis students
- 3 hours of CGN 6974 for students working on the M.E. report
- CGN 7979 or EOC 7979
- CGN 7980 or EOC 7980

Degrees Offered with a Major in Civil Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences
concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Courses

- CCE 5035: Construction Planning and Scheduling
- CCE 5405: Construction Equipment and Procedures
- CCE 6037: Civil Engineering Operations I
- CCE 6038: Innovative Construction Techniques
- CCE 6505: Computer Applications in Construction Engineering
- CCE 6507: Computer Applications in Construction Engineering II
- CCE 6516: Topics in Airborne Laser Mapping Technology
- CEG 5105: Geotechnical Engineering
- CEG 5114: Advanced Geotechnical Aspects of Landfill Design
- CEG 5115: Foundation Design
- CEG 5205C: Insitu Measurement of Soil Properties
- CEG 5206: Geosensing I
- CEG 5805: Ground Modification Design
- CEG 6015: Advanced Soil Mechanics
- CEG 6116: Advanced Shallow Foundation Design
- CEG 6117: Advanced Deep Foundation Design
- CEG 6201: Experimental Determination of Soil Properties
- CEG 6207: Geosensing II
- CEG 6405: Seepage in Soils
- CEG 6505: Numerical Methods of Geomechanics
- CEG 6515: Earth Retaining Systems and Slope Stability
- CES 5010: Probabilistic and Stochastic Methods in Civil Engineering
- CES 5116: Finite Elements in Civil Engineering
- CES 5325: Design of Highway Bridges
- CES 5606: Topics in Steel Design
- CES 5607: Behavior of Steel Structures
- CES 5715: Prestressed Concrete
- CES 5726: Design of Concrete Systems
- CES 5801: Design and Construction in Timber
- CES 5835: Design of Reinforced Masonry Structures
- CES 6106: Advanced Structural Analysis
- CES 6108: Structural Dynamics
- CES 6165: Computer Methods in Structural Engineering
- CES 6551: Design of Folded Plates and Shells
- CES 6588: Protective Structures
- CES 6590: Impact Engineering
- CES 6591: Applied Protective Structures
- CES 6592: Retrofit Protective Structures
- CES 6593: Advanced Protective Structures
- CES 6706: Advanced Reinforced Concrete
- CES 6855: Condition Assessment of Structures
Civil and Coastal Engineering Departmental Courses

- CES 6571: Design of Temporary Structures
- CES 6585: Wind Engineering
- CGN 5125: Legal Aspects of Civil Engineering
- CGN 5315: Civil Engineering Systems
- CGN 5605: Public Works Planning
- CGN 6150: Engineering Project Management
- CWV 6126: Variable-Density Groundwater Flow
- CWV 6240: Mixing and Transport in Turbulent Flow
- TTE 6207: Advanced Highway Capacity Analysis

Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWV 5125: Groundwater Flow I
- CWV 5127: Evaluation of Groundwater Quality
- CWV 5235: Open Channel Hydraulics
- CWV 6115: Surface Hydrology
- CWV 6126: Variable-Density Groundwater Flow
- CWV 6525: Groundwater Flow II
- CWV 6537: Contaminant Subsurface Hydrology
- EGM 5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6441: Water Resources Planning and Management
- ENV 6586: Wetland Hydrology
- ENV 6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
Coastal and Oceanographic Engineering

College

College of Engineering

Department/School

Civil and Coastal Engineering Department

Coastal and Oceanographic Engineering Program

The coastal and oceanographic engineering program is offered through the Department of Civil and Coastal Engineering with the following degrees: Master of Engineering, Master of Science, and Doctor of Philosophy degree. Subject to approval by the supervisory committee, graduate-level courses taken through the Departments of Environmental Engineering Sciences, Geological Sciences, and Mechanical and Aerospace Engineering are considered as major credit.

For courses taken through the Department of Civil and Coastal Engineering, credit hours graded S/U will not count toward graduation except for:

- 6 hours of CGN 6971 or EOC 6971 for thesis students
- 3 hours of CGN 6974 for students working on the M.E. report
- CGN 7979 or EOC 7979
- CGN 7980 or EOC 7980

Degrees Offered with a Major in Coastal and Oceanographic Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Coastal and Oceanographic Engineering Courses

- EGM 5816: Intermediate Fluid Dynamics
- EOC 5860: Port and Harbor Engineering
- EOC 6196: Littoral Processes
- EOC 6430: Coastal Structures
- EOC 6850: Numerical Simulation Techniques in Coastal and Ocean Engineering
- EOC 6905: Individual Study in Coastal and Oceanographic Engineering
- EOC 6932: Selected Field and Laboratory Problems
- EOC 6934: Advanced Topics in Coastal and Oceanographic Engineering
- EOC 6939: Graduate Seminar
- EOC 6971: Research for Master's Thesis
- EOC 6972: Research for Engineer's Thesis
- EOC 7979: Advanced Research
- EOC 7980: Research for Doctoral Dissertation
- OCP 5293: Coastal Processes
- OCP 6050: Physical Oceanography
- OCP 6165: Ocean Waves I: Linear Theory
- OCP 6165L: Ocean Waves Laboratory
Civil and Coastal Engineering Departmental Courses

- CES 6571: Design of Temporary Structures
- CES 6585: Wind Engineering
- CGN 5125: Legal Aspects of Civil Engineering
- CGN 5315: Civil Engineering Systems
- CGN 5605: Public Works Planning
- CGN 6150: Engineering Project Management
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6240: Mixing and Transport in Turbulent Flow
- TTE 6207: Advanced Highway Capacity Analysis

Hydrology / Water Resources Shared Courses

- CWR 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM5816: Intermediate Fluid Dynamics
- ENV/5518: Field Methods in Environmental Hydrology
- ENV/5565: Hydraulic Systems Design
- ENV/6050: Advanced Pollutant Transport
- ENV/6052: Immiscible Fluids in Porous Media
- ENV/6441: Water Resources Planning and Management
- ENV/6508: Wetland Hydrology
- ENV/6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRE Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Computer and Information Science and Engineering Department

College of Engineering

Chair: Paul Gader
Graduate Coordinator: Ji-Won Peir

Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems:** computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems:** database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, e-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms:** design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art:** modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
Intelligent systems and computer vision: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases

Computer networks and security: wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B, to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A minimum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: http://www.cise.ufl.edu

Other

Computer Engineering

College

College of Engineering

Department/School

Computer and Information Science and Engineering Department

Computer Engineering Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science and the Doctor of Philosophy degrees in Computer Engineering through the College of Engineering. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.


Specific degree requirements and options may be found here: http://cise.ufl.edu/academics/grad

Instructions for application for admission may be found here: http://cise.ufl.edu/admissions/grad

Degrees Offered with a Major in Computer Engineering

Doctor of Philosophy

Master of Engineering
Master of Science

without a concentration

collection in Digital Arts and Sciences

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5805: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6685: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6156: High Performance Computer Architecture
- CEN 5035: Software Engineering
- CEN 6070: Software Testing and Verification
- CEN 6075: Software Specification
- CIS 6905: Individual Study
- CIS 6910: Supervised Research
- CIS 6930: Special Topics in CIS
- CIS 6935: Graduate Seminar
- CIS 6940: Supervised Teaching
- CIS 6971: Research for Master's Thesis
- CIS 7979: Advanced Research
- CIS 7980: Research for Doctoral Dissertation
- CNT 5106C: Computer Networks
- CNT 5410: Computer and Network Security
- CNT 5517: Mobile Computing
- CNT 6107: Advanced Computer Networks
- CNT 6885: Distributed Multimedia Systems
- COP 5536: Advanced Data Structures
- COP 5555: Programming Language Principles
- COP 5615: Distributed Operating System Principles
- COP 5618: Concurrent Programming
- COP 5625: Programming Language Translators
- COP 5725: Database Management Systems
- COP 6272: Database System Implementation
- COP 6755: Distributed Database Systems
- COT 5405: Analysis of Algorithms
- COT 5442: Approximation Algorithms
- COT 5519: Sparse Matrix Algorithms
- COT 5520: Computational Geometry
- COT 5615: Mathematics for Intelligent Systems
- COT 6315: Formal Languages and Computation Theory

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
Digital Arts and Sciences (Engineering) Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science degree in Digital Arts and Sciences through the College of Engineering. Minimum requirements for this degree are given in the Graduate Degrees section of this catalog.

This specialized program integrates engineering and design and was created for students with an interest in video games, human-computer interaction, 3D modeling and animation, virtual reality, and computer graphics. The curriculum includes core computer science with a special emphasis on human-centered computing and provides students the flexibility to focus on both computer science and design, and to create software that is computationally complex, user friendly and aesthetically pleasing.

Specific degree requirements and options may be found here: http://cise.ufl.edu/academics/grad

Instructions for application for admission may be found here: http://cise.ufl.edu/admissions/grad

Degrees

Master of Science

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5805: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6685: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6156: High Performance Computer Architecture
- CEN 5035: Software Engineering
- CEN 6070: Software Testing and Verification
- CEN 6075: Software Specification
- CIS 6905: Individual Study
- CIS 6910: Supervised Research
- CIS 6930: Special Topics in CIS
- CIS 6935: Graduate Seminar
- CIS 6940: Supervised Teaching
- CIS 6971: Research for Master's Thesis
- CIS 7979: Advanced Research
- CIS 7980: Research for Doctoral Dissertation
- CNT 5106C: Computer Networks
- CNT 5410: Computer and Network Security
- CNT 5517: Mobile Computing
The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the Graduate Degrees Section of this catalog. For more information about our program, please visit the link below.

Electrical and Computer Engineering Program Information

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in computer engineering, devices, electromagnetics and energy systems, electronics, and signals and systems.

Graduate students in the Department of Electrical and Computer Engineering have bachelor’s degrees from many areas: electrical engineering, other engineering disciplines, chemistry, mathematics, physics, and other technical fields. The Department of Electrical and Computer Engineering offers both thesis and nonthesis options for the master’s degrees.

In the thesis option a student shall complete a minimum of 30 semester credit hours with a maximum of 6 semester credit hours of EEL 6971 (Research for Master’s Thesis). While the Graduate School sets the minimum requirements, the supervisory committee determines the appropriate number of thesis hours a student shall be required to take for the thesis. Other course requirements include a minimum of 18 hours at the 5000 or 6000 level in electrical and computer engineering. Excluded from satisfying these course requirements are EEL 5905 and EEL 6905 (Individual Work), EEL 6910 (Supervised Research), 6932 (Graduate Seminar), EEL 6940 (Supervised Teaching), and EEL 6971 (Research for Master’s Thesis). No more than 6 hours of Individual Work (EEL 5905 or EEL 6905) may be counted toward the degree.

In the nonthesis option a student shall complete a minimum of 30 semester credit hours with a maximum of 6 semester credit hours of Individual Work (EEL 5905 or EEL 6905). The course requirements include a minimum of 21 semester credit hours at the 5000 or 6000 level in electrical and computer engineering. Excluded from satisfying these course requirements are EEL 5905 and EEL 6905 (Individual Work), EEL 6910 (Supervised Research), 6932 (Graduate Seminar), EEL 6940 (Supervised Teaching), and EEL 6971 (Research for Master’s Thesis).
The Department also offers a combined bachelor’s/master’s degree program. This program allows qualified students to earn both a bachelor’s degree and master’s degree with a saving of one semester. Qualified students may begin their master’s programs while seniors, counting up to 12 hours of specified electrical and computer engineering graduate courses for both bachelor’s and master’s degree requirements. Bachelor’s/master’s program admission requirements are (1) satisfaction of Graduate School admission requirements for the master’s degree, (2) an upper-division (undergraduate) GPA of at least 3.3, and (3) completion of at least 7 EEL core courses and 2 EEL laboratories. Students with a GPA between 3.3 and 3.59 can double count up to 6 hours, while students with a GPA of 3.6 or higher can double count up to 12 hours.

All prospective doctoral students must take the written part of the Ph.D. qualifying examination within the first year of enrollment. Other requirements for the doctoral degree, as well as requirements for master’s and engineer degrees, are given in the Electrical and Computer Engineering Department’s Graduate Guidelines (see http://www.ece.ufl.edu/content/graduate-academics) and in the front section of this catalog.

The following course listing indicates the major areas of faculty interest. Special topics courses EEL 5934 and EEL 6935 cover a wide variety of subjects for which there are no present courses.

Degrees Offered with a Major in Electrical and Computer Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Courses

- CNT 6805: Network Science and Applications
- EEE 5317C: Introduction to Power Electronics
- EEE 5320: Bipolar Analog IC Design
- EEE 5322: VLSI Circuits and Technology
- EEE 5384: Fundamentals of Data Converters
- EEE 5400: Future of Microelectronics Technology
- EEE 5405: Microelectronic Fabrication Technologies
- EEE 5426: Introduction to Nanodevices
- EEE 6287: Brain Machine Interface Engineering
- EEE 6321: MOS Analog IC Design
- EEE 6323: Advanced VLSI Design
- EEE 6325: Computer Simulation of Integrated Circuits and Devices
- EEE 6328C: Microwave IC Design
- EEE 6374: Radio Frequency (RF) Integrated Circuits and Technologies
- EEE 6382: Semiconductor Physical Electronics
- EEE 6390: VLSI Device Design
- EEE 6397: Semiconductor Device Theory I
- EEE 6402: Nonclassical Si-Based Nanoscale CMOS Devices
- EEE 6428: Computational Nanoelectronics
- EEE 6431: Carbon Nanotubes
- EEE 6460: Advanced Microsystem Technology
- EEE 6465: Design of MEMS Transducers
- EEL 5182: State Variable Methods in Linear Systems
- EEL 5225: Principles of Micro-Electro-Mechanical Transducers
- EEL 5400: Airborne Sensors and Instrumentation
- EEL 5401: Airborne Laser Scanning; Data Processing and Analysis
- EEL 5441: Fundamentals of Photonics
- EEL 5462: Advanced Antenna Systems
- EEL 5490: Lightning
- EEE 5502: Foundations of Digital Signal Processing
- EEE 5544: Noise in Linear Systems
- EEE 5556: Electronic Countermeasures
- EEL 5666C: Intelligent Machines Design Laboratory
- EEL 5718: Computer Communications
- EEL 5721: Reconfigurable Computing
- EEL 5737: Principles of Computer System Design
- EEL 5764: Computer Architecture
- EEL 5840: Elements of Machine Intelligence
- EEL 5905: Individual Work
- EEL 5934: Special Topics in Electrical Engineering
College of Engineering Courses

- EEL 6065: Electrical & Computer Engineering Technical Writing
- EEL 6264: Advanced Electric Energy Systems I
- EEL 6265: Advanced Electric Energy Systems II
- EEL 6443: Integrated and Fiber Optics
- EEL 6446: Electromagnetic Field Theory and Applications I
- EEL 6457: Electromagnetic Field Theory and Applications II
- EEE 6504: Adaptive Signal Processing
- EEL 6507: Queueing Theory and Data Communications
- EEL 6509: Wireless Communication
- EEE 6503: Digital Filtering
- EEL 6532: Information Theory
- EEL 6533: Statistical Decision Theory
- EEL 6535: Digital Communications
- EEL 6537: Spectral Estimation
- EEL 6550: Error Correction Coding
- EEE 6512: Image Processing and Computer Vision
- EEL 6528: Digital Communications with Software-defined Radios
- EEL 6555: Signal Processing for Active Sensing
- EEE 6586: Automatic Speech Processing
- EEL 6588: Wireless Ad Hoc Networks
- EEL 6591: Wireless Networks
- EEL 6614: Modern Control Theory
- EEL 6617: Linear Multivariable Control
- EEL 6619: Robust Control Systems
- EEL 6686: Embedded Systems Seminar
- EEL 6706: Fault-Tolerant Computer Architecture
- EEL 6763: Parallel Computer Architecture
- EEL 6769: Hardware-Software Interactions: Nonnumeric Processing
- EEL 6814: Neural Networks for Signal Processing
- EEL 6825: Pattern Recognition and Intelligent Systems
- EEL 6841: Machine Intelligence and Synthesis
- EEL 6871: Autonomous Computing
- EEL 6892: Virtual Computers
- EEL 6905: Individual Work
- EEL 6910: Supervised Research
- EEL 6933: Electrical and Computer Engineering Graduate Seminar
- EEL 6935: Special Topics in Electrical Engineering
- EEL 6940: Supervised Teaching
- EEL 6971: Research for Master's Thesis
- EEL 6972: Research for Engineer's Thesis
- EEL 7979: Advanced Research
- EEL 7980: Research for Doctoral Dissertation

Environmental Engineering Sciences Department

Director: K. Hatfield
Graduate Coordinator: P. Chadik

Complete faculty listing [Follow this link](#).

The Department of Environmental Engineering Sciences offers graduate study in the following areas: Air Resources; Biogeochemical Systems; Environmental Nanotechnology; Solid and Hazardous Waste Management; Storm Water, Water Supply and Waste Water; Sustainability Science & Engineering Systems Ecology and Ecological Engineering and Water Resources. Students graduated from the program will demonstrate depth in individual focus areas as well as breadth of core knowledge concepts in all areas. Please visit the link below for more information about our program in Environmental Engineering Sciences.

Other

Environmental Engineering Sciences

College
Environmental Engineering Sciences Program Information

Graduate study is offered leading to the degrees Master of Engineering, Master of Science, and Doctor of Philosophy in the field of environmental engineering sciences. Our graduate research and education areas are

**Air Resources**
- Monitoring of air pollutants: indoor, ambient, industrial, and occupational
- Monitoring methodology and instrument development
- Formation and fate of air pollutants
- Air quality modeling
- Air pollution control: system, process and materials
- Sustainability of air quality
- Health effects and environmental impact of air pollutant

**Biogeochemical Systems**
- Green Engineering
- Microbiology of Natural and Engineered Systems
- Environmental Fate and Transport of Pollutants in Soils and Aquatic Systems
- Biological and Chemical Remediation of Contaminated Systems
- Environmental Toxicology and Nanotoxicology
- Effects of Climate and Land Use Changes on Biogeochemical Cycles
- Aqueous Geochemistry and Water Treatment

**Environmental Nanotechnology**
- Manufacturing and tailoring of nanomaterials and nanodevices for application in environmental and human health research
- Environmental fate and transport of nanomaterials
- Environmental implications of nanomaterials

**Solid and Hazardous Waste Management**
- Bioreactor Landfills
- Combustion and Thermal Treatment Residuals
- Contaminated Soil Characterization and Treatment
- Construction and Demolition Debris
- Electronic Waste
- Hazardous Waste
- Landfill Design and Operations
- Landfill Gas and Leachate
- Recycling and Beneficial Use of Wastes
- Treated Wood
- Waste Characterization and Leaching
- Solid Waste Management in Developing Countries

**Stormwater, Water Supply and Wastewater**
- Fundamental characterization of aqueous and particulate-phase contaminants including emerging contaminants: representative ambient monitoring, methodology and load quantification.
- Sourcing and generation of aqueous and particulate phase contaminants, physics and chemistry of contaminant transport and fate.
- Water contaminant control: systems, unit operation and processes, and materials development, in particular innovative mass transfer materials and low impact development materials.
- Water reuse as part of the urban water cycle: volumetric and contaminant load impacts.
- Unit operation and process modeling: scalable physical models and computational fluid dynamics (CFD).
- Integrated physical, chemical, biological and thermal treatment phenomena for water cycle components.
- Coupling fundamental monitoring and material balance testing with urban water modeling.
- Fundamental and applied studies of physical-chemical water treatment processes, such as adsorption, coagulation, ion exchange, and oxidation, for a wide range of water qualities including surface water, groundwater, membrane concentrate, landfill leachate, and human urine.
- Innovative applications of ion exchange for water treatment.
- Fundamental studies in aquatic chemistry with a focus on the role of natural organic matter.
- Fundamental and applied studies of adsorption and photocatalysis, including surface optimization
- Bottom up integrated urban water system simulation and optimization

**Sustainability Science & Engineering**
- Rational design of nanomaterial through acute and full-life-cycle toxicity assessment
- Life cycle assessment calculations and comparisons of alternative energy and materials options
- Industrial ecology
- Corporate water resources sustainability
- Campus green building codes
- Green laboratory techniques
- Operation of buildings to meet green energy requirements

**Systems Ecology and Ecological Engineering**
- Ecological Engineering
- Energy Analysis
- Wetlands ecosystem research
- Ecological Modeling
- Estuarine Systems

**Water Resources**
- Contaminant transport and fate
- Decision support systems
- Hydroecology and hydrologic restoration
- Hydrology
• Stormwater control
• Water resources planning and management
• Water conservation
• Urban water infrastructure

Graduate students can also combine one or more of the above areas with specialties in other departments at the University of Florida.

The department participates in the hydrologic sciences interdisciplinary concentration that is offered through 9 departments in 3 colleges. This concentration is described under Interdisciplinary Graduate Studies.

Direct admission into the Master of Science and Doctor of Philosophy programs requires a bachelor’s degree in engineering or in a basic science such as chemistry, geology, physics, biology, or mathematics. Persons with a degree in a nontechnical field may also be admitted into this program after completing appropriate technical courses. Direct admission into the Master of Engineering program requires a bachelor’s degree in engineering.

Requirements for a master’s degree normally take 12 to 24 months to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, and may be completed in 3 years, but often takes longer, depending on prior academic experience.

Concurrent program: The department offers a combined bachelor’s/master’s degree program. This program allows qualified students to earn both a bachelor’s degree and a master’s degree, with a savings of 12 credits.

Joint program: The Environmental Engineering Sciences Department, in partnership with the Levin College of Law, offers a joint program leading to the M.S. or M.E. degree in environmental engineering sciences and the Juris Doctor degree. Twelve credits of appropriate course work are counted toward both degrees.

Degrees Offered with a Major in Environmental Engineering Sciences

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences
concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Courses

- CEG 5206: Geosensing I
- CWR 6115: Surface Hydrology
- CWR 6116: Advanced Surface Hydrology
- CWR 6252: Environmental Biochemistry of Trace Metals
- CWR 6536: Stochastic Subsurface Hydrology
- CWR 6537: Contaminant Subsurface Hydrology
- EES 5105: Advanced Wastewater Microbiology
- EES 5107: Ecological and Biological Systems
- EES 5207: Environmental Chemistry
- EES 5245: Water Quality Analysis
- EES 5305C: Ecological and General Systems
- EES 5306: Energy Analysis
- EES 5307: Ecological Engineering
- EES 5315: Ecology and the Environment
- EES 5415: Environmental Health
- EES 6007: Advanced Energy and Environment
- EES 6009: Ecological Economics
- EES 6026C: Environmental Systems Dynamics
- EES 6028: Spatial Modeling Using Geographic Information Systems
- EES 6051: Advanced Environmental Planning and Design
- EES 6135: Aquatic Microbiology
- EES 6136: Aquatic Autotrophs
- EES 6137: Aquatic Heterotrophs
- EES 6140: Biology of Exotic Species
- EES 6371: Environmental Meteorology and Oceanography
- EES 6208: Principles of Water Chemistry I
- EES 6209: Principles of Water Chemistry II
- EES 6225: Atmospheric Chemistry
- EES 6246: Advanced Water Analysis
- EES 6301: Comparative Approaches in Systems Ecology
- EES 6308C: Wetland Ecology
- EES 6309: Wetland Treatment Systems
- EES 6318: Principles of Industrial Ecology
- EES 6335: Springs Ecosystems
- EES 6356: Estuarine Systems
- EES 6405: Environmental Toxicology
- ENV 6439: Activated Carbon: Environmental Design and Application
- ENV 5072: Pollution Control and Prevention
- ENV 5075: Environmental Policy
- ENV 5105: Foundations of Air Pollution
- ENV 5306: Advanced Solid Waste Treatment Design
- ENV 5309: Municipal Refuse Disposal
- ENV 5518: Field Methods in Environmental Hydrology
Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM 5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- CWR 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6441: Water Resources Planning and Management
- ENV 6508: Wetland Hydrology
- ENV 6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Industrial and Systems Engineering Department

Chair: J. Geunes.
Graduate Coordinator: J. C. Smith and P. Momcilovic.

Complete faculty listing by department: Follow this link.

The Department of Industrial and Systems Engineering offers the Master of Engineering and the Master of Science degrees, each with a thesis or nonthesis option, with specialization in engineering management, manufacturing and logistics systems engineering, operations research, quality engineering, and special interest options such as health systems. In addition, the Department offers the Engineer degree and the Doctor of Philosophy degree with specialization in linear, combinatorial, nonlinear, and global optimization; supply chain management and e-commerce; financial engineering; manufacturing management; facilities location and layout; quality engineering; and stochastic processes.

Complete descriptions of the requirements for the M.E., M.S., Engineer, and Ph.D. degrees are provided in the General Information section of this catalog.

A degree in one of the engineering disciplines or in mathematics, statistics, physics, computer sciences, quantitative management, or similar fields is prerequisite. Where the student's background is deficient, an articulation program of foundation courses will be required.
The Department offers a combined bachelor's/master's degree program of B.S.I.S.E./Master of Science (Management), B.S.I.S.E./Master of Engineering or Master of Science, and a B.S. from disciplines within the College of Engineering/Master of Science or Master of Engineering. Contact the graduate coordinator for information.

Other

Industrial and Systems Engineering

College

College of Engineering

Department/School

Industrial and Systems Engineering Department

Degrees Offered with a Major in Industrial and Systems Engineering

Doctor of Philosophy

without a concentration

concentration in Quantitative Finance

Engineer

Master of Engineering

Master of Science

Industrial and Systems Engineering Courses

- EIN 6227: Advanced Quality Management and Engineering for Business Processes
- EIN 6336: Advanced Production and Inventory Control
- EIN 6357: Advanced Engineering Economy
- EIN 6367: Facilities Layout and Location
- EIN 6392: Manufacturing Management
- EIN 6905: Special Problems
- EIN 6910: Supervised Research
- EIN 6918: Graduate Seminar
- EIN 6940: Supervised Teaching
- EIN 6971: Research for Master's Thesis
- EIN 6972: Research for Engineer's Thesis
- EIN 7933: Special Problems
Materials Science and Engineering Department

Chair: S. Phillpot
MSE Graduate Coordinator: J. J. Macholksy, Jr.
NE Graduate Coordinator: E. Dugan

Complete faculty listing by department: Follow this link.

The Department of Materials Science and Engineering offers the Master of Science and Doctor of Philosophy degrees in Materials Science & Engineering (MSE) and Nuclear Engineering (NE). Requirements for these degrees are described in the General Information section of this catalog.

Degrees in MSE include specific areas of research and study in biomaterials, ceramics, composites, computational materials science, electronic materials, metals, polymers, nanomaterials, and nuclear materials. Degrees in NE include specific areas of research and study in advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security.

Nontraditional Degree Programs: The Department offers combined bachelor/master’s degree programs: MSE BS/MS, NE BS/MS, and students may also combine the MSE BS with the MS awarded by the Biomedical Engineering (BME). The combined bachelor/master’s program allows qualified students to earn both degrees in materials science and engineering within a time frame of approximately 5 years. Qualifying students are allowed to begin master’s coursework in their junior years and double count specific graduate courses for both degrees. The master’s degree may be completed within 2 to 3 semesters after completing the bachelor’s degree. Program admission requirements are (1) satisfaction of Graduate School admission requirements prior to the beginning of the senior year, (2) an upper division GPA of at least 3.5 in MSE and 3.4 in NE, (3) for MSE, completion of a minimum of 18 credit hours of courses, (4) admission by the Department’s Graduate Admission Committee and approval by the College of Engineering and the Graduate School. For more information, contact the Department.

Concurrent M.D./Ph.D. degrees are offered through a collaborative program between the College of Medicine and Materials Science and Engineering. For more information, please contact the Department.

To be eligible for regular admission to the graduate program within the Department, the student must hold a B.S. in an appropriate major. Because of the breadth of MSE graduate programs, students in materials science, engineering, technology, computer science, or other science areas are encouraged to pursue their research and training areas of interest.

The faculties of the Department of Materials Science and Engineering (MSE) of the University of Florida (UF) and the University of Roma Tor Vergata (URTV) have approved a cooperative degree program in Materials Science and Engineering culminating in a Doctor of Philosophy degree, awarded by both universities. Contact the Department for details.

Other
Degrees Offered with a Major in Materials Science and Engineering

**Doctor of Philosophy**

*without a concentration*

*in concentration in Clinical and Translational Science*

**Master of Engineering**

**Master of Science**

Courses

- EMA 5008: Particle Science and Technology: Theory and Practice
- EMA 5095: Critical Analysis of Research in Materials Science & Engineering
- EMA 5108: Vacuum Science and Technology
- EMA 5365: Biomimetic Synthesis
- EMA 6005: Thin and Thick Films
- EMA 6105: Fundamentals and Applications of Surface Science
- EMA 6106: Advanced Phase Diagrams
- EMA 6107: High Temperature Materials
- EMA 6109: Physical Chemistry of High Temperature Materials
- EMA 6110: Electron Theory of Solids for Materials Scientists I
- EMA 6111: Electron Theory of Solids for Materials Scientists II
- EMA 6114: Advanced Materials Principles 2
- EMA 6128: Materials Microstructures
- EMA 6136: Diffusion, Kinetics, and Transport Phenomena
- EMA 6165: Polymer Physical Science
- EMA 6166: Polymer Composites
- EMA 6226: Synthesis and Properties of Metallic Nanostructures
- EMA 6227: Advanced Mechanical Metallurgy II
- EMA 6265: Mechanical Properties of Polymers
- EMA 6313: Advanced Materials Principles I
- EMA 6315: Colloidal Hydrodynamics
- EMA 6316: Materials Thermodynamics
- EMA 6319: Applied Colloid and Interfacial Chemistry for Engineers
- EMA 6412: Synthesis and Characterization of Electronic Materials
- EMA 6416: Organic Electronics
- EMA 6445: Electroceramics
- EMA 6446: Solid State Ionics
- EMA 6448: Ceramic Processing
- EMA 6461: Polymer Characterization
- EMA 6507: Scanning Electron Microscopy and Microanalysis
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Mechanical and Aerospace Engineering Department

Chair: David W. Hahn
Graduate Coordinator: D. W. Mikolaitis

Complete faculty listing by department: [Follow this link](http://www.mae.ufl.edu/graduate).

The Department of Mechanical and Aerospace Engineering offers the degrees of Master of Science (thesis or nonthesis), Master of Engineering (thesis or nonthesis), Engineer, and Doctor of Philosophy in aerospace engineering and mechanical engineering. Minimum requirements for these degrees are given in the General Information section of this catalog. Additional information can be found at [http://www.mae.ufl.edu/graduate](http://www.mae.ufl.edu/graduate). Prospective students are expected to have strong backgrounds in engineering. For the first year of study, each student is generally required to take a minimum of three regular courses each semester. There are three areas of specialization available for graduate studies: dynamics, systems, and control; solid mechanics, design, and manufacturing; thermal science and fluid dynamics. Within a specialization there are unique opportunities to conduct analytical, experimental, and/or numerical study in a wide variety of challenging problems. The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Aerospace Engineering

College

College of Engineering

Department/School

Mechanical and Aerospace Engineering Department
Degrees Offered with a Major in Aerospace Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Mechanical and Aerospace Engineering Departmental Courses

- BME 5580: Introduction to Microfluidics and BioMEMS
- EAS 5938: Special Topics in Aerospace Engineering
- EAS 6135: Molecular Theory of Fluid Flows
- EAS 6138: Gasdynamics
- EAS 6242: Advanced Structural Composites
- EAS 6415: Guidance and Control of Aerospace Vehicles
- EAS 6905: Aerospace Research
- EAS 6910: Supervised Research
- EAS 6935: Graduate Seminar
- EAS 6939: Special Topics in Aerospace Engineering
- EAS 6971: Research for Master's Thesis
- EAS 7979: Advanced Research
- EAS 7980: Research for Doctoral Dissertation
- EGM 5005: Laser Principles and Applications
- EGM 5111L: Experimental Stress Analysis
- EGM 5121C: Data Measurement and Analysis
- EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
- EGM 5584: Biomechanics of Soft Tissue
- EGM 5616: Intermediate Fluid Dynamics
- EGM 5633: Special Topics in Engineering Science and Mechanics
- EGM 5806: Laser-Based Diagnostics
- EGM 6321: Principles of Engineering Analysis I
- EGM 6322: Principles of Engineering Analysis II
- EGM 6323: Principles of Engineering Analysis III
- EGM 6341: Numerical Methods of Engineering Analysis I
- EGM 6342: Fundamentals of Computational Fluid Dynamics
- EGM 6352: Advanced Finite Element Methods
- EGM 6365: Structural Optimization
- EGM 6570: Principles of Fracture Mechanics
- EGM 6611: Continuum Mechanics
- EGM 6671: Inelastic Materials
- EGM 6812: Fluid Mechanics I
- EGM 6813: Fluid Mechanics II
- EGM 6855: Bio-Fluid Mechanics and Bio-Heat Transfer
- EGM 6905: Individual Study
- EGM 6910: Supervised Research
- EGM 6934: Special Topics in Engineering Mechanics
- EGM 6936: Graduate Seminar
- EGM 6971: Research for Master's Thesis
- EGM 7819: Computational Fluid Dynamics
- EGM 7979: Advanced Research
- EGM 7980: Research for Doctoral Dissertation
- EML 5045: Computational Methods for Design and Manufacturing
- EML 5104: Classical and Statistical Thermodynamics
- EML 5124: Two-Phase Flow and Boiling Heat Transfer
- EML 5131: Combustion
- EML 5215: Analytical Dynamics I
- EML 5223: Structural Dynamics
- EML 5224: Acoustics
- EML 5233: Failure of Materials in Mechanical Design
- EML 5311: Control System Theory
- EML 5318: Computer Control of Machines and Processes
- EML 5455: Clean Combustion Technology
- EML 5465: Energy Management for Mechanical Engineers
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Mechanical Engineering

College

College of Engineering

Department/School

Mechanical and Aerospace Engineering Department

Degrees Offered with a Major in Mechanical Engineering

Doctor of Philosophy

Master of Engineering

Master of Science
Mechanical and Aerospace Engineering Departmental Courses

- BME 5580: Introduction to Microfluidics and BioMEMS
- EAS 5938: Special Topics in Aerospace Engineering
- EAS 6135: Molecular Theory of Fluid Flows
- EAS 6138: Gasdynamics
- EAS 6242: Advanced Structural Composites
- EAS 6415: Guidance and Control of Aerospace Vehicles
- EAS 6905: Aerospace Research
- EAS 6910: Supervised Research
- EAS 6935: Graduate Seminar
- EAS 6939: Special Topics in Aerospace Engineering
- EAS 6971: Research for Master's Thesis
- EAS 7979: Advanced Research
- EAS 7980: Research for Doctoral Dissertation
- EGM 5005: Laser Principles and Applications
- EGM 5111L: Experimental Stress Analysis
- EGM 5121C: Data Measurement and Analysis
- EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
- EGM 5584: Biomechanics of Soft Tissue
- EGM 5593: Special Topics in Engineering Science and Mechanics
- EGM 6006: Laser-Based Diagnostics
- EGM 6321: Principles of Engineering Analysis I
- EGM 6322: Principles of Engineering Analysis II
- EGM 6323: Principles of Engineering Analysis III
- EGM 6341: Numerical Methods of Engineering Analysis I
- EGM 6342: Fundamentals of Computational Fluid Dynamics
- EGM 6352: Advanced Finite Element Methods
- EGM 6365: Structural Optimization
- EGM 6570: Principles of Fracture Mechanics
- EGM 6611: Continuum Mechanics
- EGM 6687: Inelastic Materials
- EGM 6682: Fluid Mechanics I
- EGM 6683: Fluid Mechanics II
- EGM 6885: Bio-Fluid Mechanics and Bio-Heat Transfer
- EGM 6910: Individual Study
- EGM 6915: Advanced Research
- EGM 6934: Special Topics in Engineering Mechanics
- EGM 6936: Graduate Seminar
- EGM 6971: Research for Master's Thesis
- EGM 7819: Computational Fluid Dynamics
- EGM 7845: Turbulent Fluid Flow
- EGM 7979: Advanced Research
- EGM 7980: Research for Doctoral Dissertation
- EML 5045: Computational Methods for Design and Manufacturing
- EML 5104: Classical and Statistical Thermodynamics
- EML 5124: Two-Phase Flow and Boiling Heat Transfer
- EML 5131: Combustion
- EML 5215: Analytical Dynamics I
- EML 5223: Structural Dynamics
- EML 5224: Acoustics
- EML 5233: Failure of Materials in Mechanical Design
- EML 5311: Control System Theory
- EML 5318: Computer Control of Machines and Processes
- EML 5455: Clean Combustion Technology
- EML 5465: Energy Management for Mechanical Engineers
- EML 5515: Gas Turbines and Jet Engines
- EML 5516: Design of Thermal Systems
- EML 5526: Finite Element Analysis and Application
- EML 5595: Mechanics of the Human Locomotor System
- EML 5598: Orthopedic Biomechanics
- EML 5605: Advanced Refrigeration
- EML 5714: Introduction to Compressible Flow
- EML 6146: Microscale Heat Transfer
- EML 6154: Conduction Heat Transfer
- EML 6155: Convective Heat Transfer I
- EML 6156: Multiphase Convection Heat Transfer
- EML 6157: Radiation Heat Transfer
- EML 6216: Analytical Dynamics II
- EML 6229: Introduction to Random Dynamical Systems
- EML 6267: Structural Dynamics of Production Machinery
- EML 6278: Advanced Rotor Dynamics
- EML 6281: Geometry of Mechanisms and Robots I
- EML 6282: Geometry of Mechanisms and Robots II
- EML 6323: Nontraditional Manufacturing
- EML 6324: Fundamentals of Production Engineering
- EML 6350: Introduction to Nonlinear Control
- EML 6351: Nonlinear Control II: Adaptive Control
Nuclear and Radiological Engineering Department

Chair: D. Hintenlang
Graduate Coordinator: W. Bolch

Complete faculty listing [Follow this link](#).

The Department offers the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy in nuclear engineering sciences with emphases in nuclear power engineering, medical physics, and health physics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The medical physics and health physics options are offered through interdepartmental programs in cooperation with the College of Medicine (see the Health Physics and Medical Physics description under Interdisciplinary Graduate Studies).

**Combined Program** — The Department also offers a B.S.N.E./M.S. degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of one semester. Qualified students may begin their master's program while seniors counting 12 hours of specified nuclear engineering sciences graduate courses for both the bachelor's and master's degree requirements. Seniors admitted to the combined program are eligible for teaching and research assistantships. Program admission requirements are (1) satisfaction of Graduate School admission requirements for a master's degree, (2) an upper-division (undergraduate) GPA of at least 3.6, and (3) completion of specified bachelor's degree requirements.

The graduate program has two major programs, Nuclear Engineering and Medical Physics. Specific areas of research and study in Nuclear Engineering include advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security. The Medical Physics program is a CAMPEP accredited program designed to meet the professional requirements for a career in clinical service or research and development. Areas of Medical Physics study and research include diagnostic medical imaging, radiation therapy, nuclear medicine imaging, and radiation dosimetry.

The requirement for admission to the graduate program in nuclear engineering sciences is a bachelor's degree in an approved program in engineering or in the sciences. Students applying to the Medical Physics program should have completed the equivalent of at least a minor in physics. If the student's background is considered deficient for the planned course of study, an articulation program of background courses will be required.

Depending on professional objectives, the student may select a non-thesis option for the MS degree and substitute 8 credits of graduate-level course work, of which at least 6 credits are in nuclear engineering sciences, including a 4-credit (minimum) special project, ENU 6936. Completion of 32 credits will meet the minimum requirements for the non-thesis MS degree.

Normally, the requirements for a master's degree can be completed in 12 months. Students in the medical physics option usually take 21 to 24 months to complete the master's degree, which requires 40-42 credit hours. For a master's degree in health physics, a student must complete 42 hours of credit. If articulation work is required, it may take longer, depending upon the extent of the student's deficiency.

**Other**

**Nuclear Engineering Sciences**

**College**

**College of Engineering**

**Department/School**

**Nuclear and Radiological Engineering Department**

**Degrees Offered with a Major in Nuclear Engineering Sciences**
Doctor of Philosophy

without a concentration

concentration in Imaging Science and Technology

Master of Engineering

Master of Science

Courses

- ENU 5142: Reliability and Risk Analysis for Nuclear Facilities
- ENU 5176L: Principles of Nuclear Reactor Operations Laboratory
- ENU 5186: Nuclear Fuel Cycles
- ENU 5186: Nuclear Reactor Power Plant System Dynamics and Control
- ENU 5516L: Nuclear Engineering Laboratory II
- ENU 5615C: Nuclear Radiation Detection and Instrumentation
- ENU 5615L: Nuclear Radiation Detection and Instrumentation Lab
- ENU 5626: Radiation Biology
- ENU 5658: Imaging System Analysis with Medical Physics Applications
- ENU 5705: Advanced Concepts for Nuclear Energy
- ENU 6051: Radiation Interaction Basics and Applications I
- ENU 6052: Radiation Transport Basics and Applications
- ENU 6053: Radiation Interaction Basics and Applications II
- ENU 6061: Survey of Medical Radiological Physics
- ENU 6106: Nuclear Reactor Analysis I
- ENU 6107: Nuclear Reactor Analysis II
- ENU 6126: Fundamentals of Reactor Kinetics
- ENU 6135: Nuclear Thermal Hydraulics
- ENU 6623: Radiation Dosimetry
- ENU 6627: Therapeutic Radiological Physics
- ENU 6636: Medical Radiation Shielding & Protection
- ENU 6651: Clinical Rotation in Radiation Therapy
- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6655: Advanced Diagnostic Radiological Physics
- ENU 6657: Diagnostic Radiological Physics
- ENU 6659: Nuclear Medicine Instrumentation and Procedure
- ENU 6835: Nuclear Fuels
- ENU 6905: Individual Work
- ENU 6910: Supervised Research
- ENU 6935: Nuclear and Radiological Engineering Seminar
- ENU 6936: Special Projects in Nuclear and Radiological Engineering Sciences
- ENU 6937: Special Topics in Nuclear and Radiological Engineering Sciences
- ENU 6971: Research for Master's Thesis
- ENU 6972: Research for Engineer's Thesis
- ENU 7979: Advanced Research
- ENU 7980: Research for Doctoral Dissertation

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6639: Engineering Leadership
Applied Physiology and Kinesiology Department

Chair: S. Dodd
Graduate Coordinator: E. Christou

Complete faculty listing by department: Follow this link.

The Ph.D. program is offered with concentrations in biobehavioral science and exercise physiology. Students in the biobehavioral science concentration specialize in one of four areas: biomechanics, exercise / performance psychology, motor control / learning, or sports medicine. These interdisciplinary concentrations focus on preparing students as researchers with a blend of course work and research training.

A program leading to the Master of Science degree in applied physiology and kinesiology (thesis and non-thesis options) is also offered. Areas of concentration for the master's program include athletic training/sports medicine, biobehavioral science, clinical exercise physiology, exercise physiology, and human performance. The thesis option gives the student an opportunity to study, conduct research, and prepare a thesis in an area of special interest. The non-thesis option offers the student a specialization in a selected area of study, with additional work in other areas. A comprehensive written examination is required for this option, as is a capstone internship experience. Requirements for these degrees are given in the General Information section of this catalog.

Athletic training/sports medicine: This concentration provides comprehensive academic preparation, research, and clinical experience in the areas of injury prevention, assessment, treatment, rehabilitation, and therapeutic modalities.

Biobehavioral Science: This thesis mandatory concentration is multidisciplinary and flexible, permitting students to tailor their scholarly experience to the development of research skills in one of several related disciplines: biomechanics, motor control and learning, and exercise and performance psychology. Each area of specialization is briefly described below.

- Biomechanics: The specialization in biomechanics draws from the fields of neuroscience, engineering, and medicine. The course work and training include kinematics and kinetics of movement. Course work also includes anatomy/kinesiology, biomechanics, engineering, neuroscience, medicine, psychology, physical therapy, and statistics.
- Motor learning / control: This interdisciplinary specialization draws on experiences and a knowledge base in the movement and sport sciences, cognitive sciences, and physical therapy. Students are prepared to conduct research and provide expertise in traditional motor performance and learning settings.
- Exercise / performance psychology: This area of specialization provides the basis for understanding and influencing the underlying thought processes and attitudes that will ultimately determine the performance of individuals involved in sport, exercise, and other achievement oriented activities. The primary emphasis is to develop the scientific background and skills necessary for doctoral training and research.

Clinical exercise physiology: The purpose of this non-thesis program is to give students the opportunity to develop advanced knowledge and competencies in Exercise Physiology. Clinical Exercise Physiologists typically practice in hospitals, clinics and wellness centers as part of a health care team that administers tests and develops programs of exercise, counseling, and education for patients with cardiopulmonary, metabolic, and musculoskeletal diseases.

Exercise physiology: This thesis mandatory area of concentration is concerned with the scientific study of how the various physiological systems of the human body respond to physical activity. It is a multidisciplinary field with strong ties to the basic life sciences and medicine, and application to clinical, normal, and athletic populations.

Human performance: This non-thesis master's concentration merges a range of specializations within the Department into a curriculum that provides educational experiences to graduate students interested in studying the factors that determine human performance in both athletic and nonathletic domains. This flexible approach allows students to focus on specific applications that best meet their individual interests. Human performance incorporates components such as nutrition, psychology, motor behavior, and physiology that are applicable to athletic and clinical populations.

Other

Applied Physiology and Kinesiology

College

College of Health and Human Performance

Department/School

Applied Physiology and Kinesiology Department

Applied Physiology and Kinesiology Program Information

Graduate study in Applied Physiology and Kinesiology (APK) is focused on research in concentration areas including athletic training biomechanics; motor control and learning exercise physiology; and exercise and performance psychology. Graduate students are exposed to and directly involved in research covering the full multidisciplinary spectrum of human potential from young to old, fit to unfit, healthy to diseased, able-bodied to disabled, and from the casual recreational participant to the high-level athlete. In addition to human performance issues, APK faculty and students study the immediate and lasting effects of exercise and its use in disease prevention and rehabilitation.

For more information, please see our website: http://apk.hhp.ufl.edu/index.php/current-students/prospective-students.

Degrees Offered with a Major in Applied Physiology and Kinesiology

Master of Science
without a concentration

congestion in Athletic Training/Sports Medicine

congestion in Biobehavioral Science

congestion in Clinical Exercise Physiology

congestion in Exercise Physiology

congestion in Human Performance

Applied Physiology and Kinesiology Departmental Courses

- APK 5127: Assessment in Exercise Science
- APK 5404: Sport Psychology
- APK 6111L: Practicum in Exercise Physiology
- APK 6115C: Physiological Bases of Exercise and Sport Sciences
- APK 6118: Neuromuscular Adaptation to Exercise
- APK 6126: Cardiopulmonary Pathologies
- APK 6128: EKG Interpretation
- APK 6205C: Nature and Bases of Motor Performance
- APK 6206: Planning Motor Actions
- APK 6210: Controlling Motor Actions
- APK 6225: Biomechanical Instrumentation
- APK 6226C: Biomechanics of Human Motion
- APK 6406: Exercise Psychology
- APK 6408: Performance Enhancement
- APK 6410: Seminar in Exercise Psychology
- APK 6415: Seminar in Sport Psychology: Current Topics
- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- APK 7107: Cardiovascular Exercise Physiology
- APK 7108: Environmental Stress Exercise Physiology
- APK 7117: Exercise Metabolism
- APK 7124: Free Radicals in Aging, Exercise and Disease
- APK 7129: Pulmonary Function during Exercise
- ATR 6124: Clinical Anatomy for the Exercise Sciences
- ATR 6145: Human Pathophysiology for the Exercise Sciences
- ATR 6215: Evidence-Based Orthopedic Exam I: Upper-Extremity
- ATR 6216: Evidence-Based Orthopedic Exam II: Lower-Extremity
- ATR 6304: Rehabilitation and Modalities of Athletic Injuries
- ATR 6624: Athletic Training Research and Technology I
- ATR 6625: Athletic Training Research and Technology II
- ATR 6934: Seminar in Athletic Training
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 6935: Variable International Topics
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- PET 5936: Special Topics/Seminars
- PET 6910: Supervised Research
- PET 6940: Supervised Teaching
- PET 6947: Graduate Internship in Exercise and Sport Sciences
- PET 6971: Research for Master's Thesis
Department of Health Education & Behavior

Chair: Julie A. Tucker
Graduate Coordinator: Christine B. Stopka

Complete faculty listing by department: Follow this link.

The Department of Health Education & Behavior offers a Doctor of Philosophy (Ph.D.) in Health and Human Performance with a concentration in Health Behavior, a non-thesis 30-credit hour Master of Science and a 36-credit Master of Science (M.S.) in Health Education and Behavior. Requirements for the Ph.D. and M.S. degrees are given in the General Information section of this catalog.

The Ph.D. degree program trains health behavior researchers for academic positions in federal health agencies such as the Centers for Disease Control and Prevention and the National Institutes of Health for postdoctoral research fellowships and for the private sector.

The 30-credit hour, non-thesis M.S. degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector. Full-time students can complete this M.S. option in one year. This degree may also give students unique and distinguishing training experiences when applying to professional schools such as law, medicine, physician assistant, dentistry, chiropractic, osteopathy, nursing, occupational therapy, and physical therapy.

The 36-credit hour project in lieu of thesis, and the 36-credit hour thesis options are designed for students interested in developing research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically can complete these options in about 4 semesters.

The Department also offers an accelerated B.S./M.S. program in health education and behavior to enable students to receive both B.S. and M.S. degrees with a reduction of 12 credits (about one semester of coursework).

Students who complete a graduate degree program in the Department of Health Education & Behavior acquire a range of skills required to research, plan, implement, and evaluate health promotion policies and programs aimed at improving the health and well-being of individuals, families, and communities. Specific skills include:

- Conducting needs and capacity assessments to identify health priorities
- Planning, implementing, and evaluating health promotion policies and programs
- Conducting research on questions associated with health problems and their determinants and health promotion policies and programs
- Administering and managing health promotion programs
- Advocating for health promotion policies and programs in schools, communities, health care facilities, and worksites
- Developing social marketing and health communication messages and campaigns
- Researching and developing social media and new media-based health promotion applications
- Serving as a resource person for health information and referrals
- Using a variety of teaching-learning strategies appropriate to the target audience and setting
- Writing scholarly and professional articles
- Working collaboratively with public and private agencies, nongovernmental organizations (NGOs) and the private sector to achieve the goal of a healthier population.

This degree prepares the health promotion specialists and health behavior scientists to work in:

- Local, state, and federal health, education and social agencies
- Nongovernmental health organizations
- Schools and universities
- Health care settings
- Private sector

Sample position titles for individuals with this degree include:

- Health education specialist
- Health promotion specialist
- Public health advisor or public health analyst
- Health promotion coordinator or health promotion consultant
- Campus health educator or patient health educator
- Health communication specialist
- Wellness specialist
- Wellness promotion coordinator
- Prevention specialist

For additional information, visit http://www.hhp.ufl.edu/heb.

Other

Health Education and Behavior

College

College of Health and Human Performance

Department/School

Department of Health Education & Behavior

Health Education and Behavior Program Information
The 30-credit hour, non-thesis in the Master of Science in Health Education and Behavior degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector.

The 30-credit, non-thesis Pre-Professional Health Science Track is designed for students seeking a career in health care. This option allows you to choose a minimum of 12 credits of basic science elective coursework which are prerequisites for dental, medical, nursing, occupational therapy, physician assistant, physical therapy, and other health professional programs including 6 credits of undergraduate science courses (3000-4999). This degree track prepares students who are interested in graduate studies in the health sciences and/or pursuing health professional training. Full-time students can complete the 30-credit hour M.S. options in one year.

The 36-credit Thesis Option, and the 36-credit Project In Lieu Of Thesis Option, in the Master of Science in Health Education and Behavior degree programs are designed for students interested in improving their research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically complete these options in about 4 semesters.

For more information, please see our website: http://heb.hhp.ufl.edu/index.php/academia/graduate-programs/masters-programs.

Degrees Offered with a Major in Health Education and Behavior

Master of Science

Health Education and Behavior Departmental Courses

- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 6935: Variable International Topics
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- HSC 5135: Emotional Health Education
- HSC 5138: Human Sexuality
- HSC 5142: Drug Education
- HSC 5315C: Teaching Health in Elementary Schools
- HSC 5536C: Medical Terminology for the Health Professions
- HSC 5576: Nutrition Education for Special Populations
- HSC 5606: Spirituality and Health
- HSC 5618: Advanced Exercise Therapy, Adapted Physical Activity, & Health
- HSC 5626: Minority Health Issues
- HSC 5657: Health and End-of-Life Issues
- HSC 5925: Seminar in Health Education
- HSC 5966: Writing for Professional Publications
- HSC 6037: Philosophy and Principles of Health Education
- HSC 6216: Environmental Health
- HSC 6235: Patient Health Education
- HSC 6318: Planning Health Education Programs
- HSC 6506: Epidemiology
- HSC 6557: Health Promotion and Programming in Gerontology
- HSC 6571: Contemporary Issues in Health Promotion
- HSC 6575: Women's Health Issues
- HSC 6595: HIV/AIDS Education
- HSC 6603: Theories of Health Behavior and Practice in Health Education
- HSC 6605: Scientific Foundations of Holistic Health
- HSC 6625: Trends in International Health
- HSC 6629: Health Promotion for Priority Populations
- HSC 6637: Social Marketing and Health
- HSC 6646: Community Health Methods in Injury Prevention & Control
- HSC 6665: Health Communication
- HSC 6667: Health Communication Programs
- HSC 6668: Interpersonal Communication and Health
- HSC 6695: Worksite Health Promotion
- HSC 6712: Evaluating Health Education Programs
- HSC 6735: Research Methods in Health Education
- HSC 6850: Internship in Health Education
- HSC 6904: Readings in Health Education
- HSC 6905: Independent Study
- HSC 6910: Supervised Research
- HSC 6935: Current Topics in Health Education
- HSC 6940: Supervised Teaching
- HSC 6971: Research for Master's Thesis
- HSC 6973: Project in Lieu of Thesis
Tourism, Recreation, and Sport Management Department

College of Health and Human Performance

Chair: Michael Sagas.
Graduate Coordinator: Stephen Holland.

Complete faculty listing: Follow this link.

The degree Master of Science is offered by the Department of Tourism, Recreation, and Sport Management with programs in sport management and in recreation, parks, and tourism. Both programs offer thesis and non-thesis formats. The Department participates in the Ph.D. program in Health and Human Performance. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Master's program provides advanced preparation of tourism, recreation, and parks and sport management professionals for positions of leadership in planning, developing, administering, and marketing of programs in a variety of employment settings; public and private. Concentrations of study may be developed in a number of areas, such as:

- Natural resource recreation management
- Tourism and commercial recreation
- Campus recreation
- Recreation administration and supervision
- Sport management

The Doctoral program is offered through the College of Health and Human Performance with concentrations in tourism; natural resource recreation and sport management. These interdisciplinary specializations blend course work and research. The curriculum is individualized, and applicants with degrees from unrelated fields can be accepted into the program. However, their previous work will be evaluated and their programs planned according to their individual needs, interests, and career objectives.

Combined program: The Department offers a combined bachelor's/master's degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of approximately one semester. Up to 12 approved graduate credit hours can be utilized toward both degrees.

MS/MSM Concurrent Degree Program: This joint degree program is offered through the College of Business Administration (Master of Science in Business Management [MSM]) and the College of Health and Human Performance's, Department of Tourism, Recreation and Sport Management (Master of Science in Sport Management [MS]). Applicants must apply to both programs and be admitted to both to participate. The MS/MSM is a non-thesis degree. The MS/MSM is designed for students who seek a graduate business degree and who lack the work experience necessary for admission to the MBA program. The MS/MSM curriculum is similar to the first year of the MBA program, giving students a good foundation in business principles. Concurrent degree students can share up to 9 credit hours of the same coursework towards both degree programs. They do not have to graduate during the same semester. Students admitted into the concurrent program must work closely with both departments to verify all requirements are being met during their course of study.

MS/J.D. joint program: This 98-credit-hour joint degree program culminates in the Master of Science and the Juris Doctor degrees. Applicants must meet the entrance requirements for the Department of Tourism, Recreation, and Sport Management and the College of Law. Admission to the second degree program is required no later than the end of the fourth consecutive semester after beginning one of the degree programs. The student's supervisory committee comprises faculty members from both the Department of Tourism, Recreation, and Sport Management and the College of Law. Students admitted into the joint program are permitted to share up to 12 credit hours of the same coursework towards both degree programs. Students must graduate during the same semester from both programs.

Other

Recreation, Parks, and Tourism

College

College of Health and Human Performance

Department/School

Tourism, Recreation, and Sport Management Department

Recreation, Parks, and Tourism Program Information

The Master of Science in Recreation, Parks and Tourism offers the following four areas of concentration:

1. Tourism and Commercial Recreation

- Travel activities to and staying outside one's usual environment; hospitality, transportation
- Recreation activities covered by fees, charges or other non-tax revenues; theme/innuement/water parks, movie theaters, sport/fitness/health clubs, resorts
- Examples of employers include: travel agencies, cruise lines, dance studios, special event companies, resorts, multipurpose sports clubs and health & fitness clubs
2. Natural Resource Recreation

- Park(s) management, protected areas, wilderness conservation
- State parks, river floating, horseback riding, hiking trails
- Beach management, rivers and lakes, sustainability
- Outdoor recreation leadership
- Conservation management, planning, and policy
- Federal agencies (National Parks, U.S. Army Corp of Engineers)

3. Recreation Administration and Supervision

- City/state public parks
- City pools
- City skate parks, family parks
- Public tennis courts
- City sports teams/leagues, youth sports
- Organized group and youth camps
- Military recreation departments (Morale, Welfare & Recreation [MWR] programs)

4. Campus Recreation Programming & Administration

- College campus intramural recreation programs
- Campus fitness/exercise centers

Graduates of the Master of Science in Recreation, Parks & Tourism will be trained for middle and/or upper level management positions, in their respective fields mentioned above. Students can choose between three options: 1.) Thesis, or 2.) Non-Thesis Internship, or 3.) Non-Thesis with Paper.

For more information, please see our website: [http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/recreation-parks-and-tourism](http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/recreation-parks-and-tourism).

Degrees Offered with a Major in Recreation, Parks, and Tourism

**Master of Science**

- without a concentration

- concentration in Historic Preservation

- concentration in Natural Resource Recreation

- concentration in Therapeutic Recreation

- concentration in Tourism

- concentration in Tropical Conservation and Development

Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMG 6076: Introduction to Hospitality and Tourism
- HMG 6608: Hospitality Law and Risk Management
- HMG 6747: Marketing in Hospitality/Tourism
Sport Management

College

College of Health and Human Performance

Department/School

Tourism, Recreation, and Sport Management Department

Sport Management Program Information

Sport Management integrates concepts of management, marketing, finance and law to apply to sport organizations at various levels and prepares students for a variety of volunteer and employment opportunities at the professional, collegiate, community and amateur level sport entities. Its focus is on the business and organization aspects of sport, not coaching or athletic performance.

For more information, please see our website: http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/sport-management.

Degrees Offered with a Major in Sport Management
Master of Science

without a concentration

concentration in Historic Preservation

concentration in Tropical Conservation and Development

Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMG 6076: Introduction to Hospitality and Tourism
- HMG 6608: Hospitality Law and Risk Management
- HMG 6747: Marketing in Hospitality/Tourism
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- LEI 5188: Trends in Leisure Studies
- LEI 5121: Outdoor Recreation and Park Management
- LEI 6108: Contemporary Theories of Recreation and Leisure
- LEI 6325: Ecotourism
- LEI 6326: Sport Tourism
- LEI 6336: Tourism Planning and Development
- LEI 6351: Heritage Tourism
- LEI 6439: Campus Recreation Administration and Programming
- LEI 6513: Administrative Procedures in Leisure Services
- LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
- LEI 6557: Recreation Management/Development in the Coastal Zone
- LEI 6662: Advanced Marketing for Recreation, Parks, and Tourism
- LEI 6895: Tourism Theory and Concepts
- LEI 6903: Readings in Recreation, Parks, and Tourism
- LEI 6905: Directed Independent Study
- LEI 6910: Supervised Research
- LEI 6931: Special Topics in Recreation, Parks, and Tourism
- LEI 6935: Seminar in Recreation, Parks, and Tourism
- LEI 6940: Supervised Teaching
- LEI 6944: Practicum in Leisure Studies
- LEI 6971: Research for Master's Thesis
- LEI 7170: Foundations of Leisure Behavior
- LEI 7901: Recreation, Parks, and Tourism in Higher Education
- LEI 7904: Advanced Readings in Recreation, Parks, and Tourism
- LEI 7905: Advanced Independent Study in Recreation, Parks and Tourism
- LEI 7910: Advanced Supervised Research
- LEI 7933: Advanced Special Topics in Recreation, Parks, and Tourism
- LEI 7936: Advanced Seminar in Recreation, Parks, and Tourism
- PET 6910: Supervised Research
- SPM 5016: Sport Sociology
- SPM 5206: Sport Ethics
- SPM 5309: Sport Marketing
- SPM 5506: Sport Finance
- SPM 5936: Current Topics in Sport Management
- SPM 6006: Contemporary Sport Industry
- SPM 6036: Research Seminar in Sport Management
- SPM 6106: Management and Planning of Sport and Physical Activity Facilities
- SPM 6158: Management and Leadership in Sport
- SPM 6308: Study of Sport Consumer Behaviors
- SPM 6726: Issues in Sport Law
- SPM 6905: Directed Independent Study
- SPM 6910: Supervised Research
- SPM 6947: Graduate Internship in Sport Management
- SPM 6948: Advanced Practicum in Sport Management
- SPM 6971: Research for Master's Thesis
Comparative Law Department

Director and Graduate Coordinator: P.A. Malavet.

Complete faculty listing by department: [Follow this link](#).

The LL.M. in Comparative Law degree is designed for graduates of foreign law schools who want to enhance their understanding of the American legal system and the English common law system from which it evolved. Requirements for this degree are given in the [General Information](#) section of this catalog.

The program begins with Introduction to American Law, a 4-credit summer course that gives students a foundation in the American legal process. It also helps students acclimate to the College of Law and the University community before the start of the academic year. During the fall and spring terms, and with the director's approval, students choose their remaining 22 credits from more than 100 Juris Doctor and LL.M. in Taxation courses and seminars. For admission information consult the [College of Law Prospectus](#) or write to the Comparative Law Office P.O. Box 117643, University of Florida, Gainesville, FL 32611-7643 USA.

Other

Comparative Law

College

Fredric G. Levin College of Law

Department/School

Comparative Law Department

Degrees Offered with a Major in Comparative Law

Master of Laws in Comparative Law

without a concentration

concentration in Tropical Conservation and Development

Courses

- LAW 7801: Introduction to the Legal System of the United States for LL.M. in Comparative Law, Part II
- LAW 7805: Legal Writing and Research for LL.M. in Comparative Law
- LAW 7906: Directed Research for LL.M in Comparative Law
- LAW 7932: Introduction to the Legal System of the United States for LLM in Comparative Law, Part I

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions
- LAW 7604: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
- LAW 7614: U.S. International Tax I
- LAW 7615: U.S. International Tax II
- LAW 7617: Partnership Taxation
- LAW 7623: Taxation of Gratuitous Transfers
- LAW 7625: Income Taxation of Trusts and Estates
Environmental and Land Use Law Department

Director and Graduate Coordinator: Christine A. Klein

Complete faculty listing by department: Follow this link.

Florida's sensitive, varied and beautiful natural environment makes the University of Florida a natural choice for students who want to focus on the national and global issues of land use and environmental law. Florida provides a perfect setting to study first-hand the efforts to reconcile growth and conservation.

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

For more information, please see the program page below and our website: http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law.

Other

Environmental and Land Use Law

College

Fredric G. Levin College of Law

Department/School

Environmental and Land Use Law Department

Environmental and Land Use Law Program Information

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

Students admitted to the program work with the LL.M. Program Director to design an individual course of study tailored to their particular interests. In addition to a broad range of academic courses, UF Law offers a wealth of environmental skills and field courses such as the Conservation Clinic, Environmental Dispute Resolution and Wetlands & Watersheds. LL.M. students may also apply for a seat in the spring break field course (previous offerings have included Sustainable Development in Belize, Central America, and Ocean and Coastal Law in Marineland, Florida); the South Florida Everglades field course offered in May (course availability varies) and the Summer Environmental Law Study Abroad Program in Costa Rica.

The program also capitalizes on the many outstanding programs at the University of Florida in disciplines related to environmental and land use law practice, including wildlife ecology, environmental engineering, urban and regional planning, and interdisciplinary ecology. The UF LL.M. program is unique in requiring that 6 of the 26 required credit hours must be from relevant graduate level courses that have substantial non-law content and are offered outside the law school or jointly by the law school and another department. In addition to completing required coursework, LL.M. candidates must complete a written project in connection with a seminar or the Conservation Clinic.

Six credit hours of coursework in graduate-level courses listed outside the law school or jointly listed by the law school and another graduate department and approved by the LL.M. Program Director are required. For elective courses, please visit http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law/degree-requirements.

For more information about the Environmental and Land Use Law Program, please see our website: http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law, or contact:

University of Florida
Levin College of Law
P.O. Box 117625
Gainesville, FL 32611-7625
Phone: 352-273-0777
Email: elulp@law.ufl.edu

Degrees Offered with a Major in Environmental and Land Use Law
Master of Laws in Environmental and Land Use Law

Courses

- LAW 7493: LL.M. Research: Selected Topics in Environmental & Land Use Law
- LAW 7916: Research Methods and Environmental Land Use Law

Taxation Department

Chair and Graduate Coordinator: M. K. Friel.

Complete faculty listing by department: [Follow this link](#).

Graduate study in the field of taxation leading to the Master of Laws in Taxation degree or to the Master of Laws in International Tax degree is available in the College of Law.

Applicants for admission to the Graduate School for these degrees must hold a law degree from an accredited law school or in the case of international students, from a recognized foreign university but need not submit scores on the Graduate Record Examination. For further information concerning admission consult the [Graduate Tax Program Catalog](#), or write the Tax Office, 320 Holland Law Center.

Other

International Taxation

College

Fredric G. Levin College of Law

Department/School

Taxation Department

Degrees Offered with a Major in International Taxation

Master of Laws in International Taxation

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions
- LAW 7604: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
- LAW 7614: U.S. International Tax I
- LAW 7615: U.S. International Tax II
- LAW 7617: Partnership Taxation
- LAW 7623: Taxation of Gratuitous Transfers
- LAW 7625: Income Taxation of Trusts and Estates
- LAW 7626: Estate Planning
- LAW 7632: Deferred Compensation
- LAW 7633: Tax Exempt Organizations
- LAW 7640: Civil Tax Procedure
- LAW 7641: Procedures in Tax Fraud Cases
- LAW 7650: State and Local Taxation
- LAW 7880: Tax Policy
LAW 7680: Comparative Taxation  
LAW 7682: Income Tax Treaties  
LAW 7683: Transfer Pricing  
LAW 7605: Independent Study  
LAW 7910: Supervised Research  
LAW 7911: Federal Tax Research  
LAW 7931: Current Federal Tax Problems

Taxation

College

Fredric G. Levin College of Law

Department/School

Taxation Department

Degrees Offered with a Major in Taxation

Master of Laws in Taxation

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions  
- LAW 7604: Timing Issues in Taxation  
- LAW 7611: Corporate Taxation I  
- LAW 7613: Corporate Taxation II  
- LAW 7614: U.S. International Tax I  
- LAW 7615: U.S. International Tax II  
- LAW 7617: Partnership Taxation  
- LAW 7623: Taxation of Gratuitous Transfers  
- LAW 7625: Income Taxation of Trusts and Estates  
- LAW 7626: Estate Planning  
- LAW 7632: Deferred Compensation  
- LAW 7633: Tax-Exempt Organizations  
- LAW 7640: Civil Tax Procedure  
- LAW 7641: Procedures in Tax Fraud Cases  
- LAW 7650: State and Local Taxation  
- LAW 7660: Tax Policy  
- LAW 7680: Comparative Taxation  
- LAW 7682: Income Tax Treaties  
- LAW 7883: Transfer Pricing  
- LAW 7905: Independent Study  
- LAW 7910: Supervised Research  
- LAW 7911: Federal Tax Research  
- LAW 7931: Current Federal Tax Problems

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen  
Complete faculty listing by department: Follow this link

For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/

Other

Animal Molecular and Cellular Biology
Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
- Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program's website at http://www.animal.ufl.edu/amcb/.

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses
Anthropology Department

Chair: S. deFrance
Graduate Coordinator: P. Collings

Complete faculty listing by department: Follow this link.

The Anthropology Department takes pride in maintaining a holistic perspective, bridging the four traditional fields that have composed the discipline: sociocultural, archaeological, biological, and linguistic anthropology. Both graduate students and faculty conduct research that cut across the four-fields, and extend anthropological investigations into other disciplines.

The graduate program is a mentoring program emphasizing the PhD degree. Students are mentored by faculty advisors, together with supervisory committees chosen by students with the advice of advisors. Graduate students are expected to be in residence to attend classes and seminars, and receive individualized training. Distance-education graduate degrees are not offered. Students formally report on their progress each year, and the progress of each graduate student is evaluated by the faculty in their primary field.

Students receiving graduate degrees are well-prepared intellectually and professionally for success in a wide variety of careers, and become leaders in developing the next generation of anthropology. The department offers teaching experience and resources for presenting conference papers, submitting grant proposals, conducting fieldwork, and other activities appropriate to their professionalization. Graduate students are welcome to contribute to discussions in departmental meetings, and serve on some departmental committees.

Other

Anthropology

College

College of Liberal Arts and Sciences

Department/School

Anthropology Department

Anthropology Program
The department of Anthropology offers graduate work leading to the Master of Arts (thesis or nonthesis option) and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog. For more information, visit the departmental website: http://anthro.ufl.edu. Graduate training is offered in cultural anthropology, archaeology, and biological anthropology.

Each graduate student should specify a major field of study among the four fields of anthropology. In addition, each must choose one of three tracks: the specialized track in which a student focuses on one field of anthropology, the multifield track in which a student combines two fields, or the interdisciplinary track in which a student adds study in a second discipline to anthropology. Knowledge of a foreign language or of statistics may be required by the student's supervisory committee.

The department generally requires applicants to have acceptable scores on the GRE (verbal and quantitative portions) and a 3.2 overall grade point average based on a 4.0 system. Previous work in anthropology is an asset but not a strict requirement for admission. Potential applicants are urged to visit the website to familiarize themselves with the specializations of our faculty and to indicate in their application those faculty with whom they might work. Barring special circumstances, the Department restricts admission to applicants interested in earning a Ph.D. Entering students who have earned a master's degree may apply for direct admission to the doctoral program. Students who enter without an M.A. will generally work for their M.A. on the way to the Ph.D. This requires either a formally-defended thesis or written comprehensive exams combined with a high-quality paper or research report. With their adviser's permission, they may opt to bypass the M.A.

Students enrolled in the M.A. program who wish to continue their studies for a Ph.D. must apply to the Department for certification.

New students are admitted into the graduate program only in the fall of each academic year. The deadline for receiving completed applications for admission into the graduate program is December 15, though the department encourages early applications.

Degrees Offered with a Major in Anthropology

Doctor of Philosophy

without a concentration

concentration in Historic Preservation

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

Master of Arts

without a concentration

concentration in Historic Preservation

concentration in Tropical Conservation and Development

Master of Arts in Teaching
without a concentration

concentration in Tropical Conservation and Development

Courses

- ANG 5012: Fantastic Anthropology and Fringe Science
- ANG 5085: Collection and Analysis of Visual Data in Anthropology
- ANG 5126: Zooarcheology
- ANG 5158: Florida Archeology
- ANG 5162: Maya Archeoastronomy and Ethnoastronomy
- ANG 5164: The Inca and Their Ancestors
- ANG 5172: Historical Archeology
- ANG 5194: Principles of Archeology
- ANG 5255: Rural Peoples in the Modern World
- ANG 5265: Methods in Ethnoecology
- ANG 5266: Economic Anthropology
- ANG 5303: Women and Development
- ANG 5310: The North American Indian
- ANG 5323: Peoples of Mexico and Central America
- ANG 5327: Maya and Aztec Civilizations
- ANG 5330: The Tribal Peoples of Lowland South America
- ANG 5331: Peoples of the Andes
- ANG 5336: The Peoples of Brazil
- ANG 5341: Anthropology of the Caribbean
- ANG 5352: Peoples of Africa
- ANG 5354: Anthropology of Modern Africa
- ANG 5395: Visual Anthropology
- ANG 5420: Social Network Analysis in Cultural Anthropology
- ANG 5426: Kinship and Social Organization
- ANG 5464: Culture and Aging
- ANG 5485: Research Design in Anthropology
- ANG 5486: Computing for Anthropologists
- ANG 5488: Geospatial Analysis in Cultural Anthropology
- ANG 5525: Human Osteology and Osteometry
- ANG 5531: Culture and Nutrition
- ANG 5546: Seminar: Human Biology and Behavior
- ANG 5620: Language and Culture
- ANG 5621: Proseminar in Cultural and Linguistic Anthropology
- ANG 5700: Applied Anthropology
- ANG 5702: Anthropology and Development
- ANG 5711: Culture and International Business
- ANG 5743: Human Rights Missions in Forensic Anthropology
- ANG 5744: International Forensic Fieldwork in Human Rights
- ANG 5824L: Field Sessions in Archeology
- ANG 6034: Seminar in Anthropological History and Theory
- ANG 6086: Historical Ecology
- ANG 6091: Research Strategies in Anthropology
- ANG 6110: Archaeological Theory
- ANG 6112: Critical Archaeology of Time
- ANG 6113: Ideology and Symbolic Approaches in Archaeology
- ANG 6120C: Environmental Archaeology
- ANG 6122C: Archaeological Ceramics
- ANG 6128: Lithic Technology
- ANG 6146: Archaeology of Maritime Adaptations
- ANG 6155: Southeastern U.S. Prehistory
- ANG 6161: Problems in Caribbean Prehistory
- ANG 6165: Problems in South American Archaeology
- ANG 6183: Laboratory Training in Archeology
- ANG 6185: Ethnoarchaeology
- ANG 6186: Seminar in Archeology
- ANG 6187: Experimental Archaeology
- ANG 6190: Seminar in Contemporary Methods
- ANG 6191: Archaeology of Death
- ANG 6224: Painted Books of Ancient Mexico: Codices of Aztecs, Mixtecs, and Mayas
- ANG 6241: Special Topics in Ecology of Religion
- ANG 6267: Anthropology, Geographic Information System, and Human Ecosystems
- ANG 6273: Legal Anthropology
- ANG 6274: Principles of Political Anthropology
- ANG 6286: Seminar in Contemporary Theory
Astronomy Department

Chair: C. Telesco
Graduate Coordinator: V. Sarajedini.

Complete faculty listing by department: Follow this link.

The University of Florida’s Astronomy Department is one of the largest in the country. Research is an integral part of the graduate program. Students have opportunities to work with faculty and staff on a broad range of astronomical problems using in-house, national and international, and ground- and space-based facilities. Support for graduate studies is available through fellowships, research assistantships, and teaching assistantships. For more information on the program, please follow the link below or visit our website.

Other

Astronomy

College

College of Liberal Arts and Sciences

Department/School

Astronomy Department

Astronomy Program Information

The Astronomy Department offers graduate programs leading to the M.S., M.S.T. or Ph.D. degrees in astronomy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Planetary Systems: Observational and theoretical studies concentrate in the areas of planet formation, the dynamical evolution of planetary systems and the detection and characterization of extrasolar planets. Members of the department are active in Kepler Mission and ground-based Dopple surveys to identify extrasolar planets. Researchers are also active in studying the origins and orbital evolution of interplanetary dust and small bodies in the solar system and around nearby stars.
Stellar populations: Observational studies concentrate on resolved stars in the Milky Way and nearby galaxies. Studies of particular classes of stars include various types of binary stars and blue stragglers. The goal of these studies is to apply our theoretical understanding of stellar structure and evolution to the properties of stars in a variety of environments.

Origins of stars and planets: Observational studies focus on the properties of giant molecular clouds, the collapse of molecular cloud cores, the formation of stars in clusters and in isolation, and the formation and evolution of circumstellar and protoplanetary disks. The department is active in several star formation surveys, involving many international ground- and space-based facilities. Theoretical studies emphasize the development of analytic models and numerical simulations, as well as their testing against observational constraints.

Structure and evolution of galaxies: Observational programs use multi-wavelength photometry of stars and star clusters in galaxies throughout the Local Group and in nearby groups, including the Milky Way, to study galaxy evolution. Other observations focus on the structure and dynamics of galaxies and their interstellar medium using neutral hydrogen (HI) and molecules such as carbon monoxide.

Extragalactic astronomy and cosmology: Observational programs investigate the nature of ultra-luminous galaxies, active galactic nuclei (AGNs), and the formation and chemical evolution of distant galaxies and clusters of galaxies. Theoretical investigations focus on the emission/absorption features in AGN spectra, the star-formation and chemical-evolution properties of galaxies, and applications of general relativity and particle physics to conditions in the very early universe.

Instrumentation programs: The UF Infrared Astrophysics Laboratory is a world leader in designing and constructing advanced near-infrared and mid-infrared instrumentation for major telescopes around the world, including the 8m Gemini North and South Telescopes and the 10m Gran Telescopio Canarias. Instrumentation is also developed in the area of high precision Doppler techniques for planet searches and the development of high contrast imaging techniques for direct imaging of extrasolar planets.

Computing facilities: The Astronomy Department maintains a network of high-performance computers running Linux and OS-X. The local network is maintained by a full-time systems manager. Astronomy students have access to supercomputing facilities maintained by the UF High Performance Computing Center, including thousands of CPU cores with high-performance networking.

Degrees Offered with a Major in Astronomy

Doctor of Philosophy

Master of Science

Master of Science in Teaching

Courses

- AST 5113: Solar System Astrophysics I
- AST 5114: Solar System Astrophysics II
- AST 6112: Solar System Astrophysics
- AST 6215: Stellar Structure and Function
- AST 6245: Stellar Atmospheres and Radiative Processes
- AST 6309: Galactic and Extragalactic Astronomy
- AST 6336: Interstellar Matter
- AST 6415: Observational Cosmology
- AST 6416: Physical Cosmology
- AST 6506: Celestial Mechanics
- AST 6725C: Observational Techniques
- AST 6905: Individual Work
- AST 6910: Supervised Research
- AST 6925: Departmental Colloquium
- AST 6935: Frontiers in Astronomy
- AST 6936: Astronomy Journal Club
- AST 6971: Research for Master's Thesis
- AST 7939: Special Topics
- AST 7979: Advanced Research
- AST 7980: Research for Doctoral Dissertation

Biology Department

College of Liberal Arts and Sciences
Complete faculty listing by department: Follow this link.

The Department of Biology offers two graduate programs: Botany and Zoology. Both programs offer graduate work leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

More information regarding these programs is available by following the links below and by visiting our departmental website: http://www.biology.ufl.edu.

Other

Botany

College

College of Liberal Arts and Sciences

Department/School

Biology Department

Botany Program Information

Chair: Craig W. Osenberg
Graduate Coordinator: W. Bradley Barbazuk

The Department of Biology offers graduate work in Botany leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Department offers studies in the areas of biochemistry, molecular biology, cell biology, physiology, ecology, systematics, and evolution. Specific areas of specialization include anatomy/morphology with emphasis on extant and fossil vascular plants; ecology and environmental studies including ecosystem ecology, conservation biology and genetics, fire ecology, exotic invasive species, and tropical botany and ecology; cell biology with emphasis on the cytoskeleton and cell morphogenesis; physiology, biochemistry, and molecular biology with emphasis on photosynthesis, growth and development of angiosperms, protein phosphorylation and signal transduction, global analysis of spatial patterns of gene expression; plant secondary metabolism and proteomics; systematics with emphasis on DNA- and morphology-based phylogenetic analyses, phylogenetic studies, molecular evolution/development, and monographic and floristic studies. To be considered for admission to graduate studies, students should have:

- The equivalent of an undergraduate degree in botany or biology with basic course work in their area of interest
- Acceptable GRE scores (verbal, quantitative, and analytical writing)
- Letters of recommendation
- International students must submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program. The program of graduate study for each student will be determined by a supervisory committee, and deficiencies in background coursework will be made up early in the graduate program. No more than 9 credits of BOT 6905 may be used to satisfy the credit requirements for a master's degree.

Degrees Offered with a Major in Botany

Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences
Master of Science

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
- BOT 5725C: Taxonomy of Vascular Plants
- BOT 6508C: Proteomics: Theory and Practice
- BOT 6516: Plant Metabolism
- BOT 6556: Plant Growth and Development
- BOT 6716C: Advanced Taxonomy
- BOT 6726C: Principles of Systematic Biology
- BOT 6905: Individual Studies in Botany
- BOT 6910: Supervised Research
- BOT 6927: Advances in Botany
- BOT 6935: Special Topics
- BOT 6936: Graduate Student Seminar
- BOT 6940: Supervised Teaching
- BOT 6943: Internship in College Teaching
- BOT 6971: Research for Master's Thesis
- BOT 7979: Advanced Research
- BOT 7980: Research for Doctoral Dissertation
- PCB 5046C: Advanced Ecology
- PCB 5338: Principles of Ecosystem Ecology
- PCB 5356: Tropical Ecology
- PCB 6675C: Evolutionary Biogeography
- PLP 6656C: Fungal Biology

Zoology
College

College of Liberal Arts and Sciences

Department/School

Biology Department

Zoology Program Info

Chair: Craig W. Osenberg
Graduate Coordinator: W. Bradley Barbazuk

The Department of Biology offers graduate programs in Zoology leading to the Master of Science in Teaching, Master of Science, and Doctor of Philosophy degrees. The requirements for these degrees can be found in the Graduate Degrees section of this catalog.

Our program emphasizes Integrative Biology, with integration accomplished through a focus on the theoretical foundations provided by evolutionary biology and ecology. Our faculty has expertise in ecology, evolution, behavior, comparative and environmental physiology, genetics, development, and phylogenetics. We work in a variety of terrestrial and aquatic environments and geographic regions (tropics through subpolar), and on a range of organisms (including plants). Our faculty value integrative research (e.g., by crossing levels of organization from gene expression to species interactions), linking theory with data (through use of statistical and mathematical tools), and using natural history to guide the development and testing of rigorous conceptual frameworks. Many of our faculty also are interested in applying and testing basic science in applied contexts (e.g., conservation biology and ecotoxicology).

Our approach is highlighted through our first-year, required, graduate course, Integrative Principles. Each student's supervisory committee will recommend additional courses according to the academic background and research plans of the student.

Degrees Offered with a Major in Zoology

Doctor of Philosophy

without a concentration

concentration in Animal Molecular and Cellular Biology

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Tropical Conservation and Development
concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Zoology Courses

- BOT 6726C: Principles of Systematic Biology
- PCB 5307C: Limnology
- PCB 5415C: Behavioral Ecology
- PCB 5615: Molecular Evolution and Systematics
- PCB 6049: Seminar in Ecology
- PCB 6377C: Physiological Ecology of Vertebrates
- PCB 6447C: Community Ecology
- PCB 6675C: Evolutionary Biogeography
- PCB 6695: Seminar in Evolutionary Biology
- ZOO 5115C: Vertebrate Paleontology
- ZOO 5486C: Mammalogy
- ZOO 6005: Integrative Principles of Zoology
- ZOO 6308: Dynamic Optimization Modeling in Behavioral and Evolutionary Ecology
- ZOO 6406: Biology of Sea Turtles
- ZOO 6456C: Ichthyology
- ZOO 6542: Nutritional Ecology
- ZOO 6545: Individual Studies
- ZOO 6910: Supervised Research
- ZOO 6920: Zoology Colloquium
- ZOO 6927: Special Topics in Zoology
- ZOO 6931: Seminar in Marine Turtle Biology
- ZOO 6939: Seminar in Animal Behavior
- ZOO 6971: Research for Master's Thesis
- ZOO 7979: Advanced Research
- ZOO 7980: Research for Doctoral Dissertation

Chemistry Department

Chair: W. Dolbier
Graduate Coordinator: B. W. Smith

Complete faculty listing: Follow this link.

The Department of Chemistry granted its first master's degree in 1909 and the first Ph.D. in 1930. Specializations in biochemistry, organic, physical, inorganic and analytical are offered with extensive interdisciplinary research opportunities (e.g., bio/nano-science, particle science, green chemistry, polymer chemistry, chemical physics, health related biochemistry, chemistry-engineering, and genomics).

The Department presently offers the Master of Science and Doctor of Philosophy degrees with a major in chemistry. The non-thesis Master of Science in Teaching degree is also offered with a major in chemistry.

Other

Chemistry
College

College of Liberal Arts and Sciences

Department/School

Chemistry Department

Chemistry Program

The department offers the Master of Science (thesis or nonthesis) and Doctor of Philosophy degrees with a major in chemistry and specialization in biochemistry, analytical, organic, inorganic, or physical chemistry. The nonthesis degree Master of Science in Teaching is also offered with a major in chemistry. New graduate students should have adequate undergraduate training in inorganic, analytical, organic, and physical chemistry. Normally this will include as a minimum a year of general chemistry, one semester of quantitative analysis, one year of organic chemistry, one year of physical chemistry, and one semester of advanced inorganic chemistry. Additional courses in instrumental analysis, biochemistry, and advanced physical and organic chemistry are desirable. Deficiencies in any of these areas may be corrected during the first year of graduate study. Such deficiencies are determined by a series of placement tests given prior to registration, and the results of these tests are used in planning the student's program. Doctoral candidates are required to complete at least 9 semester credits of courses specified by the division of the Chemistry Department in which they choose to specialize, as well as at least 9 semester credits of out-of-major-division courses. There are some minor restrictions on courses that may be used to meet this requirement. Additional courses may be required by the student's supervisory committee or major professor.

Ph.D. candidates must serve not less than one year as teaching assistants. This requirement will be waived only when, in the opinion of the department, unusual circumstances justify such action. A chemical physics option is offered for students who will be doing research in areas of physical chemistry which require a strong background in physics. For this option, a student meets the departmental requirements for concentration in physical chemistry, except that only one out-of-major division course is required. In addition, a minimum of 14 credits in 4000 level or higher physics courses or a minimum of 7 such credits in physics and 7 in 4000 level or higher mathematics courses is required. Candidates for the master's degree are required to complete any two core courses. The Master of Science degree in chemistry has both thesis and nonthesis options. The nonthesis degree Master of Science in Teaching is offered with a major in chemistry and requires a written paper of substantial length (30 to 50 pages) on an approved topic pertaining to some phase of chemistry, under the course CHM 6905.

Degrees Offered with a Major in Chemistry

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

concentration in Imaging Science and Technology

Master of Science

Master of Science in Teaching

Courses
The department offers the following degrees and programs: the Doctor of Philosophy in classical studies; the Master of Arts degree in classical studies or Latin; the Master of Latin degree, and the Master of Arts in Teaching degree in Latin. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Within the Ph.D. program are three tracks:

- Philology (prepares students for careers in colleges and universities)
- Classical civilization (available via distance course work)
- Latin and Roman studies (available via distance course work).

Requirements for the philology track of the doctoral degree include:

- 60 credit hours after the M.A. (or a total of 90 credit hours)
- Five additional seminars after the M.A. in classics at the 500 level or higher
- Three of the following seminars: PHIL 6425, GRW 6105, LAT 6425, LNW 6105, and CLA 6805
- A reading knowledge of two modern languages, one of which must be German
- Reading lists in Greek and Roman authors
- Supervised experience in teaching Latin, Greek, or civilization courses is advised
- Successful completion of a series of qualifying examinations appropriate to the chosen specialization (Greek reading; Latin reading; classical Greek literature in its historical context; classical Latin literature in its historical context; special author/topic)
• An oral preliminary examination, dissertation, and final examination.

The M.A. degree in classical studies is recommended for students who plan to continue on to the doctoral level. The M.A. degree in Latin is recommended for students who plan to pursue a career in secondary teaching. Both M.A. programs require 30 credit hours, including 6 credits of GRW 6971 or LNW 6971, a thesis, and final examination.

The Master of Latin degree is a non-thesis degree, designed for currently employed and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of classics, and enhance their professional qualifications through a program of summer course work and directed independent study and/or distance learning courses during the regular academic year. The Master of Arts in Teaching, a non-thesis degree, is offered with a program in Latin and is intended for students preparing to teach in community colleges or high schools.

Other

Classical Studies

College

College of Liberal Arts and Sciences

Department/School

Classics Department

Classical Studies Program Information

(The following information refers only to our on-campus programs. Please visit the Distance Learning Homepage for further details on our Distance Learning programs, especially aimed at elementary, secondary, or community college teachers.)

Ph.D. in Classical Studies

The Ph.D. program in classical studies is a traditional course of study in Greek and Latin language and literature that prepares students for careers in research and teaching at colleges and universities. Students awarded a TA position receive a stipend plus a full tuition waiver. The University also offers competitive fellowships. The department routinely provides research fellowships for its Ph.D. candidates. Department awards are also available for study abroad opportunities. Students are expected to become Florida residents after one year.

M.A. in Classical Studies

The Department of Classics at the University of Florida offers an M.A. degree in Classical Studies. Students awarded a TA position receive a stipend plus a full tuition waiver. Students are expected to become Florida residents after one year.

The Master of Arts in Classical Studies is recommended for students who plan to continue their studies at the doctoral level

For minimum degree requirements, see the Graduate Degrees section of the catalog. For additional requirements, please see the department website: http://classics.ufl.edu.

Admissions Requirements to the Classical Studies Programs:

Admission into the university and the program for Classics is ultimately determined and granted according to the rules established by the Graduate School of the University of Florida (see the Graduate Catalog).

Submission of Graduate Record Examination (GRE) scores, with a minimum score of 1000 (combined verbal and quantitative). Competitive applicants for funding awards from the department typically have a combined score of at least 1200.

Ph.D. program (Level II) requirements include:

1. M.A. in Classics or the equivalent.
2. A GPA of at least 3.25 in previous graduate work, and an undergraduate average of at least 3.0.
3. Demonstrated reading knowledge of German, French, Italian or Modern Greek (competency in the second language to be demonstrated before the completion of the second year at Level II).
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the applicant's record gives evidence of the capacity to undertake and complete guided independent reading and research at the doctoral level.

Master's program (Level I) requirements include:

1. Extensive study of Greek and Latin, with at least three years of coursework in one language and at least two years in the other language.
2. At least six hours in one or more of the following ancient history, ancient art, archaeology, philosophy, literary criticism, linguistics.
3. A GPA of at least 3.0.
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the record shows promise on other grounds.

Degrees Offered with a Major in Classical Studies

Doctor of Philosophy
Master of Arts

Classics Departmental Courses

- CLA 6125: Augustan Age
- CLA 6515: Roman Dynasty: Nero and the Julio-Claudians
- CLA 6795: Greek and Roman Archaeology
- CLA 6805: The Classical Research Tradition
- CLA 6885: Roman Law and Society
- CLA 6895: Athenian Law and Society
- CLA 6905: Individual Work
- CLA 6930: Greece and the Near East
- CLT 6265: Greek Drama in Translation
- GRE 6425: Greek Prose Composition
- GRE 6755: Epigraphy
- GRK 6905: Individual Work in Modern Greek
- GRW 6105: The Greek Tradition
- GRW 6216: Greek Novel
- GRW 6316: Greek Tragedy
- GRW 6317: Ancient Greek Comedy
- GRW 6345: Greek Lyric Poetry
- GRW 6346: Pindar
- GRW 6347: Homer
- GRW 6386: Greek Historians
- GRW 6506: Plato
- GRW 6705: Attic Orators
- GRW 6905: Individual Work
- GRW 6931: Comparative Study of Greek and Latin Literature
- GRW 6971: Research for Master's Thesis
- GRW 7979: Advanced Research
- GRW 7980: Research for Doctoral Dissertation
- LAT 6425: Latin Prose Composition
- LNW 5325: Roman Elegiac Poetry
- LNW 5555: Roman Poets: Horace
- LNW 5665: Roman Poets: Vergil
- LNW 5675: Roman Poets: Ovid
- LNW 5931: Comparative Study of Latin and Greek Literature
- LNW 6105: The Roman Tradition
- LNW 6225: The Ancient Roman Novel
- LNW 6335: Roman Oratory and Rhetoric
- LNW 6365: Studies in Roman Satire
- LNW 6385: Roman Historians
- LNW 6495: Late Latin Literature
- LNW 6905: Individual Work
- LNW 6933: Special Topics in Latin Literature
- LNW 6935: Preseminar in Classics
- LNW 6940: Supervised Teaching
- LNW 6971: Research for Master's Thesis
- LNW 7979: Advanced Research
- LNW 7980: Research for Doctoral Dissertation
The Department of Classics at the University of Florida offers an M.A. degree in Latin, an M.A.T. degree in Latin, as well as a Master of Latin degree. Students awarded a TA position receive a stipend plus a full tuition waiver. Students are expected to become Florida residents after one year.

The Master of Arts in Latin is a thesis degree designed specifically for students who are aiming toward a career in secondary teaching, but who still desire the writing experience and credential that a thesis provides.

The Master of Arts in the Teaching of Latin (M.A.T.) is recommended for students who wish to pursue a career in teaching and who want to include educational courses in their program. This is a non-thesis degree.

The Master of Latin (M.L.) degree is designed primarily for currently employed, and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of Classics, and enhance their professional qualifications. This is a non-thesis degree.

For minimum degree requirements, see the Graduate Degrees section of the catalog. For additional requirements, please see the department website: http://classics.ufl.edu.

Admission Requirements to the Latin Programs:

Admission into the university and the program for Classics is ultimately determined and granted according to the rules established by the Graduate School of the University of Florida (see the Graduate Catalog).

Submission of Graduate Record Examination (GRE) scores, with a minimum score of 1000 (combined verbal and quantitative). Competitive applicants for funding awards from the department typically have a combined score of at least 1200.

Master's level (Level I) requirements include:

1. Extensive study of Greek and Latin, with at least three years of coursework in one language and at least two years in the other language.
2. At least six hours in one or more of the following: ancient history, ancient art, archaeology, philosophy, literary criticism, linguistics.
3. A GPA of at least 3.0.
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the record shows promise on other grounds.

Degrees

Master of Arts

Master of Arts in Teaching

Master of Latin

Classics Departmental Courses

- CLA6125: Augustan Age
- CLA6515: Roman Dynasty: Nero and the Julio-Claudians
- CLA6795: Greek and Roman Archeology
- CLA6805: The Classical Research Tradition
- CLA6885: Roman Law and Society
- CLA6895: Athenian Law and Society
- CLA6905: Individual Work
- CLA6930: Greece and the Near East
- CLT6295: Greek Drama in Translation
- GRE6425: Greek Prose Composition
- GRE6755: Epigraphy
- GRK6905: Individual Work in Modern Greek
- GRW6105: The Greek Tradition
- GRW6216: Greek Novel
- GRW6316: Greek Tragedy
- GRW6317: Ancient Greek Comedy
- GRW6345: Greek Lyric Poetry
- GRW6346: Pindar
- GRW6347: Homer
- GRW6386: Greek Historians
- GRW6506: Plato
- GRW6705: Attic Orators
- GRW6905: Individual Work
- GRW6930: Special Topics in Greek Literature
- GRW6931: Comparative Study of Greek and Latin Literature
- GRW6971: Research for Master's Thesis
- GRW7079: Advanced Research
- GRW7980: Research for Doctoral Dissertation
Computer and Information Science and Engineering Department

College of Liberal Arts and Sciences

Chair: Paul Gader
Graduate Coordinator: Jih-kwon Peir.

Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, Engineer, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems**: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background. All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B, to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A maximum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: [http://www.cise.ufl.edu](http://www.cise.ufl.edu)
Computer Science

College

College of Liberal Arts and Sciences

Department/School

Computer and Information Science and Engineering Department

Computer Science Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science degree in Computer Science through the College of Liberal Arts and Sciences. Minimum requirements for this degree are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in Algorithms, Computer Vision, Databases, Graphics and Modeling, Machine Learning, Networks, and Systems, with active labs in Bioinformatics; Computational Science and Intelligence; Vision, Graphics and Medical Imaging; Database Systems Research and Development; Data Science Research; Mobile and Pervasive Computing; Human-Centered Computing; and Cybersecurity.

Specific degree requirements and options may be found here: http://cise.ufl.edu/academics/grad

Instructions for application for admission may be found here: http://cise.ufl.edu/admissions/grad

Degrees Offered with a Major in Computer Science

Master of Science

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5805: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6685: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6156: High-Performance Computer Architecture
- CEN 5035: Software Engineering
- CEN 6070: Software Testing and Verification
- CEN 6075: Software Specification
- CIS 6905: Individual Study
- CIS 6910: Supervised Research
- CIS 6930: Special Topics in CIS
- CIS 6935: Graduate Seminar
- CIS 6940: Supervised Teaching
- CIS 6971: Research for Master's Thesis
- CIS 7979: Advanced Research
- CIS 7980: Research for Doctoral Dissertation
- CNT 5106C: Computer Networks
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Sociology and Criminology & Law Department

Chair: Barbara Zsembik
Graduate Coordinator: Barbara Zsembik
Complete faculty listing by department: [Follow this link](#).

The Department of Sociology and Criminology & Law offers several programs of graduate study leading to the Ph.D. in Sociology, the Ph.D. in Criminology, Law and Society, the MA in Sociology, the MA in Criminology, Law and Society, and a Joint MA in Criminology/JD degree. The department also partners with the School of Natural Resources and Environment Department to offer the Ph.D. or MA in Interdisciplinary Ecology. Advanced undergraduate majors may complete a combined BA/MA degree in Sociology or a combined BA/MA degree in Criminology, Law and Society.

Other

Criminology, Law and Society

College

[College of Liberal Arts and Sciences](#)

Department/School

[Sociology and Criminology & Law Department](#)

Criminology, Law and Society Program Information

Requirements for the M.A. and Ph.D. degrees are given in the Graduate Degrees section of this catalog. The graduate program in criminology and law has two areas of special emphasis: crime and justice, and law and society. The degree programs are research-based and prepare students to conduct original exploration into relevant problems, issues, and policies.

**M.A. degree program:** Admission to the master’s degree program requires a bachelor’s degree from a criminology/criminal justice or relevant social science or humanities program (political science, sociology, anthropology, psychology, philosophy, history, women’s studies, etc.). Qualified students may enter the master’s program as undergraduates through the combined B.A./M.A. program. Both M.A. options (thesis and nonthesis) require satisfactory completion of at least 36 credit hours.

**Ph.D. degree program:** The Doctor of Philosophy program includes a minimum of 90 semester hours of credit beyond the B.A. Students with a criminology or closely related M.A. received in the last 7 years from an accredited U.S. university may request that up to 30 hours credit from their M.A. work be counted toward this total. Those with an M.A. from this department may apply 36 hours. The Department requires Ph.D. students to complete at least 66 hours of course work (excluding research credits), including the M.A. hours. Qualifying examinations take place at the end of a student’s course work.
Criminology, Law and Society/Law joint degree programs: The Department of Sociology and Criminology & Law (CLS) and the College of Law offer a joint degree program leading to an M.A. or a Ph.D. in Criminology, Law and Society and a J.D. in law. The joint degree programs enable students to earn both the degrees (the J.D. and the M.A. or the J.D. and the Ph.D.) in less time than would be required to earn both degrees consecutively. Students wishing to pursue the joint program must be admitted to both the Graduate School and the College of Law. These requirements include both the LSAT and GRE. Admission to one may precede the other. Students are encouraged to announce their intent to seek a joint degree as soon as possible. CLS allows 12 hours of appropriate law school courses to be credited toward the CLS degree. The 12 credits selected from the law curriculum must be approved by the graduate coordinator on the recommendation of the student’s supervisory committee. The College of Law will permit 12 hours of credit earned in graduate courses to be credited toward the J.D.

Degrees

Doctor of Philosophy

Master of Arts

Courses

- CCJ 5934: Contemporary Issues in Criminology and Law
- CCJ 6936: Proseminar in Crime, Law, and Justice
- CJL 6039: Law and Society
- CCJ 6063: Communities and Crime
- CCJ 6658: Drugs, Crime, and Policy
- CCJ 6285: Criminal Justice Process
- CCJ 6619: Crime and the Life Course
- CCJ 6643: White Collar Crime
- CCJ 6705: Research Methods in Crime, Law, and Justice
- CCJ 6708: Research Issues in Crime and Deviance
- CCJ 6712: Evaluation Research
- CCJ 6905: Independent Study
- CCJ 6910: Supervised Research
- CCJ 6920: Seminar in Criminological Theory
- CCJ 6971: Research for Master's Thesis
- CCJ 7742: Research Methods in Crime, Law, and Justice II
- CCJ 7921: Professional Development in Criminology, Law, and Society
- CCJ 7979: Advanced Research
- CCJ 7980: Research for Doctoral Dissertation
- CJC 6120: Corrections and Public Policy
- CJL 6089: Humanitarian Law
- CJL 6090: Law and Social Science
- CJL 6091: Anthropology of Law
- CJL 6095: Human Rights in Cultural Context

Sociology

College

Department/School

Sociology and Criminology & Law Department

Sociology Program Information

Sociologists conduct research to understand the social forces that shape all of our lives, often in hopes of improving everyday life and the life chances of each person. Graduate studies in sociology provide the people skills and technical skills to organize information, communicate analytical research to academic and lay audiences, and prepare well-reasoned and carefully-written reports and documents that contribute to societal well-being. Our award-winning and internationally-known faculty successfully mentor graduate students to complete their studies and become established in their professional academic and nonacademic careers.
We offer particular expertise in these areas: environment and resources, families, aging, gender, health, sexualities, life course, and race-ethnicity in US and global perspectives. There is also considerable expertise in: demography, social inequality, Latin American studies, Latino sociology, social psychology, deviance, and political sociology. We take great pride in the fact that our faculty are involved in interdisciplinary research projects that span nearly all of the University’s colleges and academic programs, including the School of Natural Resources and the Environment, the Water Institute, the Emerging Pathogens Institute, the Center for Latin American Studies, the Center for European Studies, the Center for Women’s Studies and Gender Research, the Health Science Center, and the Jewish Studies Center. Wherever you go on campus, you will most likely find at least one Sociologist from our department making major contributions.

Minimum requirements for the M.A. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Admission to either Sociology graduate program requires a bachelor’s degree in Sociology or related social science as approved by the Department. Current UF students may also enter the M.A. program through the combined B.A./M.A. program. The Sociology graduate programs look for mature students with outstanding potential and research interests that complement those of our faculty.

Prospective students should examine the research interests of the Sociology Graduate Faculty to obtain a more detailed sense of faculty expertise and research areas, see the department website: [http://soccrim.clas.ufl.edu/graduate/](http://soccrim.clas.ufl.edu/graduate/). Applications for admission and fellowship support are due December 1 of each year. Students planning to apply for admission should take the Graduate Record Examination at the earliest possible date.

Departments Offered with a Major in Sociology

**Doctor of Philosophy**

without a concentration

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

**Master of Arts**

without a concentration

concentration in Tropical Conservation and Development

Courses

- SYA6018: Classical Social Theories
- SYA6126: Contemporary Sociological Theory
- SYA6305: Methods in Social Research I
- SYA6306: Methods in Social Research II
- SYA6315: Qualitative Research Methods
- SYA6327: Research Problems in Deviance
- SYA6407: Quantitative Research Methods
- SYA6905: Individual Work
- SYA6910: Supervised Research
- SYA6942: Applied Social Research Project
- SYA6971: Research for Master's Thesis
English Department

Chair: K. Kidd
Graduate Coordinator: S. I. Dobrin

Complete faculty listing by department: Follow this link.

The Department of English offers the Master of Arts degree (thesis and nonthesis options) and the Doctor of Philosophy degree in English, along with the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog. For more information about our programs, please follow the hyperlinks below or visit our website: http://www.english.ufl.edu/programs.html.

Other

Creative Writing

College

College of Liberal Arts and Sciences

Department/School

English Department

Creative Writing Program Information

The Department of English offers the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.F.A. are provided in the Graduate Degrees section of this catalog. Full information concerning courses of study is available from the graduate coordinator.

Degrees

Master of Fine Arts

English Departmental Courses
The Department of English offers the Master of Arts degree (thesis and non-thesis options) and the Doctor of Philosophy degree in English with the specializations listed below. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog. Specific areas of specialization for the Master of Arts and the Doctor of Philosophy include literature (Medieval, Renaissance, Restoration, and 18th-century and 19th-century British literature, American literature to 1900, contemporary British and American literature), American studies, critical theory, cultural studies, film and media studies, feminisms, genders and sexualities, postcolonial studies, composition and rhetoric, comics and visual rhetoric, and children's literature.

New graduate students should have completed an undergraduate English major of at least 24 semester hours, and doctoral students should have a Master of Arts degree in English. Full information concerning courses of study is available from the graduate coordinator.

Degrees
Doctor of Philosophy

Master of Arts

English Departmental Courses

- AML 6017: Studies in American Literature Before 1900
- AML 6027: Studies in 20th-Century American Literature
- CRW 6130: Fiction Writing
- CRW 6166: Studies in Literary Form
- CRW 6331: Verse Writing
- CRW 6906: Individual Work
- ENC 5236: Advanced Business Writing for Accounting
- ENC 6428: Digital English
- ENC 6016: Psychological Approaches to Literature
- ENG 6075: Literary Theory: Issues
- ENG 6076: Literary Theory: Theorists
- ENG 6077: The Language of Film
- ENG 6138: Studies in the Movies
- ENG 6906: Individual Work
- ENG 6910: Supervised Research
- ENG 6932: Film and Video Production
- ENG 6971: Research for Master's Thesis
- ENG 7939: Seminar in Variable Topics
- ENG 7979: Advanced Research
- ENL 6206: Studies in Old English
- ENL 6216: Studies in Middle English
- ENL 6226: Studies in Renaissance Literature
- ENL 6236: Studies in Restoration and 18th-Century Literature
- ENL 6246: Studies in Romantic Literature
- ENL 6256: Studies in Victorian Literature
- ENL 6276: Studies in 20th-Century British Literature
- LAE 6940: Supervised Teaching
- LAE 6947: Writing Theories & Practices
- LIT 5335: Approaches to Children's and Adolescent Literature
- LIT 6037: Studies in Verse
- LIT 6047: Studies in Drama
- LIT 6309: Communications and Popular Culture
- LIT 6326: Postcolonial Studies
- LIT 6308: Studies in Comics and Animation
- LIT 6327: Studies in Folklore
- LIT 6357: African-American or African Diaspora Literature
- LIT 6358: Theoretical Approaches to Black Cultural Studies
- LIT 6855: Issues in Cultural Studies
- LIT 6856: Cultural Studies: Interventions
- LIT 6857: Cultural Studies: Movements
- LIT 6934: Variable Topics
- SPC 6239: Studies in Rhetorical Theory

Geography Department

Chair: M. W. Binford
Graduate Coordinator: C. J. Matyas

Complete faculty listing by department: Follow this link.

The Department of Geography offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The focus of the Department is in human-environment interactions, with "environment" interpreted very broadly. The Department provides four main areas of specialization for graduate research: economic and cultural geography; resource management and land use and land cover change; medical geography; and physical geography. Economic and cultural geography concerns such topics as spatial economic theory and housing and care of the elderly. Resource management and land use and land cover change focus on agricultural change and resource conservation and development in the tropics and subtropics, and rural and urban land use and land cover change in tropical and temperate regions. Africa and Latin America are the primary areas of regional emphasis outside of the U.S. Physical geography in the Department concentrates on climatology, fluvial geomorphology, and hydrology. Medical geography studies the geographic aspects of human health including disease ecology and transmission and healthcare issues. The Department's extensive geographic information system, remote sensing, and computer cartography teaching and research facilities contribute to and support all of the areas of research. Faculty from the Department are also major participants in the Emerging Pathogens Institute, Florida Climate Institute, Land Use and Environmental Change Institute (L.U.E.C.I.), and the Water Institute. Prospective students should examine the research interests of the Graduate Faculty to obtain a more detailed sense of the Department's specialties (see the departmental website: www.geog.ufl.edu).

To ensure the incorporation of relevant interdisciplinary perspectives in each student's program, the Department maintains close ties with other departments in Liberal Arts and Sciences, and with programs in African studies, Latin American studies, the School of Natural Resources and Environment, the Institute on Aging, urban and regional planning, tropical agriculture, tropical
ecology, water resources, the Warrington College of Business Administration, the College of Agricultural and Life Sciences, College of Public Health and Health Professions, and the Hydrological Sciences Academic Cluster. Certificates in certain of these fields may be obtained in addition to graduate degrees in geography. Geography administers the Graduate Certificate in Applied Atmospheric Sciences.

A graduate student should preferably have an undergraduate major in geography, but applicants with degrees in one of the social or physical sciences are accepted into the Department's graduate program. Deficiencies in undergraduate work in geography must be corrected concurrently with registration in graduate level courses. All students in the graduate program are required to take courses in contemporary geographic thought and geographic research skills.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

**Other**

**Geography**

**College**

*College of Liberal Arts and Sciences*

**Department/School**

*Geography Department*

**Geography Program Information**

The Department of Geography offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the *Graduate Degrees Section* of this catalog.

**Degrees**

**Doctor of Philosophy**

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

**Master of Arts**
without a concentration

concentration in Applications of Geographic Technologies

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Arts in Teaching

without a concentration

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Applications of Geographic Technologies

concentration in Geographic Information Systems
concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- GEA 6419: Seminar: South America
- GEA 6466: Seminar on Geography of Amazonia
- GEA 6468: Resource Utilization and Conservation in Latin America
- GEO 5305: Environmental Biogeography
- GEO 5346: Natural Hazards
- GEO 5556: Geography of Innovation and Technological Change
- GEO 5605: Advanced Urban Geography
- GEO 5809: Geography of World Agriculture
- GEO 5905: Individual Study: Directed Reading
- GEO 5920: Geography Colloquium
- GEO 5945C: Field Course in Geography
- GEO 6118: Contemporary Geographic Thought and Research
- GEO 6119: Proposal Writing in Geography
- GEO 6160: Introduction to Quantitative Methods for Geographers
- GEO 6161: Intermediate Quantitative Methods for Geographers
- GEO 6166: Advanced Quantitative Methods for Spatial Analysis
- GEO 6255: Climatology
- GEO 6282: Fluvial Morphology
- GEO 6348: Floods Seminar
- GEO 6375: Land Change Science Seminar
- GEO 6429: Seminar: Cultural Geography
- GEO 6435: Seminar in Population
- GEO 6451: Medical Geography
- GEO 6495: Environment and Behavior
- GEO 6905: Individual Work
- GEO 6921: How to Survive and Thrive in Academia
- GEO 6931: Seminar in Cultural and Political Ecology
- GEO 6938: Selected Topics in Geography
- GEO 6971: Research for Master's Thesis
- GEO 7979: Advanced Research
- GEO 7980: Research for Doctoral Dissertation
- GEY 6341: Shelter and Care Options for U.S. Elderly
- GIS 5008C: Maps and Graphs
- GIS 5009C: Advanced Cartography
- GIS 5028C: Advanced Aerial Photo Interpretation
- GIS 5039C: Remote Sensing
- GIS 5107C: Geographic Information Systems in Research
- GIS 5306: Geographic Information Systems Applications in Environmental Systems
- GIS 5540: Business Geography and New Real Estate Market Analysis
- GIS 6104: Spatial Networks
- GIS 6425C: GIS Models for Public Health
- MET 5504: Weather and Forecasting
- MET 6530: Hurricanes
- MET 6565: Seminar in Atmospheric Teleconnections
- MET 6752: Atmospheric Data Analysis

Geological Sciences Department

Chair: P. A. Mueller.
Graduate Coordinator: J. M. Jaeger.

Complete faculty listing Follow this link.

The Department of Geological Sciences is composed of a group of internationally recognized faculty, graduate students, and dedicated support staff. Faculty and students in the Department of Geological Sciences are involved in exciting and groundbreaking research projects throughout the world and in Florida. The Department houses world-class analytical and computing facilities for research and teaching.

The Department has identified six primary areas of emphasis in its research and teaching programs: environmental geology and hydrology, palaeoclimatology, tectonophysics, geochemistry and mineralogy/petrology, marine and coastal geology, and paleomagnetism. For more detailed information on current departmental activities, faculty, and research centers, see
http://web.geology.ufl.edu. The Department has collaborative, interdisciplinary programs of study and research with the Florida Museum of Natural History, the Center for Wetlands Research, the Land Use and Environmental Change Institute (L.U.E.C.I.), and the hydrological sciences cluster.

Other

Geology

College

College of Liberal Arts and Sciences

Department/School

Geological Sciences Department

Geology Program

The Department of Geological Sciences offers programs leading to the Master of Science (thesis), the Master of Science in Teaching (nonthesis), and the Doctor of Philosophy degrees in geology. Requirements for these degrees are described in the General Information section of this catalog.

For admission to graduate status in the Department of Geological Sciences, a student must have a baccalaureate degree with a major in geology or a related field or its equivalent. Deficiencies in undergraduate preparation can be corrected by completing the undergraduate courses without credit while enrolled as a graduate student.

Applicants should take the GRE general test. The scores of this examination must be reported to the Department of Geological Sciences. Three letters of recommendation are also required for admission to the doctoral program and for financial aid applications at any level.

A minimum of 33 semester hours of graduate level courses are required for the Master of Science in geology. At least 24 hours must be in organized graduate-level geology courses (excluding research, teaching, special projects, etc.). Six hours of thesis research credit are required. All master's degrees are terminal; a separate and new application for admission to the doctoral program is required.

For the Master of Science in Teaching degree, at least 36 hours are required. Six of these hours must be in GLY 6943 and at least 24 must be in organized graduate-level geology courses. The remaining 6 hours must be in approved electives. A minor in education is required. Candidates also must pass the final oral examination.

Of the 90 semester hours required for the Ph.D., 45 must be in formal, organized graduate-level class work (excluding individual work, supervised research and teaching, advanced research, dissertation, special projects, etc.). Remaining credits will be in GLY 7979 and GLY 7980, additional geology courses, or courses in a related field.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Degrees

Doctor of Philosophy

without a concentration

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences
Master of Science

without a concentration

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- BOT 5305: Paleobotany
- ESC 5211: Current Topics in Earth Science for Teachers
  - ESC 5211L
- GLY 5020
- GLY 5020L
- GLY 5075
- GLY 5156: Geologic Evolution of North America
- GLY 5246: Geochemistry
- GLY 5245: Hydrogeochemistry
- GLY 5247: Surface and Ground Water Interactions
- GLY 5248: Physical Geochemistry
- GLY 5255: Organic Geochemistry and Geobiology
- GLY 5328: Advanced Igneous Petrology
- GLY 5455: Introduction to Geophysics and Tectonics
  - GLY 5456
- GLY 5466: Seismology and Earth Structure
- GLY 5468: Terrestrial Gravity and Magnetism
- GLY 5476: Environmental Geophysics
- GLY 5558C: Sedimentology
- GLY 5576: Continental Margin Stratigraphy
- GLY 5705: Geomorphology
- GLY 5736: Marine Geology
- GLY 5786L: Topics in Field Geology
- GGLY 5867: Ground Water Geology
- GGLY 6075: Global Climate Change: Past, Present, and Future
- GGLY 6268C: Isotope Geology
- GGLY 6297: Topics in Geochemistry
  - GGLY 6424
- GGLY 6425: Tectonics
- GGLY 6519: Stratigraphy and Timescales
- GGLY 6620C: Micropaleontology
  - GGLY 6660C
- GGLY 6695: Topics in Paleoclimatology
- GGLY 6826: Hydrogeologic Modeling
- GGLY 6862: Numerical Methods in Earth Sciences
- GGLY 6905: Individual Work
- GGLY 6931: Seminar
- GGLY 6932: Special Topics in Geology
- GGLY 6940: Supervised Teaching
- GGLY 6971: Research for Master's Thesis
- GGLY 7979: Advanced Research
- GGLY 7980: Research for Doctoral Dissertation

History Department

College of Liberal Arts and Sciences

Chair: Sean P. Adams
Graduate Coordinator: Elizabeth Dale

The Department of History offers the following graduate degrees: Master of Arts with fields of specialization in African, Asian, European, Latin American, and United States history, and the Doctor of Philosophy with fields of specialization in African, European, Latin American, and United States history. In addition to materials required by the Graduate School for admission, applicants must send directly to the History Department the following evidence of aptitude and interest: Three recommendations, from persons competent to evaluate your potential for graduate work; A 3- to 5-page essay identifying your career goals and particular areas of interest; a sample of your written work in history. Interested students should consult the department web page for more information.

Other

History

College

College of Liberal Arts and Sciences

Department/School

History Department

History Program

The Department of History offers the following graduate degrees: Master of Arts degree with fields of specialization in African, Asian, European, Latin American, and United States history and the Doctor of Philosophy degree with fields of specialization in African, European, Latin American, and United States history, or with a dual major which allows students to create their own major fields.

Master of Arts: This degree serves to prepare students for admission to a Ph.D. program, for a teaching career in high school or community colleges, or for a career in government or business.

Fields of specialization:
- African (East Africa, Southern Africa, West Africa)
- European (medieval, early modern, or modern)
- Latin American (colonial Latin America, post-Colonial Latin America, Brazil, and the Caribbean or Spanish America)
- United States history (early America, 19th century, 20th century)

Thesis option requirements:
- A minimum of 30 credit hours
- At least 12 graduate-level regular course credit hours in your major field. In European, you must take at least two seminars in your area of specialization. In U.S. history, you must take the 19th-century America readings seminar, or the 20th-century or early America readings seminar, and at least one research seminar. In Latin American and African history, you must take the relevant readings seminars in your area of specialization, one other readings seminar, and at least one research seminar.
- At least 6 graduate-level regular course credit hours outside the major field (but in the Department of History). We recommend that you invest these regular course hours in readings seminars.
- Take 3 hours of historiography (HIS 6061) by the fourth semester of graduate study.
- Take 3 regular course credit hours from outside the Department. These should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your
Non-thesis option requirements:

- A minimum of 30 credit hours.

- At least 12 graduate-level regular course credit hours inside your major field. In European, you must take at least two seminars in your area of specialization. In U.S. history, you must take the 19th-century American readings seminar, either the 20th-century or the early America readings seminar, and at least one research seminar. In Latin American or African history, you must take the relevant readings seminars in your area of specialization, one other readings seminar, and at least one research seminar.

- At least 6 graduate-level regular course credit hours outside your major field (but in the Department of History). We recommend that you invest these regular course hours in readings seminars.

- Take 3 hours of historiography (HIS 6061) by your fourth semester of graduate study.

- Take 3 regular course credit hours from outside the Department; these should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.

- Complete a research seminar and/or a nonthesis project in history. Your primary goal in either is to complete an article-length essay (approximately 35 to 40 pages) of publishable or near-publishable quality. The essay should be based largely on primary sources.

- You must pass a final comprehensive oral and written examination conducted by your supervisory committee.

Supervisory committee for the M.A.: The committee normally consists of the chair and two other members of the graduate faculty. Additional members may be added if desirable. The committee assists in planning and supervising the student's program and conducts the final examination. The chair is also the thesis director if that option is chosen.

Duration: The M.A. program can be completed in 3 semesters of full-time registration but may take longer. The Department believes that normally no more than 4 semesters of full-time registration should be spent on the degree. These semesters need not be consecutive. The Board of Education has established 60 credit hours as a maximum for the master's degree. Up to 6 credits of graduate-level courses taken at another school with a grade of B or better may be transferred into the master's program if approved by the Graduate School.

Bachelor's/master's program: The Department offers a combined 4/1 degree program that enables outstanding undergraduates to obtain both the B.A. and M.A. degrees in history after successful completion of 150 credit hours. The program is designed for the students who wish to continue their education in history past the bachelor's level but do not intend to pursue a doctorate in history or for students who wish to expand their training in a specific field before moving on to a doctoral program. The department offers a 4/1 degree program in the standard M.A. fields of study and offers two specialized tracks: oral history and academic publishing. Please see the Department website for more information. Students in this program are not eligible for departmentally controlled financial aid.

Doctor of Philosophy requirements:

- Professional competence in your major field, or major fields for students pursuing a dual degree.

- Knowledge of a minor, which may be drawn from the approved major fields of specialization for the doctorate (African, European, Latin American, or U.S. history), from approved minor fields (Atlantic history, gender, legal history), or may be self designed as a thematic research or teaching field. It must include at least 3 hours outside the historical area that defines your major field. Note: Students pursuing a dual major do not take a department minor field.

- At least 3 regular course credit hours from outside the Department; these should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.

- Pass a set of written and oral qualifying examinations testing competence in major and additional fields and your knowledge of the nature of history and the historian's task.

- A dissertation for which credit is given in HIS 7000.

History law joint degree program: The Department of History and the College of Law offer a program in legal history leading to either the M.A. or a Ph.D. degree in history and the J.D. in law. Because the faculties of history and law stress interdisciplinary training, students admitted to the joint degree program will be allowed to count a significant number of hours toward both degrees. Applicants must be accepted by both the Graduate School and the College of Law. Normally, students will complete the course and examination requirements of both degrees in 4 years. Students may begin their first year of work in either history or law, but they must complete the first year of law school within 1 year and they must do so within the first 2 years after admission to the joint degree program. For further information write to the Legal History Coordinator, Department of History, University of Florida, Box 117320, Gainesville, FL 32611-7320.

Degrees

Doctor of Philosophy

without a concentration

concentration in Historic Preservation

concentration in Women's/Gender Studies
Master of Arts

without a concentration

collection in Historic Preservation

collection in Jewish Studies

Courses

- AFH 5297: History of African Agriculture
- AFH 5348: History of West Africa
- AFH 5458: Southern Africa
- AFH 5934: Topics in African History
- AFH 6259: Seminar in Modern Africa
- AFH 6805: Theories and Methods of African History
- AFH 6936: Readings in African History
- AMH 5405: The South to 1860
- AMH 5905: Special Studies
- AMH 5930: Topics in United States History
- AMH 6198: Early American Society
- AMH 6199: Nineteenth Century America
- AMH 6290: Modern America
- AMH 6356: Research in U.S. History
- AMH 6406: Readings in Modern Africa
- AMH 6465: Seminar in U.S. Urban History
- AMH 6506: Seminar in American Labor History
- AMH 6516: Seminar in American Foreign Relations and Expansion
- AMH 6557: Seminar in Constitutional or Legal History of the United States
- ASH 5388: Topics in East Asian History
- EUH 5546: Topics in British History
- EUH 5934: Topics in European History
- EUH 6126: Readings in Medieval History
- EUH 6174: Conversion in the Middle Ages
- EUH 6175: Ethnicity in the Middle Ages
- EUH 6176: Villages and Peasants in the Middle Ages
- EUH 6177: Economy and Society in Latin America and the Early Latin American World
- EUH 6213: Europe, 1500-1763
- EUH 6289: Readings, Modern Europe
- EUH 6469: Modern German History
- EUH 6935: Readings, Early Modern Europe
- EUH 6937: Readings in Mediterranean History
- HIS 5450: Slavery in the New World: Comparative Perspectives
- HIS 5454: Science and the Enlightenment
- HIS 5484: Comparative Perspectives
- HIS 5485: Special Studies in the History of Science
- HIS 6060: Historical Method
- HIS 6061: Introduction to Historiography
- HIS 6416: Problems in Comparative Legal History
- HIS 6445: Postcolonial Theories
- HIS 6469: Topics in Historiography of History of Science
- HIS 6478: Topics in the Scientific Revolution
- HIS 6480: Pre-Newtonian Sciences
- HIS 6488: Readings in the History of Science
- HIS 6905: Individual Study
- HIS 6910: Supervised Research
- HIS 6940: Supervised Teaching
- HIS 6943: Internship in College Teaching
- HIS 6957: Nonthesis Project in History
- HIS 6971: Research for Master's Thesis
- HIS 7979: Advanced Research
- HIS 7980: Research for Doctoral Dissertation
- LAH 5438: Modern Mexico
- LAH 5475: Caribbean, Nineteenth and Twentieth Centuries
- LAH 5476: Caribbean History to 1800: Slavery, Colonization, and International Conflict
Department of Languages, Literatures and Cultures

Complete faculty listing by department: Follow this link.

Other

French and Francophone Studies

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

French and Francophone Studies Program Information

Bachelor’s/master’s program: French and Francophone Studies offers a combined 4/1 degree program that enables outstanding undergraduates to obtain both the B.A. and M.A. degrees after successful completion of 152 credit hours. The program is designed for the students who wish to continue their education in French and Francophone Studies past the bachelor’s level but do not intend to pursue a doctorate or for students who wish to expand their training in a specific field before moving on to a doctoral program. Since students in the bachelor’s/master’s program have a graduate classification, students receiving undergraduate scholarships or Pell grants should check with the funding provider to make sure that they will not lose eligibility.

Degrees

Master of Arts

Master of Arts in Teaching

Courses

- FLE 6385: Foreign Languages Teaching Methods
- FRE 6060: Beginning French for Graduate Students I
- FRE 6061: Beginning French for Graduate Students II
- FRE 6466: Advanced Translation and Stylistics
- FRE 6735: Special Studies in French Linguistics
- FRE 6736: The French language in the Americas
- FRE 6785: French Phonetics and Phonology
- FRE 6827: Sociolinguistics of French
- FRE 6845: History of the French Language
- FRE 6855: Structure of French
- FRE 6856: French in the 21st Century
- FRE 6940: Supervised Teaching
- FRE 6943: Romance Language Teaching Methods
- FRE 6945: Practicum in Advanced College Teaching
- FRE 6956: Overseas Studies in French
- FRW 6217: Seventeenth-Century French Prose
- FRW 6276: Readings in Eighteenth-Century Literature
- FRW 6288: Twentieth-Century French Novel
- FRW 6315: Seventeenth-Century French Drama
- FRW 6328: Twentieth-Century French Theater
- FRW 6346: French Poetry of the Renaissance
- FRW 6356: Modern French Poetry
- FRW 6396: French Cinema
- FRW 6416: Later French Medieval Literature
- FRW 6536: The Romantic Period
- FRW 6556: French Realism and Naturalism
- FRW 6715: The Philosophic Movement
- FRW 6780: Studies in Francophone Literature and Culture (Excluding the Caribbean and Sub-Saharan Africa)
- FRW 6805: Introduction to Graduate Study and Research
- FRW 6825: French Critical Theory
  - FRW 6827: French Critical Theory
- FRW 6900: Special Study in French Literature
- FRW 6905: Individual Work
- FRW 6910: Supervised Research
- FRW 6938: Seminar in French Literature
- FRW 6971: Research for Master's Thesis
- FRW 7979: Advanced Research
- FRW 7980: Research for Doctoral Dissertation

German

Chair: M. Watt
Graduate Coordinator: W. Hasty

Complete faculty listings: Follow this link

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

Degrees

Doctor of Philosophy

without a concentration

concentration in Women's/Gender Studies

Master of Arts

German Literature and Cinema
• GET 6295: Weimar Cinema
• GET 6299: New German Cinema and Its Legacy
• GEW 6205: Foundations of Literary Study
• GEW 6266: History of the German Novel
• GEW 6305: Studies in German Drama and Theater
• GEW 6405: Medieval and Renaissance Literature
• GEW 6425: From Luther to Lessing: Early Modern German Literature
• GEW 6535: German Classical and Romantic Literature
• GEW 6558: Young Germany, Biedermeier, Realism, and Naturalism
• GEW 6725: Culture and Society in the Weimar Republic
  • GEW 6726
• GEW 6735: Modern German Literature
• GEW 6736: Contemporary German Literature
• GEW 6745: Literature and Culture in the Third Reich
• GEW 6826: German Literary Theory
• GEW 6900: Seminar in Germanic Languages and Literatures
• GEW 6901: Special Study in Germanic Languages and Literatures
• GEW 6905: Independent Study
• GEW 6910: Supervised Research
• GEW 6971: Research for Master's Thesis
• GEW 7979: Advanced Research
• GEW 7980: Research for Doctoral Dissertation

German Language

• GER 6060: Beginning German for Graduate Students I
• GER 6061: Beginning German for Graduate Students II
• GER 6905: German Culture
• GER 6940: Supervised Teaching

Romance Languages (Language, Literature and Culture)

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

Degrees Offered with a Major in Romance Languages

Doctor of Philosophy

concentration in French and Francophone Studies

Spanish and Portuguese Studies Departmental Courses

• FOL 6326: Technology in Foreign Language Education
• FOW 6930: Special Study in Romance Languages and Literatures
• SPN 6166: Teaching Spanish for the Professions
• SPN 6940: Supervised Teaching
• SPW 6545: Spanish Romanticism
• SPN 6705: Foundations of Hispanic Linguistics
• SPN 8845: History of the Spanish Language
• SPS 6905: Individual Study
Spanish

- SPS 6910: Supervised Research
- SPS 6940: Supervised Teaching
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation
- SPW 6535: Spanish Romanticism

Portuguese

- POW 6276: Twentieth-Century Brazilian Novel
- POW 6385: Brazilian Lyric
- POW 6386: Brazilian Drama
- POW 6805: Individual Work
- POW 6930: Rotating Topics in Brazilian or Portuguese Literature

Latin American Studies Department

Director: C. D. Deer.
Graduate Coordinator: R. F. Brown.

Complete faculty listing by department: [Follow this link](#).

The Center for Latin American Studies offers the following graduate programs:

- Latin American Studies
- Sustainable Development Practice

Other

Latin American Studies
Latin American Studies Program

The Center for Latin American Studies offers the following graduate programs:

- An interdisciplinary Master of Arts degree
- Graduate certificate and advanced graduate certificate in Latin American studies in conjunction with disciplinary degrees in the Colleges of Agricultural and Life Sciences; Design, Construction, and Planning; Business Administration; Education; Fine Arts; Journalism and Communications; Law; and Liberal Arts and Sciences.

The graduate program in Latin American studies relies on over 250 courses with Latin American content taught in more than 35 academic units of the above colleges. The degree and certificate programs in Latin American studies are described on their website [www.latam.ufl.edu/academics/graduate-programs](http://www.latam.ufl.edu/academics/graduate-programs). Complete course listings are available at the Center for Latin American Studies (319 Grinter Hall) and on the website.

Degrees

Master of Arts

without a concentration

concentration in Tropical Conservation and Development

Latin American Studies Courses

- FOT 6940: Translation Studies Practicum
- LAS 6008: Ecological Principles
- LAS 6220: Issues and Perspectives in Latin American Studies
- LAS 6290: Tropical Conservation and Development
- LAS 6291: Conservation and Development Skills
- LAS 6292: Tropical Conservation and Development Research Methods
- LAS 6293: Design and Methods of Research in Latin American Studies
- LAS 6295: Latin American Business Environment
- LAS 6296: Latin American Business Topics
- LAS 6905: Individual Work
- LAS 6938: Seminar in Modern Latin American Studies
- LAS 6940: Tropical Conservation and Development Practicum
- LAS 6943: Development Theory and Practice in Latin America
- LAS 6971: Research for Master's Thesis

Sustainable Development Practice
Latin American Studies Department

Sustainable Development Practice Program

Director: G. Galloway
Program Coordinator: C. Tarter

The Master of Sustainable Development Practice (MDP) Program offers the following academic programs:

- An interdisciplinary Master’s degree in Sustainable Development Practice
- A graduate certificate in Sustainable Development Practice

The MDP Program is jointly administered by the Center for Latin American Studies and the Center for African Studies. The Master’s degree is described in the Other Master’s Degrees section of the Graduate Catalog. The certificate program is described in the Interdisciplinary Graduate Certificates section of the Graduate Catalog. More information about the MDP Program can also be found at the website [http://www.africa.ufl.edu/mdp/index.html](http://www.africa.ufl.edu/mdp/index.html).

Degrees

Master of Sustainable Development Practice

Sustainable Development Courses

- AFS 6905: Individual Work in African Studies
- EVR 5705: Natural Resources and Innovation Systems
- LAS 6291: Conservation and Development Skills
- LAS 6938: Seminar in Modern Latin American Studies
- LAS 6943: Development Theory and Practice in Latin America
- PHC 6445: Global Public Health and Development II
- PHC 6764: Global Public Health and Development I

African Studies Courses

- AFS 5061: Africana Bibliography
- AFS 6060: Research Problems in African Studies
- AFS 6305: Development Theory and Practice Intro
- AFS 6307: Foundations of Economics for Sustainable Development
- AFS 6357: Anthropology of Humanitarian Intervention
- AFS 6905: Individual Work in African Studies

Latin American Studies Courses

- FOT 6940: Translation Studies Practicum
- LAS 6008: Ecological Principles
- LAS 6220: Issues and Perspectives in Latin American Studies
- LAS 6290: Tropical Conservation and Development
- LAS 6291: Conservation and Development Skills
- LAS 6292: Tropical Conservation and Development Research Methods
- LAS 6293: Design and Methods of Research in Latin American Studies
- LAS 6295: Latin American Business Environment
- LAS 6296: Latin American Business Topics
- LAS 6905: Individual Work
- LAS 6938: Seminar in Modern Latin American Studies
- LAS 6940: Tropical Conservation and Development Practicum
- LAS 6943: Development Theory and Practice in Latin America
- LAS 6971: Research for Master's Thesis

Additional Course Offerings
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6921: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Pracicum
- PHC 6946: Public Health Internship
Linguistics Department

Chair: F. McLaughin
Graduate Coordinator: E. Potsdam

Complete faculty listing by department: Follow this link

The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

Requirements for these degrees are given in the Graduate Degrees section of this catalog. For detailed information on the program, please visit the link below. For further information on the program, including financial aid, please visit http://lin.ufl.edu.

Other

Linguistics

College
Linguistics Program Information

The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in:

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

For detailed information on the program, including financial aid, please visit the website [http://lin.ufl.edu](http://lin.ufl.edu).

The Certificate in Second Language Acquisition and Teaching is offered to University of Florida graduate degree-seeking students in linguistics and related disciplines. As part of its service to the University community, Linguistics also offers English as a Second Language training for international applicants and admitted students. These programs, the English Language Institute (ELI), Academic Written English (AWE), and Academic Spoken English (ASE), are described in the Student Services section of this catalog. This information, along with links to the application form, are available at [http://lin.ufl.edu](http://lin.ufl.edu).

Applicants who lack a background in linguistics should develop basic competency in the core areas before commencing graduate work. These deficiencies can be met by taking LIN 3010, LIN 3201, and LIN 3460 or the equivalent.

Degrees

Doctor of Philosophy

Master of Arts

Linguistics Departmental Courses

- EAP 5835: Academic Spoken English I
- EAP 5836: Academic Spoken English II
- EAP 5837: Academic Spoken English Tutorial
- EAP 5845: Academic Writing
- EAP 5846: Research and Technical Writing
- EAP 5937: Special Topics in Academic Spoken English
- LIN 5657: Gender and Language
- LIN 5741: Applied English Grammar
- LIN 6084: Introduction to Graduate Research
- LIN 6165: Field Methods
- LIN 6208: Phonetics for Linguists
- LIN 6226: Advanced Phonetics
- LIN 6323: Phonology
- LIN 6341: Issues in Phonology
- LIN 6402: Morphology
- LIN 6410: Issues in Morphology
- LIN 6501: Syntax
- LIN 6520: Issues in Syntax
- LIN 6571: Structure of Specific Language
- LIN 6601: Sociolinguistics
- LIN 6622: Bilingualism
- LIN 6707: Psycholinguistics
- LIN 6720: Second Language Acquisition
- LIN 676C: Methods in Psycholinguistics
Mathematics Department

Chair: D. Cenzer
Graduate Coordinator: J. A. Larson

Complete faculty listing: Follow this link.

The Department of Mathematics offers the degrees of Doctor of Philosophy, Master of Science, and Master of Arts, and the Master of Arts in Teaching and Master of Science in Teaching, each with a major in mathematics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

Interdisciplinary Programs — The Department offers a co-major program in conjunction with the Statistics Department leading to the Doctor of Philosophy degree in mathematics and statistics. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Statistics, Industrial and Systems Engineering, and Finance, Insurance, and Real Estate Departments.

Combined Program — The Department has an accelerated bachelor's/master's program designed for superior undergraduate students who have the ability to pursue such a plan of study leading to the Master of Science or Master of Arts degree. The main feature of the program is that up to 12 semester hours of approved graduate level mathematics courses may be used as dual credit for both the undergraduate and the graduate degree. All other requirements for both the bachelor's degree and the master's degree must be met. For admission requirements for this program, see the undergraduate coordinator.

There are opportunities for concentrated study in a number of specific areas of pure and applied mathematics at both the master's and doctoral levels. The faculty directs studies and research in algebra, number theory, analysis, geometry, topology, logic, differential equations, dynamical systems, probability theory, numerical analysis, numerical optimization, approximation theory, combinatorial analysis, graph theory, computer applications, biomathematics, mathematical physics, inverse problems, and medical imaging. In addition to the requirements of the Graduate School, the minimum prerequisite for admission to the program of graduate studies in mathematics is the completion, with an average grade of B or better, of at least 24 credits of undergraduate mathematics, including a full year of calculus and three semesters of appropriate work beyond the calculus. The most appropriate courses for this purpose are advanced calculus, linear algebra and abstract algebra. Students lacking part of the requirements will be required to make up the deficiency early in their graduate work. Prerequisites to individual courses should be determined before registration by consultation with the instructor concerned. Some of the courses listed are offered only as needed. Since times of offering courses are estimated a year in advance, certain changes may be made if needs are known by the Department. The courses MAA 5328, MAA 5329, MAS 5311, and MAS 5312 are required for all advanced degree programs in mathematics. The requirements for the master's degree nonthesis option include a minimum of 32 semester hours of course work. Students pursuing the master's degree in mathematics must pass two comprehensive written examinations, one in algebra and one in analysis. Students pursuing the master's degree with a specialization in applied mathematics have two options: the examination option requires passage of the algebra and analysis examinations; the thesis option requires instead the preparation and oral defense of a thesis on original research conducted under the supervision of a faculty adviser. Students pursuing the Master of Arts in Teaching or the Master of Science in Teaching degree must prepare a teaching portfolio and pass an oral examination. Each of these programs normally requires two years for completion. The requirements for a doctoral degree include 36 hours of 6000-level course work in mathematics; no hours of teaching, colloquium, dissertation, or individual work will count toward this requirement. To become a candidate for the doctoral degree, the student must pass a comprehensive preliminary examination with written and oral components administered by the Department. The doctoral student must also pass a reading knowledge examination in one of the following foreign languages: French, German, or Russian. The dissertation is an important requirement for the doctoral degree in mathematics. The topic for the dissertation may be chosen from a number of areas of current research in pure and applied mathematics. Every graduate student is expected to attend the regular colloquium. Details concerning all requirements for graduate degrees in mathematics may be obtained by writing the Mathematics Department Graduate Selection Committee or consulting the Department website, http://www.math.ufl.edu.

Other

Mathematics

College

College of Liberal Arts and Sciences

Department/School

Mathematics Department

Degrees
Doctor of Philosophy
without a concentration
concentration in Imaging Science and Technology
concentration in Quantitative Finance

Master of Arts in Teaching

Master of Science

Master of Science in Teaching

Courses

- MAA 5104: Advanced Calculus for Engineers and Physical Scientists I
- MAA 5105: Advanced Calculus for Engineers and Physical Scientists II
- MAA 5228: Modern Analysis I
- MAA 5229: Modern Analysis II
- MAA 5404: Introduction to Complex Variables for Engineers and Physical Scientists
- MAA 6236: Mathematical Analysis for Statisticians
- MAA 6406: Complex Analysis I
- MAA 6407: Complex Analysis II
- MAA 6616: Analysis I
- MAA 6617: Analysis II
- MAA 7526: Advanced Topics in Functional Analysis I
- MAA 7527: Advanced Topics in Functional Analysis II
- MAD 6206: Combinatorial Theory I
- MAD 6207: Combinatorial Theory II
- MAD 6406: Numerical Linear Algebra
- MAD 6407: Numerical Analysis
- MAD 7396: Topics in Combinatorial Theory I
- MAD 7397: Topics in Combinatorial Theory II
- MAE 6940: Supervised Teaching
- MAE 6943: Internship in College Teaching
- MAP 5304: Intermediate Differential Equations for Engineers and Physical Scientists
- MAP 5345: Introduction to Partial Differential Equations
- MAP 5489: Modeling in Mathematical Biology
- MAP 6208: Numerical Optimization
- MAP 6327: Applied Differential Equations I
- MAP 6356: Partial Differential Equations I
- MAP 6357: Partial Differential Equations II
- MAP 6375: Numerical Partial Differential Equations
- MAP 6376: Finite Element Method
- MAP 6467: Stochastic Differential Equations and Filtering Theory I
- MAP 6468: Stochastic Differential Equations and Filtering Theory II
- MAP 6472: Probability and Potential Theory I
- MAP 6473: Probability and Potential Theory II
- MAP 6487: Biomathematics Seminar I
- MAP 6488: Biomathematics Seminar II
- MAP 6505: Mathematical Methods of Physics and Engineering
- MAP 6506: Mathematical Methods of Physics and Engineering II
- MAP 6941: Internship in Applied Mathematics
- MAP 7436: Seminar in Applied Mathematics I
- MAP 7437: Seminar in Applied Mathematics II
- MAS 5311: Introductory Algebra I
- MAS 5312: Introductory Algebra II
- MAS 6331: Algebra I
- MAS 6332: Algebra II
- MAS 7215: Theory of Numbers I
- MAS 7216: Theory of Numbers II
- MAS 7396: Advanced Topics in Algebra I
- MAS 7397: Topics in Algebra II
Philosophy Department

Chair: G. Witmer.
Graduate Coordinator: C. Liu.

Complete faculty listing by department: Follow this link.

The Department offers the Master of Arts and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog.

Admission to the program requires a bachelor’s degree in philosophy or sufficient course work in philosophy, as determined by the department. Applicants are evaluated on the basis of academic achievement, GRE scores, three letters of recommendation, a statement of purpose, and a sample essay in philosophy. Students may be admitted as for a terminal M.A. degree or for the Ph.D. Program.

The M.A. degree requires two years (36 hours) of course work. All graduate students take foundational courses in their first four semesters: the graduate Proseminar (PHI 5935), Graduate Logic (PHI 5135), a course in Ancient Philosophy (PHP 5005 or PHP 5015), a course in Modern Philosophy (PHI 5405 or PHI 5406), and either Foundations of Analytic Philosophy (PHP 5785) or Epistemology (PHI 5365).

The Ph.D. requires 90 credit hours, which may include 36 used as credit for the M.A. In addition to the foundational courses required for the M.A., the Ph.D. requires Ethical Theory (PHI 5665) and both of PHP 5785 and PHI 5365. It also requires six courses at the advanced 6000-level, 3 proposal research hours and 12 doctoral research hours, and of course the successful completion and defense of a dissertation.

Further information about the department's programs and admissions can be obtained on the department's website web.phil.ufl.edu or by contacting the Graduate Coordinator, 330 Griffin-Floyd Hall, (352)392-2084 or gradcoord@phil.ufl.edu.

Other

Philosophy

College

College of Liberal Arts and Sciences

Department/School

Philosophy Department

Degrees

Doctor of Philosophy

Master of Arts
Master of Arts in Teaching

Courses

- PHH 5405: Modern Philosophy I
- PHH 5406: Modern Philosophy II
- PHH 5605: Studies in Continental Philosophy
- PHH 6105: Seminar in Ancient Philosophy
- PHH 6425: Seminar in Modern Philosophy
- PHI 5135: Graduate Logic
- PHI 5225: Philosophy of Language
- PHI 5325: Philosophy of Mind
- PHI 5365: Epistemology
- PHI 5405: Philosophy of Science
- PHI 5425: Philosophy of Social Science
- PHI 5505: Metaphysics
- PHI 5665: Ethical Theory
- PHI 5905: Individual Work
- PHI 5934: Topics in Philosophy
- PHI 5935: Proseminar
- PHI 6105: Seminar in Logic
- PHI 6226: Seminar in Philosophy of Language
- PHI 6306: Seminar in Epistemology
- PHI 6326: Seminar in Philosophy of Mind
- PHI 6406: Seminar in Philosophy of Science
- PHI 6506: Seminar in Metaphysics
- PHI 6667: Seminar in Ethics
- PHI 6787: Seminar in Continental Philosophy
- PHI 6905: Individual Work
- PHI 6910: Supervised Research
- PHI 6934: Special Topics
- PHI 6940: Supervised Teaching
- PHI 6971: Research for Master's Thesis
- PHI 7979: Advanced Research
- PHI 7980: Research for Doctoral Dissertation
- PHP 5005: Ancient Philosophy I
- PHP 5015: Ancient Philosophy II
- PHP 5785: Foundations of Analytic Philosophy
- PHP 6415: Seminar in Kant
- PHP 6795: Seminar in Analytic Philosophy
- PHP 6930: Seminar in a School or Thinker

Physics Department

College of Liberal Arts and Sciences

Chair: Kevin Ingersent
Graduate Coordinator: Guido Mueller

Complete faculty listings: Follow this link.

The Department of Physics offers the Master of Science (thesis or nonthesis) and the Doctor of Philosophy degrees. The nonthesis Master of Science in Teaching is also offered. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Areas of specialization for graduate research include astrophysics and cosmology, atomic and molecular physics, biological physics, chemical physics, condensed matter physics (theory and experiment), nuclear physics, particle physics (theory and experiment), statistical physics, and low temperature physics.

Special interdisciplinary research programs include the Institute for Fundamental Theory (carried out jointly with the Department of Mathematics), the Institute for Theoretical and Computational Studies in Molecular and Materials Science (carried out jointly with the Department of Chemistry), the Institute of High Energy and Particle Astrophysics, and Microfabrictech (jointly with the College of Engineering). A curriculum is offered by the Center for Chemical Physics for students interested in research related to chemistry or chemical engineering. The Center for Condensed Matter Sciences provides opportunities for investigations in a diverse range of subjects and fields, including the Microkelvin Research Laboratory. The University of Florida operates the National High Magnetic Field Laboratory jointly with Florida State University and Los Alamos National Laboratory.

The core curriculum is designed to provide a thorough foundation for all physics graduate students. It consists of PHY 6246, PHY 6346, PHY 6347, PHY 6536, PHY 6645, and PHY 6646. Doctoral students must achieve a 3.30 GPA in the core curriculum. All students must pass a preliminary examination at the undergraduate level. All degree candidates are required, as part of their graduate education, to participate continuously in the research and/or teaching programs of the Department.

For more information, please see the program page below, and visit our website: http://www.phys.ufl.edu.

Other
Physics

College

College of Liberal Arts and Sciences

Department/School

Physics Department

Physics Program Information

The Department of Physics is dedicated to advancing the forefronts of knowledge in both pure and applied physics, thus providing an exciting intellectual climate for our graduate students. Our research activities include astrophysics (particle astrophysics, cosmology and gravitation), condensed matter and materials physics (experimental, theoretical and computational), low temperature physics, elementary particle physics (experimental and theoretical) and biological physics. With such diversity in research offerings you will have an opportunity to pursue research in most areas of contemporary physics. In spite of the size of our Department, we are committed to designing a program of graduate study that is tailored to your experience and interests. Our Graduate Coordinator sees that each of our graduate students receives personal attention and advice as they progress toward their advanced degree.

Graduate Program Overview

Preliminary Examination:
- Covers undergraduate subject matter
- Given twice a year; two years to complete

Graduate Core Courses
- Two semesters of quantum mechanics
- Two semesters of electromagnetism
- One semester of classical mechanics
- One semester of statistical mechanics
- Waivers given for equivalent work at other institutions
- Completed in first or second years

Distribution Requirement
- Advanced course work in three subfields
- Usually completed by the end of the second year

Highlights
- Involvement in research in first summer (or sooner)!
- Diversity of research interdisciplinary options!
- Individualized program designed to meet the unique background of each student!

For more information, please see our website: http://www.physics.ufl.edu.

Degrees

Doctor of Philosophy

without a concentration

concentration in Imaging Science and Technology

Master of Science
Master of Science in Teaching

Courses

- AST 6416: Physical Cosmology
- PHY 5277: Physics of Accident Reconstruction and Biomechanics
- PHY 5905: Individual Work
- PHY 6246: Classical Mechanics
- PHY 6346: Electromagnetic Theory I
- PHY 6347: Electromagnetic Theory II
- PHY 6536: Statistical Mechanics I
- PHY 6555C: Cryogenics
- PHY 6645: Quantum Mechanics I
- PHY 6646: Quantum Mechanics II
- PHY 6648: Quantum Field Theory I
- PHY 6905: Individual Work
- PHY 6910: Supervised Research
- PHY 6920: Departmental Colloquium
- PHY 6932: Seminar in Molecular and Computational Physics
- PHY 6943: Internship in College Teaching
- PHY 6971: Research for Master's Thesis
- PHY 7097: Advanced Topics in Theoretical Physics
- PHY 7669: Quantum Field Theory II
- PHY 7939: Special Topics
- PHY 7979: Advanced Research
- PHY 7980: Research for Doctoral Dissertation
- PHZ 5155C: Physical Modeling and Simulation
- PHZ 5245: Introduction to Magnetic Resonance
- PHZ 5354: Introduction to Particle Physics
- PHZ 6405: Introduction to Solid-State Physics
- PHZ 6156: Computer Methods in Physics
- PHZ 6166: Qualitative Methods of Theoretical Physics
- PHZ 6355: Elementary Particle Physics I
- PHZ 6358: Standard Model of Elementary Particles I
- PHZ 6391: Seminar in Astrophysics
- PHZ 6392: Seminar in Particle Physics
- PHZ 6426: Solid State I
- PHZ 6493: Seminar in Condensed Matter Physics
- PHZ 6607: Special and General Relativity
- PHZ 7357: Elementary Particle Physics II
- PHZ 7359: Standard Model of Elementary Particles II
- PHZ 7427: Solid State II
- PHZ 7428: Modern Condensed Matter Physics
- PHZ 7429: Phases of Condensed Matter
- PHZ 7608: Special and General Relativity II

Plant Molecular and Cellular Biology Department

College of Agricultural and Life Sciences
College of Liberal Arts and Sciences
College of Medicine

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology within the colleges of Agriculture and Life Sciences, Medicine, and Liberal Arts and Sciences.

Other

Plant Molecular and Cellular Biology

College

College of Liberal Arts and Sciences
Plant Molecular and Cellular Biology Program Information

Director: Gloria A. Moore
Graduate Coordinator: Matias Kirst

Plant Molecular and Cellular Biology (PCMB) is an interdisciplinary and interdepartmental graduate degree program that emphasizes understanding the molecular and cellular mechanisms that mediate plant development, adaptation, and evolution. Students can pursue an M.S. or a Ph.D. degree through the PMCB program. All students complete core courses in Advanced Genetics, Plant Molecular Biology and Genomics, Plant Cellular and Developmental Biology, and Plant Biochemistry. In addition to the core classes, students can select from a variety of courses in biochemistry, molecular biology, physiology, breeding, genetics, evolution, microbiology, and plant pathology.

New students are exposed to a variety of faculty and experimental systems while they rotate through several laboratories during their first two semesters before selecting an adviser and dissertation research area. Both M.S. and Ph.D. students take four required courses: PCB 5065 Advanced Genetics, PCB 5530 Plant Molecular Biology and Genomics, PCB 6528 Plant Cell and Developmental Biology and BOT 6935 Plant Biochemistry, as well as journal colloquium classes (PCB 7922 Journal Colloquium). Additional elective courses are taken after approval by the student's supervisory committee. For additional information see http://pmcb.ifas.ufl.edu.

Successful candidates should have a strong interest in plant molecular and cellular mechanisms controlling development, metabolism, adaptation, and evolution. Applicants typically have a B.S. or M.S. in the agricultural, forestry, biological or chemical sciences with advanced undergraduate coursework in genetics, molecular and cellular biology, and biochemistry. However, outstanding students from a broad range of science disciplines are actively considered.

Degrees

Doctor of Philosophy

without a concentration

concentration in Toxicology

Master of Science

Plant Molecular and Cellular Biology Courses

- BOT 6936: Special Topics
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6910: Supervised Research
- PCB 6937: Special Topics in Plant Molecular and Cellular Biology
- PCB 6971: Research for Master's Thesis
- PCB 7922: Journal Colloquium in Plant Molecular and Cellular Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation

Political Science Department

Chair: Ido Oren
Graduate Coordinator: Daniel Smith

Complete faculty listing: Follow this link.

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science–international relations
program currently offers the Master of Arts (thesis or non-thesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information, please contact the Political Science Department or follow the hyperlinks below to more information about the specific programs offered.

Other

Political Science

College

College of Liberal Arts and Sciences

Department/School

Political Science Department

Political Science Program Information

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or non-thesis option) and Doctor of Philosophy. The political science–international relations program currently offers the Master of Arts (thesis or non-thesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information about international relations, please contact the Political Science Department or visit their departmental page in this catalog.

Admission to graduate study in the Department of Political Science normally requires the completion of an undergraduate major in political science or its equivalent. Students without this preparation may be required to make up deficiencies early in their graduate work. The core sequence begins in the fall term, providing basic knowledge that students need in later semesters. In evaluating candidates for admission, the Department considers

- Prior academic achievement
- GRE scores
- Letters of recommendation from three faculty members or others familiar with the academic potential or work habits of the applicant

A statement of purpose that conveys intellectual ambitions, indicates how the program of study satisfies the student's interests and goals, and tells how the student would contribute to the program.

Fields of specialization offered by the Department include American government and politics, comparative politics, international relations, public policy, political theory, political behavior, and political methodology.

Master of Arts: The M.A. curricula are designed to serve students who want to pursue goals of an advanced general education, to gain skills and knowledge suitable for various types of public or private employment, or to prepare for further work at the doctoral level. M.A. students are required to complete POS 6736, The Conduct of Inquiry, and either POS 6737: Political Data Analysis or STA 6126: Statistical Methods in Social Research I. Students may complete their M.A. degrees with or without writing a thesis. Students pursuing the thesis option must complete 30 hours of graduate coursework. The thesis is expected to be of length and quality comparable to papers presented at professional academic conferences or published in academic journals. Students pursuing the non-thesis option must complete 36 semester hours of graduate coursework and defend two qualifying papers. For both M.A. options, course work in political science, exclusive of core courses, must include a minimum of two graduate-level courses in one field of political science.

The M.A. degree may be taken in conjunction with the following certificate programs:

- Political campaigning
- Public affairs

Students in these certificate programs pursue the non-thesis option.

Public affairs: This program trains students for leadership positions in state, local, and national governments as well as for careers in nonprofit organizations by providing students with knowledge and skills in the areas of organization behavior, public budgeting and finances, public management, policy analysis, program evaluation, and computer applications. The curriculum consists of seminars in political science, public administration, public policy, process, state and local politics, and research methods. Supervised internships in selected agencies in Florida are arranged by the Department of Political Science as an integral part of the training program. This specialization requires 39 hours of coursework plus satisfactory completion of a 3-hour internship at the discretion of the Department. Students must also defend a final management-policy paper that incorporates analytical and substantive expertise. Graduates of the program serve in a variety of professional positions, including city managers, heads of municipal departments, directors of nonprofit organizations, analysts for the state legislature, and budget analysts for the federal government. In addition to the M.A. degree in political science, students receive the Certificate in Public Affairs.

Political campaigning: The program is designed to provide students with the basic political skills, insights, and experience that are critical for success in the rapidly changing profession of politics and political consulting. The program combines an awareness of the academic literature on mass and elite behavior with exposure to the increasingly sophisticated techniques used by campaigns. Students take a total of 39 hours from four major areas:

- Courses required of all M.A. students
- Courses oriented to practical aspects of political campaigning and governmental affairs (lobbying), including a 3-credit campaigning-related internship
- Related courses offered by the College of Journalism and Communications

Entry-level jobs have included such positions as legislative aide, campaign (or deputy campaign) manager, polling analyst, state party political consultant, and media relations. With additional experience, some former students have gone on to become state legislators and later, member of the U.S. House of Representatives, deputy chief of staff to the governor of Florida, partner in a major Washington area polling firm, assistant to the Minister of Justice and Attorney General of Canada, and head lobbyist for a nationwide restaurant chain. In addition to the M.A. degree in political science, students receive the Certificate in Political Campaigning.

Law/PUBLIC AFFAIRS JOINT DEGREE PROGRAM: This program culminates in the Master of Arts in political science and Juris Doctor degrees. A joint degree program culminating in the Master of Arts in political science international relations and Juris Doctor degrees is also available. The joint program enables students to earn both the J.D. and the M.A. in less time than would be required to earn both degrees consecutively. Full-time students who make satisfactory progress can usually earn both degrees in 4 years. Candidates for the joint degree program must meet the entrance requirements for, and be admitted to, both the College of Law and the Department of Political Science. These requirements include both the LSAT and the GRE. Students are encouraged to announce their intent of seeking a joint degree as soon as possible. The Department of Political Science will allow 12 hours of appropriate law school courses to be credited toward the M.A. degree. The 12 credits selected from the law curriculum must be approved by the Political Science graduate coordinator on the recommendation of the student's supervisory committee. The College of Law will permit 12 hours of credit earned in political science graduate courses to be credited toward the J.D. degree. Students in the joint degree program are
permitted, but not required, to pursue a companion certificate program in public affairs, political campaigning, or international development policy and administration.

**Combined bachelor's/master's degree program:** This combined program is designed for superior students who have the ability to pursue an accelerated program leading to the Bachelor of Arts and the Master of Arts degrees in political science or political science international relations.

Up to 12 semester hours of approved graduate-level political science courses may be used as credit for both the undergraduate and graduate degree. Applicants to the program must present

- Acceptable scores on the verbal, quantitative, and analytical writing portions of the GRE
- Completion of at least 24 semester hours at the University of Florida (including at least 12 semester hours of political science) with a GPA of 3.7 or higher
- Letters of recommendation from two faculty members in the Department of Political Science

The combined program is not recommended for students considering a Ph.D. program in political science at UF but is appropriate for those considering one of the M.A. degree plus certificate programs described above. Further information concerning this program is available from the departmental undergraduate and graduate coordinators.

**Doctor of Philosophy:** The Ph.D. program emphasizes preparation for academic careers through seminars, independent work with faculty, and professional development experiences including graduate paper readings, placement workshops, and a distinguished lecture series. The Ph.D. prepares students for teaching and research in either an academic or governmental environment and opens doors to other career opportunities in both the private and public sectors. The Ph.D. program emphasizes the development of strong analytic skills and sophisticated research methods. As resources permit, the Department provides students with funding for travel expenses to scholarly meetings and professional (methodological) training support. As part of the preparation for careers in academia, doctoral students are also generally expected to contribute to the teaching mission of the Department. All Ph.D. students must complete the following:

- POS 6736: The Conduct of Inquiry
- POS 6716: Scope and Epistemologies of Political Science
- POS 6757: Political Data Analysis
- POT 6505: Politics and Theory
- Course work in a major and two minor fields of study
- Qualifying examinations in a major field and one minor field
- A dissertation

Fields of study open to Ph.D. students include comparative politics, American politics, public policy, international relations, political behavior, political theory, and political methodology. Applications are particularly welcome from students whose intellectual interests traverse these fields, including those with interests in religion and politics, state political institutions and policy, environmental politics, international development, and minority and ethnic politics.

University of Florida Ph.D. students benefit from associations with faculty in numerous other departments and centers. The Centers for Latin American Studies, African Studies, and European Studies, and the Asian Studies Program complement department faculty strengths in comparative politics and international relations. Students in the public policy concentration benefit from substantive expertise of faculty in the Institute for Child Health Policy, the Shimberg Center for Affordable Housing, and the Center for Gerontological Studies. Several faculty in the College of Journalism and Communications have interests in media and politics.

For more information, please see our website: [http://polisci.ufl.edu](http://polisci.ufl.edu).

**Degrees Offered with a Major in Political Science**

**Doctor of Philosophy**

- without a concentration

- concentration in Educational Policy

- concentration in Tropical Conservation and Development

**Master of Arts**

- without a concentration

- concentration in International Development Policy and Administration

- concentration in Public Affairs
concentration in Political Campaigning

concentration in Tropical Conservation and Development

Political Science Departmental Courses

- CPO 5935: Advanced Topics in Comparative Politics
- CPO 6046: Politics in Advanced Industrial Societies
- CPO 6059: Democracy and Its Competitors
- CPO 6077: Social Movements in Comparative Perspective
- CPO 6091: Introduction to Comparative Political Analysis
- CPO 6206: Seminar in African Politics
- CPO 6307: Latin American Politics I
- CPO 6732: Democratization and Regime Transition
- CPO 6736: Post-Communist politics
- CPO 6756: Comparative Elections and Party Systems
- CPO 6757: The European Union In Comparative Perspective
- CPO 6786: Peasant Politics and Society
- CPO 6795: Environmental Politics
- CPO 6796: Water Politics
- INR 5935: Advanced Topics in International Relations
- INR 6036: Globalization, Regionalism, and Governance
- INR 6039: International Political Economy
- INR 6208: Advanced International Relations Theory
- INR 6213: Seminar: Politics of the European Union
- INR 6249: Inter-American Relations
- INR 6305: Politics of American Foreign Policy Making
- INR 6337: Survey of International Security
- INR 6352: International Environmental Relations
- INR 6507: International Organization
- INR 6607: International Relations Theory
- INR 6936: Seminar in Transnational and Global Studies
- PAD 5935: Advanced Topics in Public Administration
- PAD 6108: Public Administration Theory
- PAD 6227: Public Budgeting and Finance
- PAD 6434: Leadership and Ethics in Public Agencies
- POS 6458: Politics of Campaign Finance
- POS 6946: Internship in Government
- POS 6955: Advanced Topics in Political Science
- POS 6957: Seminar in American Politics
- POS 6959: American Political Development
- POS 6127: State Government and Politics
- POS 6146: Urban Politics
- POS 6157: Community Analysis
- POS 6169: Patrons, Clients, Corruption, and Accountability
- POS 6207: Political Behavior
- POS 6208: Empirical Political Research
- POS 6272: Political Participation
- POS 6274: Political Campaigning
- POS 6276: Advanced Campaign Strategy
- POS 6278: The Politics of Direct Democracy
- POS 6292: Religion and Politics
- POS 6427: Legislative Process
- POS 6453: Political Parties and Interest Groups
- POS 6476: Bureaucratic Politics in the U.S.
- POS 6707: Qualitative Research Methods for Political Science
- POS 6712: Empirical Theories of Politics
- POS 6716: Scope and Epistemologies of Political Science
- POS 6736: The Conduct of Inquiry
- POS 6737: Political Data Analysis
- POS 6747: Topics in Political Research Methodology
- POS 6757: Survey Research
- POS 6909: Individual Work
- POS 6910: Supervised Research
- POS 6933: Special Topics
- POS 6940: Supervised Teaching
- POS 6971: Research for Master's Thesis
- POS 7979: Advanced Research
- POS 7980: Research for Doctoral Dissertation
- POT 5935: Advanced Topics in Political Theory
- POT 6016: Ancient Political Thought
- POT 6056: Modern Political Thought
- POT 6067: Contemporary Political Theory
- POT 6056: Liberalism and Its Critics
- POT 6314: Democratic Theory
- POT 6416: The Marxist Tradition and Its Critics
- POT 6505: Politics and Theory
Political Science - International Relations

College

College of Liberal Arts and Sciences

Department/School

Political Science Department

Political Science--International Relations Program Information

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science--international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information, please contact the Political Science Department directly or visit their departmental catalog page.

Admission to graduate study in the Department of Political Science normally requires the completion of an undergraduate major in political science or its equivalent. Students without this preparation may be required to make up deficiencies early in their graduate work. The core sequence begins in the fall term, providing basic knowledge that students need in later semesters. In evaluating candidates for admission, the Department considers:

- Prior academic achievement
- GRE scores
- Letters of recommendation from three faculty members or others familiar with the academic potential or work habits of the applicant
- A statement of purpose that conveys intellectual ambitions, indicates how the program of study satisfies the student’s interests and goals, and tells how the student would contribute to the program.

Political science--international relations: The M.A. degree in political science--international relations is designed to provide professional education to those whose primary interest is a career in foreign relations. In this program, students must complete course work in the core of international relations theory and in two or more of the four major subfields of international relations, international political economy, international security, foreign policy, and international organization. The M.A. is a 36-hour degree, requiring successful completion of a 6-credit political science core sequence, 15 credits of departmental or extra-department electives, and a 15-credit international relations major. Students may pursue either a thesis option or take a comprehensive examination at the end of the program.

Law/Public Affairs joint degree program: This program culminates in the Master of Arts in political science and Juris Doctor degrees. A joint degree program culminating in the Master of Arts in political science international relations and Juris Doctor degrees is also available. The joint program enables students to earn both the J.D. and the M.A. in less time than would be required to earn both degrees consecutively. Full-time students who make satisfactory progress can usually earn both degrees in 4 years. Candidates for the joint degree program must meet the entrance requirements for, and be admitted to, both the College of Law and the Department of Political Science. These requirements include both the LSAT and the GRE. Students are encouraged to announce their intent of seeking a joint degree as soon as possible. The Department of Political Science will allow 12 hours of appropriate law school courses to be credited toward the M.A. degree. The 12 credits selected from the law curriculum must be approved by the Political Science graduate coordinator on the recommendation of the student’s supervisory committee. The College of Law will permit 12 hours of credit earned in political science graduate courses to be credited toward the J.D. degree. Students in the joint degree program are permitted, but not required, to pursue a companion certificate program in public affairs, political campaigning, or international development policy and administration.

Combined bachelor's/master's degree program: This combined program is designed for superior students who have the ability to pursue an accelerated program leading to the Bachelor of Arts and the Master of Arts degree in political science or political science international relations.

Up to 12 semester hours of approved graduate-level political science courses may be used as credit for both the undergraduate and graduate degree. Applicants to the program must present:

- Acceptable scores on the verbal, quantitative, and analytical writing portions of the GRE
- Completion of at least 24 semester hours at the University of Florida (including at least 12 semester hours of political science) with a GPA of 3.7 or higher
- Letters of recommendation from two faculty members in the Department of Political Science

The combined program is not recommended for students considering a Ph.D. program in political science at UF but is appropriate for those considering one of the M.A. degree plus certificate programs described above. Further information concerning this program is available from the departmental undergraduate and graduate coordinators.

Degrees

Master of Arts

Master of Arts in Teaching
Political Science Departmental Courses

- CPO 5935: Advanced Topics in Comparative Politics
- CPO 6048: Politics in Advanced Industrial Societies
- CPO 6059: Democracy and Its Competitors
- CPO 6077: Social Movements in Comparative Perspective
- CPO 6091: Introduction to Comparative Political Analysis
- CPO 6206: Seminar in African Politics
- CPO 6307: Latin American Politics
- CPO 6732: Democratization and Regime Transition
- CPO 6736: Post-Communist Politics
- CPO 6756: Comparative Elections and Party Systems
- CPO 6757: The European Union in Comparative Perspective
- CPO 6786: Peasant Politics and Society
- CPO 6795: Environmental Politics
- CPO 6796: Water Politics
- INR 5935: Advanced Topics in International Relations
- INR 6036: Globalization, Regionalism, and Governance
- INR 6038: International Political Economy
- INR 6208: Advanced International Relations Theory
- INR 6213: Seminar: Politics of the European Union
- INR 6249: Inter-American Relations
- INR 6305: Politics of American Foreign Policy Making
- INR 6337: Survey of International Security
- INR 6352: International Environmental Relations
- INR 6507: International Organization
- INR 6607: International Relations Theory
- INR 6906: Seminar in Transnational and Global Studies
- INR 6908: Seminar in Culture and World Politics
- PAD 5935: Advanced Topics in Public Administration
- PAD 6108: Public Administration Theory
- PAD 6227: Public Budgeting and Finance
- PAD 6434: Leadership and Ethics in Public Agencies
- POS 6456: Politics of Campaign Finance
- POS 6946: Internship in Government
- POS 6935: Advanced Topics in Political Science
- POS 6945: Seminar in American Politics
- POS 6948: American Political Development
- POS 6127: State Government and Politics
- POS 6146: Urban Politics
- POS 6157: Community Analysis
- POS 6196: Patrons, Clients, Corruption, and Accountability
- POS 6207: Political Behavior
- POS 6208: Empirical Political Research
- POS 6272: Political Participation
- POS 6274: Political Campaigning
- POS 6278: Advanced Campaign Strategy
- POS 6279: The Politics of Direct Democracy
- POS 6292: Religion and Politics
- POS 6427: Legislative Process
- POS 6453: Political Parties and Interest Groups
- POS 6476: Bureaucratic Politics in the U.S.
- POS 6707: Qualitative Research Methods for Political Science
- POS 6712: Empirical Theories of Politics
- POS 6716: Scope and Epistemologies of Political Science
- POS 6736: The Conduct of Inquiry
- POS 6737: Political Data Analysis
- POS 6747: Topics in Political Research Methodology
- POS 6757: Survey Research
- POS 6909: Individual Work
- POS 6910: Supervised Research
- POS 6933: Special Topics
- POS 6940: Supervised Teaching
- POS 6971: Research for Master's Thesis
- POS 7979: Advanced Research
- POS 7980: Research for Doctoral Dissertation
- POT 5935: Advanced Topics in Political Theory
- POT 6016: Ancient Political Thought
- POT 6056: Modern Political Thought
- POT 6067: Contemporary Political Theory
- POT 6306: Liberalism and Its Critics
- POT 6314: Democratic Theory
- POT 6416: The Modern Tradition and Its Critics
- POT 6505: Politics and Theory
- POT 6516: Political Judgment
- PUP 5935: Advanced Topics in Public Policy
- PUP 6006: Policy Evaluation
- PUP 6007: Policy Process
Psychology Department

College of Liberal Arts and Sciences

Chair: Lise Abrams
Graduate Coordinator: Julia A. Graber

Complete faculty listing by department: Follow this link.

The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees section of this catalog. Students are not accepted for a terminal master's degree.

For more information, please see the program page below and our website: http://www.psych.ufl.edu.

Other

Counseling Psychology

College

College of Liberal Arts and Sciences

Department/School

Psychology Department

Degrees Offered with a Major in Counseling Psychology

Doctor of Philosophy

Psychology Departmental Courses

- CBH 6056: Comparative Psychology
- CLP 6169: Seminar: Psychology and Deviant Behavior
- CLP 7525: Best Methods for Studying Psychological Change
- DEP 6057: Advanced Developmental Psychology I
- DEP 6058: Advanced Developmental Psychology II
- DEP 6059: Seminar: Special Topics in Developmental Psychology
- DEP 6099: Survey of Developmental Psychology
- DEP 6216: Psychological Disturbances of Children
- DEP 6406: Advanced Adulthood and Aging
- DEP 6409: Seminar: Adult Development and Aging
- DEP 6799: Current Research Methods in Developmental Psychology
- DEP 6936: Current Research in Developmental Psychology
- DEP 7608: Theories of Developmental Psychology
- EAB 5436: Behavioral Pharmacology
- EAB 6099: Survey of Behavior Analysis
- EAB 6118: Theoretical Foundations of Behavior Analysis
- EAB 6707: Applied Behavior I
- EAB 6712: Experimental Psychopathology
- EAB 6716: Behavior Analysis in Developmental Disabilities
- EAB 6719: Seminar: Strategies and Tactics of Human Behavioral Research
- EAB 6750: Quantitative Methods
- EAB 6780: Ethics and Professional Issues
- EAB 6937C: Seminar: Special Topics in Experimental Analysis of Behavior
- EXP 6099: Survey of Cognition and Sensory Processes
- EXP 6609: Seminar: Cognition
Psychology (Psychology - CLAS)

College

College of Liberal Arts and Sciences

Department/School

Psychology Department

Psychology Program Information

The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees section of this catalog. Students are not accepted for a terminal master's degree.

Doctoral areas of specialization include the research areas of developmental, behavior analysis, behavioral and cognitive neuroscience, social psychology, and counseling psychology. The training program in counseling psychology is accredited by the American Psychological Association. A predoctoral internship of one year is required for the counseling psychology program.

Undergraduate preparation should include at least one course in experimental methods and one course in statistics. Other courses in psychology should include at least three or four of the following: cognition, developmental, learning, personality, physiological, sensory, and social. Applicants should have competitive GRE scores and GPA (3.5 or higher).

Co-major: The Department offers a co-major program in conjunction with the College of Education leading to the Doctor of Philosophy degree in psychology and research and evaluation methodology.

Degrees
Doctor of Philosophy

without a concentration

concentration in Women's/Gender Studies

Master of Arts

Master of Science

without a concentration

Psychology Departmental Courses

- CBH 6056: Comparative Psychology
- CLP 6169: Seminar: Psychology and Deviant Behavior
- CLP 7525: Best Methods for Studying Psychological Change
- DEP 6057: Advanced Developmental Psychology I
- DEP 6058: Advanced Developmental Psychology II
- DEP 6059: Seminar: Special Topics in Developmental Psychology
- DEP 6099: Survey of Developmental Psychology
- DEP 6216: Psychological Disturbances of Children
- DEP 6406: Advanced Adulthood and Aging
- DEP 6409: Seminar: Adult Development and Aging
- DEP 6799: Current Research Methods in Developmental Psychology
- DEP 6936: Current Research in Developmental Psychology
- DEP 7608: Theories of Developmental Psychology
- EAB 5436: Behavioral Pharmacology
- EAB 6099: Survey of Behavior Analysis
- EAB 6118: Theoretical Foundations of Behavior Analysis
- EAB 6707: Applied Behavior I
- EAB 6712: Experimental Psychopathology
- EAB 6716: Behavioral Analysis in Developmental Disabilities
- EAB 6719: Seminar: Strategies and Tactics of Human Behavioral Research
- EAB 6750: Quantitative Methods
- EAB 6760: Ethics and Professional Issues
- EAB 6937C: Seminar: Special Topics in Experimental Analysis of Behavior
- EAB 6939: Seminar: Special Topics in Applied Behavior Analysis
- EAB 7089: Advanced Seminar: Experimental Analysis of Behavior
- EAB 7090: Verbal Behavior
- EXP 6099: Survey of Cognition and Sensory Processes
- EXP 6909: Seminar: Cognition
- EXP 6939: Seminar: Current Issues in Cognition and Sensory Processes
- GEY 7408: Psychotherapy with Older Adults
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marriage Counseling
- MHS 7431: Advanced Family Counseling
- PCO 6057: Psychology of Counseling I
- PCO 6058: Psychology of Counseling II
- PCO 6059: Psychology of Counseling III
- PCO 6278: Diversity and Multiculturalism in Counseling Psychology
- PCO 6316C: Psychological Assessment I
- PCO 6317C: Psychological Assessment II
- PCO 6931: History and Contemporary Issues in Counseling Psychology
- PCO 6939: Seminar: Current Topics in Counseling Psychology
- PCO 7217: Professional Ethics and Skills in Counseling Psychology
- PCO 7247: Group Counseling/Psychology
- PCO 7537: Vocational Psychology
Religion Department

Chair: Manuel A. Vasquez.
Graduate Coordinator: David G. Hackett

Complete faculty listing by department: Follow this link.

The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asia
- Religion and nature.

Minimum requirements for these degrees are given in the General Information section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religions and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at http://religion.ufl.edu/graduate-studies/ under "Graduate Program." In special instances, and with the agreement of the supervisory committee and two sponsoring faculty members, master's degree students may choose an area outside the three specialty fields.

In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest:

- Three references from persons competent to evaluate the applicant's potential for graduate work
- An essay of 3 to 5 double-spaced, typewritten pages identifying the applicant's goals and particular interests pertinent to the three available specialty fields (this essay is extremely important and applicants should attend to it carefully)
- A writing sample.

Beyond these requirements, applicants need to show clear evidence of solid preparation before admission. This usually includes formal study of the primary language in the specialty field. Acceptable scores on the GRE General Test are required. In addition to evidence of preparation and academic promise, the Department gives careful consideration to the fit between an applicant's central scholarly interests and the resources the Department and University have to offer.

Master of Arts: The M.A. degree provides a broad background in the study of religious traditions, theoretical orientations in the discipline, and an initial concentration in one of the three specialty fields. Course work culminates in a thesis and oral examination on the thesis and course work.

Total credits: Thirty credit hours are required. These include Method and Theory I and II, the core course(s) of the major field (or equivalent for those not in one of the three specialty fields), and 6 hours of thesis research credits. The additional hours shall consist of further courses in the specialty field, other graduate seminars, and up to 6 hours of research language study.

Language study: All M.A. students are required to demonstrate competency in a scholarly language other than English before beginning the thesis. Most languages are acceptable, though students should consult the individual field requirements. The chosen language must be approved by the student's mentor and the graduate coordinator.

Thesis: Each student, guided by a supervisory committee, will prepare a Master of Arts thesis, acceptable to the Department of Religion and the Graduate School, and undergo an oral examination.

Promotion to doctoral status: The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish that status to be changed. A review and decision will be made by the field faculty and the graduate committee.

Doctor of Philosophy: The Ph.D. program trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religion master's degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master's degree with additional religion course work. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

Course requirements: The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours credited toward the Ph.D. is at the discretion of department faculty. A minimum of 45 hours is devoted to course work at the doctoral level. The specific distribution of course work depends on the specialization but will include intensive work in the major area of specialization, 6 hours of method and theory (If not taken at the M.A. level) and 15 hours devoted to dissertation writing and research.

Language requirements: All doctoral students must demonstrate proficiency in at least one and in many cases two languages other than English. The chosen language(s) as well as how and when the student's competence will be judged must be approved by the student's supervisory committee chair. Frequently language competence is documented by 1) taking an appropriate
course or courses in the language with a grade of "B" or better, or 2) passing a translation exam (usually administered by a department member or a language department at the University). Basic course work for scholarly languages will not count toward the required 90 credit hours. However, students studying a scholarly language connected to their research needs (above and beyond basic competence) can receive 6 (or more) credit hours for such advanced courses toward the required 90 total credit hours, with approval of the student's supervisory committee chair. Qualifying examinations: Qualifying examinations form a bridge between course work and dissertation research. Normally students will take qualifying examinations during their third year in residence. The precise areas of questioning and the reading list are decided by the supervisory committee in consultation with the student, well in advance of the examinations, but no later than the beginning of the term in which the student intends to take the qualifying examinations.

Dissertation proposal: Each doctoral candidate submits a formal dissertation proposal to the candidate's supervisory committee chair at least 3 weeks before the end of the semester after the qualifying examination. Admission to candidacy: On successfully completing the qualifying examination and the dissertation proposal, and all other course and language requirements, and with the approval of the supervisory committee, students make formal application to the Department and Graduate School for admission to Ph.D. candidacy. Dissertation and its defense: The final years of the program are devoted to dissertation research and writing. The student is expected to present the completed dissertation and defend it at a public oral defense conducted by the supervisory committee.

Mentoring: Each student is assigned a faculty mentor on admission to the program, based on expressions of faculty interest and the student's intended area of concentration. The mentor and graduate coordinator answer questions and provide support for the student in choosing courses and planning a program. By the end of the second semester, all master's degree students must designate their supervisory committee chair and one additional department committee member. By the end of the second semester, all doctoral students must designate their committee chair. By no later than the end of the fourth semester of study, all doctoral students must designate a four-member supervisory committee including the chair and one member from outside the department. For details about the programs listed above, visit http://religion.ufl.edu/graduate-studies/.

Other

Religion

College

College of Liberal Arts and Sciences

Department/School

Religion Department

Religion Program

The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asia
- Religion and nature.

Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religions and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at http://www.religion.ufl.edu under "Graduate Program." In special instances, and with the agreement of the supervisory committee and two sponsoring faculty members, master's degree students may choose an area outside the three specialty fields.

In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest:

- Three references from persons competent to evaluate the applicant's potential for graduate work
- An essay of 3 to 5 double-spaced, typewritten pages identifying the applicant's goals and particular interests pertinent to the three available specialty fields (this essay is extremely important and applicants should attend to it carefully)
- A writing sample.

Beyond these requirements, applicants need to show clear evidence of solid preparation before admission. This usually includes formal study of the primary language in the specialty field. Acceptable scores on the GRE General Test are required. In addition to evidence of preparation and academic promise, the Department gives careful consideration to the fit between an applicant's central scholarly interests and the resources the Department and University have to offer.

Master of Arts: The M.A. degree provides a broad background in the study of religious traditions, theoretical orientations in the discipline, and an initial concentration in one of the three specialty fields. Course work culminates in a thesis and oral examination on the thesis and course work. Total credits: Thirty credit hours are required. These include Method and Theory I and II, the core course(s) of the major field (or equivalent for those not in one of the three specialty fields), and 6 hours of thesis research credits. The additional hours shall consist of further courses in the specialty field, other graduate seminars, and up to 6 hours of research language study. Language study: All M.A. students are required to demonstrate competency in a scholarly language other than English before beginning the thesis. Most languages are acceptable, though students should consult the individual field requirements. The chosen language must be approved by the student's mentor and the graduate coordinator.
Each student, guided by a supervisory committee, will prepare a Master of Arts thesis, acceptable to the Department of Religion and the Graduate School, and undergo an oral examination.

Promotion to doctoral status: The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish that status to be changed. A review and decision will be made by the field faculty and the graduate committee.

Doctor of Philosophy: The Ph.D. program trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religion master's degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master's degree with additional religion course work. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

Course requirements: The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours credited toward the Ph.D. is at the discretion of department faculty. A minimum of 45 hours is devoted to course work at the doctoral level. The specific distribution of course work depends on the specialization but will include intensive work in the major area of specialization, 6 hours of method and theory (If not taken at the M.A. level) and 12 hours devoted to dissertation writing and research.

Language requirements: All doctoral students must demonstrate proficiency in at least one and in many cases two languages other than English. The chosen language(s) as well as how and when the student's competence will be judged must be approved by the student's supervisory committee chair. Frequently language competence is documented by 1) taking an appropriate course or courses in the language with a grade of "B" or better, or 2) passing a translation exam (usually administered by a department member or a language department at the University). Basic course work for scholarly languages will not count toward the required 90 credit hours. However, students studying a scholarly language connected to their research needs (above and beyond basic competence) can receive 6 (or more) credit hours for such advanced courses toward the required 90 total credit hours, with approval of the student's supervisory committee chair.

Qualifying examinations: Qualifying examinations form a bridge between course work and dissertation research. Normally students will take qualifying examinations during their third year in residence. The precise areas of questioning and the reading list are decided by the supervisory committee in consultation with the student, well in advance of the examinations, but no later than the beginning of the term in which the student intends to take the qualifying examinations.

Dissertation proposal: Each doctoral candidate submits a formal dissertation proposal to the candidate's supervisory committee chair at least 3 weeks before the end of the semester after the qualifying examination.

Admission to candidacy: On successfully completing the qualifying examination and the dissertation proposal, and all other course and language requirements, and with the approval of the supervisory committee, students make formal application to the Department and Graduate School for admission to Ph.D. candidacy.

Dissertation and its defense: The final years of the program are devoted to dissertation research and writing. The student is expected to present the completed dissertation and defend it at a public oral defense conducted by the supervisory committee.

Mentoring: Each student is assigned a faculty mentor on admission to the program, based on expressions of faculty interest and the student's intended area of concentration. The mentor and graduate coordinator answer questions and provide support for the student in choosing courses and planning a program. By the end of the second semester, all master's degree students must designate their supervisory committee chair and one additional department committee member. By the end of the second semester, all doctoral students must designate their committee chair. By no later than the end of the fourth semester of study, all doctoral students must designate a four-member supervisory committee including the chair and one member from outside the department. For details about the programs listed above, visit http://www.religion.ufl.edu.
concentration in Jewish Studies

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

Courses

- REL.5***
  - RLG 5143: Religion and Social Change
  - REL 5187
  - RLG 5195: Topics in Religion and Society
  - REL 5199
  - RLG 5297: Topics in Biblical Studies
  - RLG 5338: Topics in Asian Religions
  - RLG 5365: Studies in Islam
  - RLG 5396: Religion and Animals
  - RLG 5495: Topics in Religious Thought
  - RLG 5549: Studies in Christianity
  - RLG 5696: Topics in Jewish Thought
  - RLG 5906: Individual Work
  - RLG 5937: Topics in Religious Studies
    - REL 5xxxA
    - REL 5xxxB
    - REL 5xxxC
    - REL 6***
  - RLG 6035: Method and Theory I
  - RLG 6036: Method and Theory II
  - RLG 6095: Utopias and Dystopias
  - RLG 6107: Core Seminar in Religion and Nature
  - RLG 6125: Religion and Politics in the Americas
  - RLG 6129: Hindu Traditions in America
  - RLG 6138: New Religious Movements
  - RLG 6126: Religion in the Americas
  - RLG 6167: Radical Environmentalism
  - RLG 6181: Ethics and the Natural Sciences
  - RLG 6183: Religion and Environmental Ethics
  - RLG 6187: Nature in Asian Religions
  - RLG 6196: Globalizing the Sacred
  - RLG 6319: Interpreting Asian Religions
  - RLG 6339: Women in the Hindu Tradition
  - RLG 6346: Buddhist Traditions
  - REL 6347: American Buddhism
  - REL 6368: Islam in Asia
  - RLG 6310: Religion and Nature in South Asia
  - RLG 6385: Native Religions in the Americas
  - RLG 6387: Religions in Latin America
  - REL 6397: Hindu Sacred Texts and Their Ritual Context
  - RLG 6910: Supervised Research
  - RLG 6940: Supervised Teaching
  - RLG 6957: Overseas Studies in Religion
  - RLG 6971: Research for Master's Thesis
    - REL 6xxxA
    - REL 6xxxB
  - RLG 7979: Advanced Research
  - RLG 7980: Research for Doctoral Dissertation
  - SRK 6905: Individual Study in Sanskrit

Spanish and Portuguese Studies Department

Chair: G. Lord
Graduate Coordinator: L. Álvarez Castro
Complete faculty listing by department: Follow this link.
The Department of Spanish and Portuguese Studies offers a Master of Arts degree (M.A.) in Spanish (thesis and non-thesis options) and a Doctor of Philosophy degree (Ph.D.) in Romance Languages and Literatures, with a concentration in Spanish. Descriptions of the minimum requirements for both degrees are provided in the General Information section of this catalog. For specific information about the program, please visit the graduate section of the departmental webpage:

http://www.spanishandportuguese.ufl.edu/spanish/graduate.html

Candidates for graduate degrees (both M.A. and Ph.D.) in Spanish can choose between two specializations—literature/culture or linguistics. In conjunction with their master’s or doctoral work, students may also earn a Certificate in Latin American Studies. Though a graduate degree is not offered in Portuguese, extensive course offerings at the graduate level permit students to develop a strong specialization in Portuguese language and Luso-Brazilian literature, film and culture.

The main prerequisite for admission to the M.A. program is an undergraduate major in Spanish, ideally including advanced courses in the proposed area of specialization. Applicants for the Ph.D. should hold an M.A. or equivalent degree in Spanish. At the discretion of the Graduate Studies Committee, candidates from related fields of study (History, Sociology…) may be offered a conditional admission into the Ph.D. program pending the passing of the M.A. Comprehensive Examination within the first year of study.

All M.A. and Ph.D. students in Spanish who are appointed as teaching assistants must take Romance Language Teaching Methods (FOL / FOL 6943). Besides, all M.A. and Ph.D. students specializing in literature and culture must take Introduction to Graduate Study and Research (SPW 6806). Other requirements vary with degree and specialization. For details, consult the graduate section of the departmental webpage (see above).

The Department is able to offer most students a teaching assistantship that provides a maintenance stipend and includes a tuition waiver. Contingent on positive performance in teaching and graduate work, M.A. students are guaranteed four semesters of support, and Ph.D. students are guaranteed eight semesters of support beyond the M.A. In addition, there are several fellowships, supplements and stipends for which students may apply, and summer teaching may be available.

Prospective students are encouraged to review the departmental webpage in order to familiarize themselves with the program and the application process. Only those applications including all required materials and submitted by the advertised deadlines will be considered. For any questions about the program or how to apply, please contact the graduate coordinator:

lacastro@ufl.edu.

Highly qualified UF undergraduate students majoring in Spanish may apply for a combined B.A./M.A. program in Spanish that allows up to 12 graduate credits to be counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details.

Other

Romance Languages (Spanish and Portuguese Studies)

College

College of Liberal Arts and Sciences

Department/School

Spanish and Portuguese Studies Department

Degrees Offered with a Major in Romance Languages

Doctor of Philosophy

concentration in Spanish

Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW/6930: Special Study in Romance Languages and Literatures
- SPN 6166: Teaching Spanish for the Professions
- SPN 6940: Supervised Teaching
- SPW 6545: Spanish Romanticism
- SPN 6705: Foundations of Hispanic Linguistics
- SPN 6845: History of the Spanish Language
- SPS 6906: Individual Study
- SPS 6910: Supervised Research
- SPS 6940: Supervised Teaching
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation
- SPW 6535: Spanish Romanticism

Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6715: Formal Instruction and Acquisition of Spanish
- SPN 6735: Special Study in Spanish Linguistics
- SPN 6785: Advanced Spanish Phonetics
- SPN 6827: Sociolinguistics of the Spanish-Speaking World
- SPN 6835: Spanish and Spanish-American Dialectology
- SPN 6845: History of the Spanish Language
- SPN 6848: Medieval Spanish Linguistics
- SPN 6855: Structure of Spanish
- SPN 6856: Spanish in Contact: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FOL 6943: Romance Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6226: Spanish-American Narrative from the origins to Criollismo
- SPW 6249: Latin American Narrative of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6286: Contemporary Spanish-American Narrative II
- SPW 6306: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPW 6425: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6729: The Generation of 1898
- SPW 6806: Introduction to Graduate Study and Research
- SPW 6902: Special Study in Spanish or Spanish-American Literature
- SPW 6905: Individual Work
- SPW 6910: Supervised Research
- SPW 6934: Seminar in Spanish American Literature and Culture
- SPW 6938: Seminar in Spanish Literature and Culture
- SPW 6971: Research for Master's Thesis
- SPW 7979: Advanced Research
- SPW 7980: Research for Doctoral Dissertation

Portuguese

- POW 6276: Twentieth-Century Brazilian Novel
- POW 6385: Brazilian Lyric
- POW 6386: Brazilian Drama
- POW 6905: Individual Work
- POW 6930: Rotating Topics in Brazilian or Portuguese Literature

Spanish

College

College of Liberal Arts and Sciences

Department/School

Spanish and Portuguese Studies Department

Degrees

Master of Arts
Master of Arts in Teaching

Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW 6930: Special Study in Romance Languages and Literatures
- SPN 6166: Teaching Spanish for the Professions
- SPN 6940: Supervised Teaching
- SPW 6545: Spanish Romanticism
- SPN 6705: Foundations of Hispanic Linguistics
- SPN 6845: History of the Spanish Language
- SPS 6905: Individual Study
- SPS 6910: Supervised Research
- SPS 6940: Supervised Teaching
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation
- SPW 6535: Spanish Romanticism

Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6715: Formal Instruction and Acquisition of Spanish
- SPN 6735: Special Study in Spanish Linguistics
- SPN 6785: Advanced Spanish Phonetics
- SPN 6827: Sociolinguistics of the Spanish-Speaking World
- SPN 6835: Spanish and Spanish-American Dialectology
- SPN 6845: History of the Spanish Language
- SPN 6848: Medieval Spanish Linguistics
- SPN 6855: Structure of Spanish
- SPN 6856: Spanish in Contact: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FOL 6943: Romance Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6236: Spanish-American Narrative from the origins to Criollismo
- SPW 6269: Spanish Novel of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6286: Contemporary Spanish-American Narrative II
- SPW 6306: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPN 6425: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6729: The Generation of 1898
- SPW 6806: Introduction to Graduate Study and Research
- SPW 6902: Special Study in Spanish or Spanish-American Literature
- SPW 6905: Individual Work
- SPW 6910: Supervised Research
- SPW 6934: Seminar in Spanish American Literature and Culture
- SPW 6938: Seminar in Spanish Literature and Culture
- SPW 6971: Research for Master's Thesis
- SPW 7979: Advanced Research
- SPW 7980: Research for Doctoral Dissertation

Portuguese

- POW 6276: Twentieth-Century Brazilian Novel
- POW 6385: Brazilian Lyric
- POW 6388: Brazilian Drama
- POW 6905: Individual Work
- POW 6930: Rotating Topics in Brazilian or Portuguese Literature

Statistics Department
Graduate programs are available leading to Master of Science in Statistics, Master of Statistics, and Doctor of Philosophy degrees. Minimum requirements for these degrees are described in the General Information section of this catalog.

Both master's programs usually require 2 years of course work including material covered in STA 6208, 6208, STA 6326, STA 6327, STA 6246, and STA 6329. In addition to earning a "Ph.D. pass" on the first-year evaluation, requirements for the Ph.D. degree include STA 6466, 6467, STA 7249, and STA 7346.

Interdisciplinary programs: The Department offers a co-major program in conjunction with the Fisher School of Accounting leading to the Doctor of Philosophy degree in statistics and business administration accounting. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Departments of Mathematics, Industrial and Systems Engineering, and Finance, Insurance, and Real Estate. For information on these programs, consult the departmental graduate coordinator.

Combined program: The Department offers a bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Statistics

College

College of Liberal Arts and Sciences

Department/School

Statistics Department

Degrees Offered with a Major in Statistics

Doctor of Philosophy

without a concentration

concentration in Quantitative Finance

Master of Science in Statistics

Master of Statistics

Statistics Departmental Courses

- STA 5106: Computer Programs in Statistical Analysis
- STA 5223: Applied Sample Survey Methods
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 5503: Categorical Data Methods
- STA 5507: Applied Nonparametric Methods
Women's Studies Department

Director: Bonnie Moradi  
Graduate Coordinator: Kendal Broad

Complete faculty listing by department: Follow this link.

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as a two certificates. These options give students the opportunity to take advantage of scholarship in this dynamic field, and to become acquainted with different research perspectives and methodologies. Students become well grounded in theories of gender in cultural systems and in ways that gender intersects with other categories of difference such as race, ethnicity, religion, class, sexuality, nation, physical and mental ability, age, and economic and civil status. Faculty and students employ feminist and other appropriate theoretical approaches and methodologies.

The Center offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring. The Center in Ustler Hall houses archives, a small library, offices, and meeting space.

For more information about our program, please see the program page below or our website: [http://web.wst.ufl.edu](http://web.wst.ufl.edu).

Other

Women's Studies

College

College of Liberal Arts and Sciences

Department/School

Women's Studies Department
Women's Studies Program Information

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as two certificates. The Center also offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring.

**Master of Arts (thesis and non-thesis):** The Center offers the Master of Arts (M.A.) thesis degree option, which requires the completion and defense of a thesis (30 credit hours), and the Master of Arts non-thesis degree option, which requires completion and defense of a project or paper (30 credit hours). All Master's students take a core curriculum of 9 graduate credits (3 courses). For the thesis M.A., the remaining 21 hours consist of 15 credits of approved electives and 6 thesis credits. For the non-thesis M.A., 21 credits of approved electives are required.

Required courses for all MA students (9 credits):

- WST 5933: Proseminar in Women's Studies
- WST 6508: Advanced Feminist Theory
- WST 6035: Special Topics in Women's Studies

**Thesis**

15 approved credits at 5000-level or higher

6 credits of WST 6971: Research for Master's Thesis

(3 of which must be taken in the final graduating term)

Total for MA thesis: 30 credits

**Non-thesis**

21 approved credits at 5000-level or higher;

at least 6 of these credits must be classes in WST.

Total for MA non-thesis: 30 credits

**M.A./J.D. Joint Degree:** UF offers a number of Bachelor's/Master's programs for superior students. The university created combined degree programs to provide academically talented students an opportunity to complete both a bachelor's and a master's degree in a shorter period of time. The program allows you to double-count graduate courses toward both degrees, thus reducing the time it would normally take to graduate by a semester or more. The combined-degree program reduces the cost of both degrees and enhances your marketability for career advancement.

**Concurrent degree -MA in Women's Studies and an MA in Mass Communications (MAMC) with specialization in Journalism:** When appropriate, the Center for Women's Studies and Gender Research will work with individual students to develop a collaborative degree program with the College of Journalism and Communication. At the University of Florida, students may apply to complete Master's degrees in two different programs or two Master's degrees in the same program concurrently. Those interested should discuss the proposed study with the office of Graduate Student Records (392-4643, 106 Grinter) before applying. Written approval is needed from each academic unit and the Graduate School Dean. The student must be officially admitted to both programs through regular procedures. No more than 9 credits from the first program may be applied toward the second.

**M.A./J.D. Joint Degree:** The faculties of the Levin College of Law and Women's Studies in the College of Liberal Arts and Sciences have approved a joint degree program culminating in both a J.D. degree, awarded by the College of Law, and an M.A. degree (thesis or non-thesis), awarded by the College of Liberal Arts and Sciences. Under this joint degree program, a student can obtain both degrees in approximately one year less than it would take to obtain both degrees if pursued consecutively. A student must satisfy the curriculum requirements for each degree before either degree is awarded. At least 12 credits must be taken in each program. The graduate program in Women's Studies will accept 12 credits of appropriate professional courses toward the M.A. degree. The 12 credits selected from the professional curriculum must be approved by the Graduate Coordinator upon the recommendation of the student's graduate supervisory committee. Reciprocally, the law school will accept 12 credits of appropriate Women's Studies courses toward the satisfaction of the J.D. degree. Admission to the second program is required no later than the end of the third consecutive semester after beginning one degree of the joint degree program. A summer term is counted as a single semester.

**Certificates (M.A. or Ph.D. level):** Two graduate certificates in Women's Studies for master's and doctoral students are offered in conjunction with degree programs in other academic units. The Graduate Certificate in Women's Studies and the Graduate Certificate in Gender and Development require specific sets of course work, designed to give students a thorough grounding in the discipline. The Graduate Certificate in Women's Studies offers students a general overview of the field. The Graduate Certificate in Gender and Development allows students to focus on issues related to gender, economic development, and globalization.

Graduate courses in women's studies are also available from the following academic units or programs:

- Agricultural and Life Sciences
- Anthropology
- Counselor Education
- English
- History
- Journalism and Communication
- Languages, Literatures, and Cultures
- Latin American Studies
- Linguistics
- Medicine
- Philosophy
- Psychology
- Religion
- Sociology
- Teaching and Learning

For more information, please see our website: [http://web.wst.ufl.edu](http://web.wst.ufl.edu)

**Degrees Offered with a Major in Women's Studies**

**Master of Arts**
Courses

- WST 5933: Proseminar in Women's Studies
- WST 6348: Ecofeminism
- WST 6508: Advanced Feminist Theory
- WST 6905: Independent Study
- WST 6935: Special Topics in Women's Studies
- WST 6936: Feminist Challenges to Disciplinary Paradigms
- WST 6946: Internship in Applied Women's Studies and Gender Research
- WST 6957: International Studies in Women's Studies and Gender Research
- WST 6971: Research for Master's Thesis

Biochemistry and Molecular Biology Department

Chair: James B. Flanagan.
Graduate Coordinator: Kevin Brown

Complete faculty listing by department: [Follow this link](http://biochem.med.ufl.edu/).

Biochemistry and Molecular Biology Department faculty mentor Ph.D. students in the College of Medicine interdisciplinary program (IDP) in medical sciences. Students interested in pursuing a doctoral degree can view specific features of the biochemistry and molecular biology concentration at [http://biochem.med.ufl.edu/](http://biochem.med.ufl.edu/) and [http://idp.med.ufl.edu](http://idp.med.ufl.edu). For admission information, visit the IDP website. Department faculty also mentor Ph.D. students in other college programs and participate actively in the research and teaching functions of various centers such as the Center for Epigenetics and the Center for Structural Biology. The Department offers a wide variety of courses for graduate students studying in the life sciences. The research expertise of the faculty spans the areas from cell biology, metabolism, and molecular biology to physical biochemistry/structural biology. Current research interests include viral protease inhibitors, viral RNA replication, bioenergetics and proton translocation, X-chromosome structure and function, cytoskeletal assembly and dynamics, enzyme mechanism and control, chromatin structure, gene expression and regulation, mitochondrial biogenesis and evolution, the genetics of inherited disease, nutrient membrane transporters, protein site-directed mutagenesis, ribosome structure and function, signal transduction, structural biology and dynamics of macromolecules, protein-nucleic acid interactions, transgenic animal models, and virus crystal structure. Prospective graduate students should have adequate training in chemistry and biology. Minor deficiencies may be made up immediately after entering graduate school. Previous undergraduate experience in a research laboratory is highly recommended. Doctoral students are required to take a core IDP course in fall term of their first year; and beginning in spring term, students take advanced classes in areas of interest. Specific advanced-level courses may be recommended by the student's supervisory chair and committee. The following courses are open to all graduate students and advanced undergraduates. Additional courses are listed in the Advanced Concentration in Biochemistry and Molecular Biology section under Medical Sciences.

Other

Biochemistry and Molecular Biology

College

College of Medicine

Department/School

Biochemistry and Molecular Biology Department

Degrees Offered with a Major in Biochemistry and Molecular Biology

Master of Science

Courses

- BCH 5413: Mammalian Molecular Biology and Genetics
- BCH 6040: Research Discussion in Biochemistry and Molecular Biology
- BCH 6107: Biophysical Techniques in Proteomics and Protein Science
- BCH 6206: Advanced Metabolism
- BCH 6207: Advanced Metabolism: Role of Membranes in Signal Transduction and Metabolic Control
- BCH 6208: Advanced Metabolism: Regulation of Key Reactions in Carbohydrate and Lipid Metabolism
- BCH 6209: Advanced Metabolism: Regulation of Key Reactions in Amino Acid and Nucleotide Metabolism
BCH 6415: Advanced Molecular and Cell Biology
BCH 6740: Physical Biochemistry/Structural Biology
BCH 6741C: Magnetic Resonance Imaging and Spectroscopy in Living Systems
BCH 6744: Molecular Structure Determination by X-ray Crystallography
BCH 6744L: Molecular Structure and Dynamics of NMR Spectroscopy Laboratory
BCH 6745: Molecular Structure and Dynamics of NMR Spectroscopy
BCH 6745L: Molecular Structure and Dynamics of NMR Spectroscopy Laboratory
BCH 6746: Structural Biology: Micromolecular Structure Determination
BCH 6747: Structural Biology/Advanced Physical Biochemistry: Spectroscopy and Hydrodynamics
BCH 6749C: Numerical Methods in Structural Biology
BCH 6876: Recent Advances in Membrane Biology
BCH 6877: Recent Advances in Structural Biology
BCH 6878: Recent Advances in Cytoskeletal Processes
BCH 6905: Independent Studies in Biochemistry and Molecular Biology
BCH 6936: Biochemistry Seminar
BCH 6971: Research for Master's Thesis
BCH 7410: Advanced Gene Regulation
BCH 7412: Epigenetics of Human Disease and Development
BCH 7414: Advanced Chromatin Structure
BCH 7515: Structural Biology/Advanced Physical Biochemistry: Kinetics and Thermodynamics
BCH 7979: Advanced Research
BCH 7980: BioChem Doctoral Research

College of Medicine Courses

ENU 6652: Clinical Rotation in Diagnostic Radiology
ENU 6657: Diagnostic Radiological Physics
GEY 5935: Topics in Gerontology
GEY 6220: Overview of Geriatric Care Management
GEY 6646: Issues and Concepts in Gerontology
GEY 6905: Independent Study in Gerontology
GEY 6993: Professional Development in Gerontology/Geriatrics
GMS 5905: Special Topics in Biomedical Sciences
GMS 6001: Fundamentals of Biomedical Sciences I
GMS 6003: Fundamentals of Biomedical Sciences II
GMS 6012: Laboratory Practicum A
GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
GMS 6029: Brain Journal Club
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GMS 6034: Advanced Virology I: Genetics and RNA
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GMS 6036: Molecular Virology III: DNA Viruses
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GMS 6074: Comparative and Evolutionary Neurobiology
GMS 6077: Neural Degeneration and Regeneration
GMS 6078: Synaptic Function and Plasticity
GMS 6079: Computers in Biology
GMS 6090: Basic Magnetic Resonance Imaging
GMS 6090: Research in Medical Sciences
- GMS 6099: Introduction to NIH Grant Writing for Biomedical Sciences
- GMS 6100: Foundations in Aging and Geriatric Research
- GMS 6121: Infectious Diseases
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA Microarray Data Analysis
- GMS 6160: Introduction to Oral Biology I
- GMS 6161: Introduction to Oral Biology II
- GMS 6169: Antimicrobial Strategies
- GMS 6173: Stomatognathic System: Form and Function
- GMS 6180: Seminar
- GMS 6189: HIV Journal Club
- GMS 6190: Research Conference in Oral Biology
- GMS 6195: Epigenetics Journal Club
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
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- GMS 6223: Drosophila Neurogenetics: from Development to Function
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- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
- GMS 6234: Introduction to phylogeny: A practical approach to molecular phylogenetics of pathogens
- GMS 6290: Genetics/Genomics Program Graduate Seminar
- GMS 6312: Clinical Chemistry and Toxicology
- GMS 6313: Clinical Chemistry and Toxicology: A Rotation
- GMS 6331: Stem Cell Biology
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
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- GMS 6400C: Principles of Physiology
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- GMS 6497: Seminar on Vision
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- GMS 6690: Molecular Cell Biology Journal Club
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- GMS 6717: Lifestyle Interventions in Aging II: Physiologic Aspects
- GMS 6771: Clinical Neuroscience of Aging
- GMS 6876: Law & Ethics of Aging
- GMS 6845: Clinical & Translational Research Practicum
- GMS 6852: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
- GMS 6885: CTS Journal Club
- GMS 6903: Manuscript and Abstract Writing for Clinician/Scientists
- GMS 6970: Individual Study
- GMS 6980: Current Topics in Immunotherapy
- GMS 6983: Fundamentals of Vascular Physiology and Pathology
- GMS 5604: Medical Human Embryology
- GMS 5605: Medical Anatomy
- GMS 5606L: Medical Anatomy Lab
- GMS 5613: Medical Human Anatomy by Diagnostic Imaging
- GMS 5630: Medical Histology
- GMS 5681: Biological Imaging Techniques
Biostatistics Department

College of Public Health and Health Professions
College of Medicine

Chair: P. Qiu
Graduate Coordinator: Babette Brumback
Complete faculty listing by department: Follow this link.

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration in biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/.

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/.

Other

Biostatistics (Medicine)

College

College of Public Health and Health Professions
College of Medicine

Department

Biostatistics Department
Degrees

Doctor of Philosophy

Master of Science

Biostatistics Departmental Courses

- GMS 6818: Design and Conduct Clinical Trials I
- GMS 6819: Design and Conduct Clinical Trials II
- GMS 6827: Advanced Clinical Trial Methods
- GMS 6841: Design and Analysis of Translational Research in Biomedical Sciences
- GMS 6861: Applied Biostatistics I
- GMS 6862: Applied Biostatistics II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6020: Clinical Trial Methods
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6050C: Biostatistical Methods I
- PHC 6051: Biostatistical Methods II
- PHC 6052: Introduction to Biostatistical Methods
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6055: Biostatistical Computing Using R
- PHC 6063: Biostatistical Consulting
- PHC 6080: SAS for Public Health - Data
- PHC 6081: SAS for Public Health - Analysis
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6937: Special Topics in Public Health
- PHC 6946: Public Health Internship
- PHC 7013: Bias in Observational Research
- PHC 7056: Analysis of Longitudinal Data
- PHC 7066: Large Sample Theory
- PHC 7925: Biostatistics Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- STA 5223: Applied Sample Survey Methods
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 5503: Categorical Data Methods
- STA 5701: Applied Multivariate Methods
- STA 5715: Applied Survival Analysis
- STA 6092: Applied Statistical Practice
- STA 6166: Statistical Methods in Research I
- STA 7249: Generalized Linear Models
- STA 7346: Statistical Inference

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
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- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6019: Advanced In-Vitro Fertilization Laboratory Practicum
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- GMS 6073: Developmental Neurobiology
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
- GMS 6078: Synaptic Function and Plasticity
- GMS 6079: Computers in Biology
- GMS 6080: Basic Magnetic Resonance Imaging
- GMS 6090: Research in Medical Sciences
- GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
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- GMS 6411: Fundamentals of Cardiovascular Physiology
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- GMS 6413: Advances in Hypertension Research
- GMS 6414: Advanced Renal Physiology
- GMS 6415: Fundamentals of Gastrointestinal Physiology
- GMS 6416: Human Endocrinology and Anatomy of Reproduction
- GMS 6471: Fundamentals of Physiology and Functional Genomics I
- GMS 6472: Fundamentals of Physiology and Functional Genomics II
- GMS 6473: Fundamentals of Physiology and Functional Genomics III
Epidemiology Department

College of Public Health and Health Professions
College of Medicine

Chair: Linda Cottler
Ph.D. Program Director: Cindy Prins
M.S. Program Director: Catherine Woodstock Striley

Complete faculty listing by department: Follow this link.

The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: http://epidemiology.phhp.ufl.edu

Other

Epidemiology (Medicine)
College of Medicine

Department

Epidemiology Department

Epidemiology Program Information

The Ph.D. in Epidemiology program is in the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The program requires a minimum of 90 semester credits beyond the bachelor's degree. All students must complete a minimum of 9 credits in Epidemiology foundation course work, at least 36 credits of epidemiology core courses, 6 credits of statistics electives, 18 credits of epidemiology electives, 15 credits of general electives, and 12 credits of dissertation research. Students must also complete at least two mentored teaching experiences. All entering students who do not hold MPH or equivalent degrees are also required by the College of Public Health and Health Professions to complete an Introduction to Public Health course.

Students in the Ph.D. program in Epidemiology are admitted to work with a research mentor on that mentor's project, and that research mentor funds the student. Other funding sources are available such as the Graduate School and the Department.

The core course work is designed to incorporate competencies recommended in the report of the 2002 workshop on doctoral education in epidemiology from the American College of Epidemiology and the Association of Schools and Programs of Public Health, and criteria for applied epidemiology competencies. The overall outcomes expected of all graduates are as follows:

1. Apply epidemiological methods to address critical and/or emerging public health issues through the use of:
   - Appropriate epidemiological research designs
   - Advanced statistical analysis methods for health studies
   - Data structures and measurement methods for health research
   - Biological, behavioral and social theory applied to the understanding and prevention of contemporary threats to health and well-being
   - Depth of knowledge in an area of specialization

2. Assimilate the history, philosophy, and ethical principles of epidemiology into current research

3. Develop grant proposals and manage research projects

4. Write scientific papers for publication in peer-reviewed journals, and communicate research results to scientists, policy makers, and the public

5. Compete successfully for research and teaching positions in academic institutions, federal or state agencies, or private institutions.

Details of the Ph.D. in Epidemiology program and application information are available at our website: [http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2](http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2).

The Master of Science in Epidemiology degree is offered by the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The 36 credit program prepares students for careers in the public health arena that are focused on the surveillance and prevention of illnesses among diverse populations around the world. Students are trained in the foundational aspects of epidemiology including person, place and time, risk and protective factors, and the social determinants of health. Areas of focus include: chronic disease, infectious disease, geriatric, environmental, psychiatric, social, cancer and maternal and child health epidemiology.

Graduates of the M.S. in Epidemiology program are trained to:

- Apply surveillance, assessment, evaluation, and other foundational epidemiological research designs to areas of interest,
- Choose appropriate measurement and analytic methods to study health and disease in a population,
- Utilize biological, behavioral and social theory to understand how to prevent and intervene to promote the public health.

The program consists of required coursework and the successful completion of a thesis. The thesis is required to demonstrate skill in independent inquiry and investigation, under the tutelage of a mentor. Students may complete the course in three semesters with 36 credits.

More program information, including specific course requirements and elective options, is described at the program website: [http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2](http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2).

Degrees Offered with a Major in Epidemiology

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science
Master of Science

Epidemiology (PHHP/COM) Departmental Courses

- GMS 6820: Advanced Epidemiology Methods
- PHC 6008: Cardiovascular Epidemiology
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
- PHC 6034: Epidemic Investigation
- PHC 6070: Epidemiology of Aging
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6711: Measurement in Epidemiology and Outcomes Research
- PHC 6937: Special Topics in Public Health
- PHC 6938: Oral and Craniofacial Epidemiology
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7007: Cancer Epidemiology
- PHC 7038: Psychiatric Epidemiology
- PHC 7065: Critical Skills in Epidemiological Data Management
- PHC 7427: Ethics in Population Science
- PHC 7727: Grant Writing for Population Health Research
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7902: Epidemiology Supervised Research Writing Circle
- PHC 7910: International Field Epidemiology
- PHC 7916: National Field Epidemiology
- PHC 7934: Seminar I: Epidemiology Past, Present, and Future
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6846: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
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- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
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- GMS 6416: Human Endocrinology and Anatomy of Reproduction
- GMS 6471: Fundamentals of Physiology and Functional Genomics I
- GMS 6472: Fundamentals of Physiology and Functional Genomics II
- GMS 6473: Fundamentals of Physiology and Functional Genomics III
- GMS 6483: Theories of Aging
- GMS 6485: Population Based Research on Aging
- GMS 6486: Fundamentals of Biological Aging
- GMS 6490C: Research Methods in Physiology
- GMS 6491: Journal Club in Physiology
- GMS 6495: Seminar in Physiology
- GMS 6496: Recent Advances in Physiology
- GMS 6497: Seminar on Vision
- GMS 6506: Biologic Drug Development
- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6609: Advanced Gross Anatomy
- GMS 6621: Vision
- GMS 6622: Mitochondrial Biology in Aging and Disease
- GMS 6635: Organization of Cells and Tissues
- GMS 6642: Morphogenesis: Organ Systems I
- GMS 6643: Morphogenesis: Organ Systems II
- GMS 6644: Apoptosis
- GMS 6690: Molecular Cell Biology Journal Club
- GMS 6715: Lifestyle Interventions in Aging I: Behavioral Aspects & Clinical Outcomes
- GMS 6717: Lifestyle Interventions in Aging II: Physiologic Aspects
- GMS 6771: Clinical Neuroscience of Aging
- GMS 6876: Law & Ethics of Aging
- GMS 6815: Clinical & Translational Research Practicum
- GMS 6850: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
- GMS 6895: CTS Journal Club
- GMS 6903: Manuscript and Abstract Writing for Clinician/Scientists
- GMS 6970: Individual Study
- GMS 6983: Current Topics in Immunotherapy
- GMS 6683: Fundamentals of Vascular Physiology and Pathology
For more information contact the Master's Program Coordinator, Molecular Genetics and Microbiology, P.O. Box 100266, College of Medicine, Gainesville, FL 32610, Telephone (352)392-

Biotechnology: This Master of Science program is for students seeking careers in the biomedical industry as research or managerial associates; students seeking careers as teachers or educators at any level, but primarily high school or junior college; or students seeking an in-depth understanding of modern biology and scientific research as an end in itself or in preparation for further graduate study. The foundation of the M.S. program is a basic understanding of molecular and cell biology and the performance of a high-quality research project, culminating in a thesis, under the direction of a skilled mentor, with supervision by a committee composed of members of the Graduate Faculty. Specialization may be in any of the fields of research being pursued at the College of Medicine including but not limited to molecular genetics, gene therapy, bacterial or viral pathogenesis, protein structure, toxicology, mammalian genetics, wound healing, and congenital eye diseases.

For more information contact the Master's Program Coordinator, Molecular Genetics and Microbiology, P.O. Box 100266, College of Medicine, Gainesville, FL 32610, Telephone (352)392-3314.

Other

Molecular Genetics and Microbiology

College
College of Medicine

Department/School

Molecular Genetics and Microbiology Department

Courses

- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA Microarray Data Analysis
- GMS 6169: Antimicrobial Strategies
- GMS 6181: Special Topics in Microbiology
- GMS 6190: Seminar
- GMS 6195: Epigenetics Journal Club
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
- GMS 6221: Ethics in Genetics
- GMS 6231: Genomics and Bioinformatics
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6251: Molecular Therapy I – Vectors and Molecular Mechanisms
- GMS 6252: Molecular Therapy II – Disease Targets and Applications
- GMS 6253: Molecular Therapy III – Immunology of Gene Transfer
- GMS 6250: Genetics/Genomics Program Graduate Seminar
- GMS 6338: Recent Advances in Cancer Metastasis
- GMS 6506: Biologic Drug Development
- GMS 6920: Genetics Journal Colloquy
- GMS 6921: Immunology/Microbiology Journal Colloquy
- GMS 6943: Master's Translational Biotechnology Internship
- GMS 7093: Introduction to Clinical and Translational Research
- GMS 7191: Research Conference
- GMS 7192: Journal Colloquy
- GMS 7194: Biotechnology Seminar
- PCB 5235L: Experiments in Immunology

Degrees

Doctor of Philosophy - Mammalian Genetics

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GYE 5935: Topics in Gerontology
- GYE 6220: Overview of Geriatric Care Management
- GYE 6646: Issues and Concepts in Gerontology
- GYE 6905: Independent Study in Gerontology
- GYE 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
- GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
- GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
- GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
- GMS 6029: Brain Journal Club
- GMS 6031: Molecular Immunology
- GMS 6032: Mechanisms of Host Defense
- GMS 6033: Immunity in Health and Disease
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Mechanisms of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6070: Sensory and Motor Systems
- GMS 6072: Neuroendocrinology and Neuroimmunology
- GMS 6073: Developmental Neurobiology
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
- GMS 6078: Synaptic Function and Plasticity
- GMS 6079: Computers in Biology
- GMS 6080: Basic Magnetic Resonance Imaging
- GMS 6090: Research in Medical Sciences
- GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
- GMS 6099: Foundations in Aging and Geriatric Research
- GMS 6121: Infectious Diseases
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA Microarray Data Analysis
- GMS 6160: Introduction to Oral Biology I
- GMS 6161: Introduction to Oral Biology II
- GMS 6169: Antimicrobial Strategies
- GMS 6173: Stem Cell Biology: Form and Function
- GMS 6181: Special Topics in Microbiology
- GMS 6190: Seminar
- GMS 6191: HIV Journal Club
- GMS 6193: Research Conference in Oral Biology
- GMS 6195: Epigenetics Journal Club
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
- GMS 6221: Ethics in Genetics
- GMS 6223: Drosophila Neurogenetics: from Development to Function
- GMS 6231: Genomics and Bioinformatics
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
- GMS 6234: Introduction to phylogenetics: A practical approach to molecular phylogenetics of pathogens
- GMS 6290: Genetics/Genomics Program Graduate Seminar
- GMS 6312: Clinical Chemistry and Toxicology
- GMS 6313: Clinical Chemistry and Toxicology: A Rotation
- GMS 6331: Stem Cell Biology
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
- GMS 6337: B Cell Development in Health and Disease
- GMS 6361: Special Topics in Pathology
- GMS 6372: Special Topics in Immunology
- GMS 6400C: Principles of Physiology
- GMS 6405: Fundamentals of Endocrine Physiology
- GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
- GMS 6408: Fundamentals of Renal Physiology
- GMS 6410: Physiology of the Circulation of Blood
- GMS 6411: Fundamentals of Cardiovascular Physiology
Medicinal Chemistry Department

College of Pharmacy

Chair: M. O. James
Graduate Coordinator: H. Luesch

Complete faculty listing by department: Follow this link.

The College of Pharmacy offers the Doctor of Philosophy degree in pharmaceutical sciences with a concentration in medicinal chemistry. Medicinal chemistry is a unique blend of the physical and biological sciences. The scope of the field is sufficiently broad to give students with many different science backgrounds a rewarding and challenging program of study. Areas of active research include organic synthesis of medicinal agents, metal chelate design, prodrugs and topical drug delivery, drug metabolism, molecular toxicology, molecular biology, combinatorial chemistry, neurochemistry, analytical chemistry, molecular modeling, natural products, and drug discovery.

The applicant should have an undergraduate degree in pharmacy, chemistry, biology, or premedical sciences. A background in calculus and physical and organic chemistry is required. In addition to graduate medicinal chemistry courses in the College of Pharmacy, graduate courses in chemistry and biochemistry are required for the program.

The College also offers the Master of Science in Pharmacy degree in pharmaceutical sciences (nonthesis option) with concentrations in both forensic drug chemistry and forensic serology and DNA in a distance learning format. Minimum requirements for the M.S.P. and Ph.D. degrees are described in the General Information section of this catalog.
The Department participates in the interdisciplinary concentration in toxicology. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

**Other**

**Pharmaceutical Sciences (Medicinal Chemistry)**

**College**

[College of Pharmacy](#)

**Department/School**

[Medicinal Chemistry Department](#)

Degrees Offered With a Major in Pharmaceutical Sciences

**Doctor of Philosophy**

- concentration in Medicinal Chemistry
  
  *optional second concentration in Clinical and Translational Science*

- concentration in Toxicology

**Master of Science in Pharmacy**

- concentration in Pharmaceutical Chemistry

- concentration in Medicinal Chemistry

- concentration in Forensic Serology and DNA

- concentration in Forensic Science

- concentration in Forensic Drug Chemistry

- concentration in Clinical Toxicology
Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6952: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6290: Pharmaceutical Fraud and Abuse
- PHA 6291: Pharmaceutical Health Care Systems
- PHA 6717: Measurement in Pharmacy Administration Research
- PHA 6793: Evidentiary Basis of Pharmaceutical Use
- PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
- PHA 6798: The Use and Abuse of Statistics in Drug Regulation
- PHA 6799: Patient Safety Program Evaluation
- PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA 6860: Prevention of Pharmaceutical Crimes
- PHA 6891: Introduction to Pharmacoepidemiology
- PHA 6892: Practices and Procedures of the IRB
- PHA 6893: Research Ethics
**Pharmaceutics Departmental Courses**

- PHA6116: In Vivo and In Vitro Stability of Drugs
- PHA6118: Molecular Diversity
- PHA6125: Pharmacokinetics and Biopharmaceutics
- PHA6170C: Pharmaceutical Product Formulation
- PHA6183: Pharmaceutical Gene Delivery
- PHA6185: Pharmaceutical Drug Development
- PHA6416: Pharmaceutical Analysis I
- PHA6427: Pharmacogenetics of Drug Metabolism
- PHA6440: Seminar in Drug Discovery
- PHA6449: Pharmacogenomics
- PHA6630: Medication Therapy Management: A Hematologic Focus
- PHA6631: Foundations of Medication Therapy Management I
- PHA6632: Foundations of Medication Therapy Management II
- PHA6633: Medication Therapy Management: A Cardiovascular Focus
- PHA6634: Medication Therapy Management: An Endocrine Focus
- PHA6635: Medication Therapy Management: A Renal Focus
- PHA6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA6637: Medication Therapy Management: A Psychiatric Focus
- PHA6638: Medication Therapy Management: A Neurologic Focus
- PHA6639: Medication Therapy Management: A Respiratory Focus
- PHA6894: Introduction to Graduate Studies
- PHA6896: Preclinical Drug Evaluation

**Pharmacodynamics Courses**

- PHA5531: Neurotoxicology
- PHA6508: Systems Physiology and Pathophysiology I
- PHA6509: Systems Physiology and Pathophysiology II
- PHA6512L: Experiential Research Training in Pharmacodynamics
- PHA6521C: Research Techniques in Pharmacodynamics
- PHA6522L: ICBR Molecular Techniques Laboratory
- PHA6540: Neurochemical Foundation of Pharmacodynamics
- PHA7939: Journal Colloquy in Pharmacodynamics

**Pharmacology Courses**

- GMS6563: Molecular Pharmacology
- GMS6590: Seminar in Pharmacology
- GMS6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS6735: Neuropharmacology
- GMS7593: Topics in Pharmacology and Toxicology

**College of Pharmacy Courses**

- PHA5171: Pharmaceutical Biotechnology
- PHA6521C: Research Techniques in Pharmacodynamics
- PHA6806: Pharmacoeconomic Modeling
- PHA6910: Supervised Research
- PHA6935: Selected Topics in Pharmacy
- PHA6936: Advanced Topics in Pharmaceutical Sciences
- PHA6938: Research Seminar
- PHA6940: Supervised Teaching
- PHA6971: Research for Master's Thesis
- PHA7979: Advanced Research
- PHA7980: Research for Doctoral Dissertation

**Pharmaceutics Department**

*Chair*: H. C. Derendorf.

*Graduate Coordinator*: A. Palmieri III.

*Complete faculty listing by department: Follow this link.*

The Department of Pharmaceutics offers the Doctor of Philosophy in pharmaceutical sciences. Pharmaceutics is the scientific endeavor concerned with the design, formulation, evaluation, and
use of drug delivery systems. A foundation in physical chemistry, chemistry, mathematics, and in the life sciences, is necessary. Its domain extends from studies of the physiochemical properties of drugs and related molecules to investigations of the mechanisms of physiological processes affecting drug delivery and therapeutic effectiveness. The Department's general focus involves studying the design and evaluation of traditional and novel dosage forms for delivering drug molecules and macromolecules. The design involves physical chemical studies and development of analytical techniques involving spectroscopy and chromatography. Evaluation includes development of sensitive analytical techniques for the drug in biological fluids and subsequent biopharmaceutical and clinical pharmacokinetic studies.

Other

Pharmaceutical Sciences (Pharmaceutics)

College

College of Pharmacy

Department/School

Pharmaceutics Department

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

concentration in Pharmacy

optional second concentration in Clinical and Translational Science

Master of Science in Pharmacy

without a concentration

concentration in Pharmacy

Pharmaceutics Departmental Courses

- PHA6116: In Vivo and In Vitro Stability of Drugs
- PHA6118: Molecular Diversity
- PHA6126: Pharmacokinetics and Biopharmaceutics
- PHA6170C: Pharmaceutical Product Formulation
- PHA6183: Pharmaceutical Gene Delivery
Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6852: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmaceutical Microeconomics
The Department of Pharmacodynamics offers the Doctor of Philosophy in the pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the interdisciplinary toxicology concentration (see Interdisciplinary Graduate Studies in this catalog). Pharmacodynamics is an integrated field of study involving pharmacology, physiology, and toxicology in a holistic approach to drug action in living systems. The Department focuses on neuroendocrinology, cardiovascular pharmacology, and neuropharmacology with diverse research interests in aging, hypertension, reproduction, glaucoma, neurotoxicity, and environmental physiology.

An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.

Other

Pharmaceutical Sciences (Pharmacodynamics)
The Department of Pharmacodynamics offers the Doctor of Philosophy in the pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the interdisciplinary toxicology concentration (see Interdisciplinary Graduate Studies in this catalog). Pharmacodynamics is an integrated field of study involving pharmacology, physiology, and toxicology in a holistic approach to drug action in living systems. The Department focuses on neuroendocrinology, cardiovascular pharmacology, and neuropharmacology with diverse research interests in aging, hypertension, reproduction, glaucoma, neurotoxicity, and environmental physiology.

An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Pharmacodynamics

optional second concentration in Clinical and Translational Science

Master of Science in Pharmacy

concentration in Pharmacodynamics

Pharmacodynamics Courses

- PHA5531: Neurotoxicology
- PHA6508: Systems Physiology and Pathophysiology I
- PHA6509: Systems Physiology and Pathophysiology II
- PHA6512L: Experiential Research Training in Pharmacodynamics
- PHA6521C: Research Techniques in Pharmacodynamics
- PHA6522L: ICBR Molecular Techniques Laboratory
- PHA6540: Neurochemical Foundation of Pharmacodynamics
- PHA7939: Journal Colloquy in Pharmacodynamics

Medicinal Chemistry Courses

- PHA5475: Synthesis of Prodrugs
- PHA6115: Equilibria, Complexations, and Interactions of Drugs
- PHA6354: Natural Medicinal Products
- PHA6356: Structure Determination of Complex Natural Products
- PHA6357: Herbal & Dietary Supplements
- PHA6417: Pharmaceutical Analysis II
- PHA6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA6432: Fundamentals of Pharmaceutical Chemistry
- PHA6444: Pharmaceutical Chemistry I
• PHA6447: Drug Design
• PHA6448: High Throughput Drug Discovery
• PHA6471: Synthetic Medicinal Chemistry
• PHA6534: Toxicology of Chemical Weapons
• PHA6535: Principles of Nucleotide Activity
• PHA6543: Pharmaceutical Chemistry I
• PHA6556: Introduction to Clinical Toxicology
• PHA6557: Clinical Toxicology I
• PHA6840: Medicinal Chemistry of Drugs of Abuse
• PHA6850: Principles of Forensic Science
• PHA6851: Forensic Analysis of DNA
• PHA6853: Biological Evidence and Serology
• PHA6854: Forensic Immunology
• PHA6855: Forensic Genetics
• PHA6856: Blood Spatter and Distribution
• PHA6905C: Research Procedures in Medicinal Chemistry
• PHA6934: Seminar in Medicinal Chemistry
• PHA6852: Mammalian Molecular Biology
• VME6602: General Toxicology
• VME6605: Toxic Substances
• VME6613: Forensic Toxicology I
• VME6614: Forensic Toxicology II
• VME6650: Principles of Mammalian Pharmacology
• VME6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

• PHA5270: Health Care and Patient Safety
• PHA5271: Health Care Risk Management
• PHA5272: Risk Management, Liability and Compliance
• PHA6227: Institutional Pharmacy Leadership I
• PHA6228: Institutional Pharmacy Leadership II
• PHA6235: Advanced Pharmaceutical Law
• PHA6236: Health Sciences Liability Law
• PHA6250: Patient Responsibility in Health Care
• PHA6264: Pharmacoeconomics and Health Technology Assessment
• PHA6265: Introduction to Pharmaceutical Outcomes and Policy I
• PHA6266: Introduction to Pharmaceutical Outcomes and Policy II
• PHA6268: Pharmacoepidemiology and Patient Safety
• PHA6269: Pharmaceutical Products and Public Policy
• PHA6273: Structure, Process, and Outcomes of Regulation
• PHA6274: Federal Regulations of Drugs and Pharmacy
• PHA6275: Federal Regulations of Controlled Substances
• PHA6276: Regulating Pharmaceutical Access and Costs
• PHA6277: Ethics in Drug Development Production and Use
• PHA6278: State Regulation of Drugs and Pharmacy
• PHA6279: Pharmaceutical Outcomes and Policy Seminar
• PHA6280: Medicare and Medicaid
• PHA6281: Practices and Procedures of Administrative Agencies
• PHA6286: Pharmaceutical Microeconomics
• PHA6287: Pharmaceutical Health Economics
• PHA6288: Critical Review of Research Methods
• PHA6289: Regulating Clinical Research
• PHA6290: Pharmaceutical Fraud and Abuse
• PHA6291: Pharmaceutical Health Care Systems
• PHA6717: Measurement in Pharmacy Administration Research
• PHA6793: Evidentiary Basis of Pharmaceutical Use
• PHA6796: Study Design in Pharmaceutical Outcomes & Policy Research
• PHA6798: The Use and Abuse of Statistics in Drug Regulation
• PHA6799: Patient Safety Program Evaluation
• PHA6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
• PHA6860: Prevention of Pharmaceutical Crimes
• PHA6891: Introduction to Pharmacoepidemiology
• PHA6892: Practices and Procedures of the IRB
• PHA6893: Research Ethics
• PHA6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
• PHA6937: Topics in Pharmaceutical Administration
• PHA6926: Introduction to Pharmaceutical Microeconomics
• PHA6928: Pharmaceutical Policy Process
• PHA6929: Commercial Applications of Pharmacoconomics

Pharmaceutics Departmental Courses

• PHA6116: In Vivo and In Vitro Stability of Drugs
• PHA6118: Molecular Diversity
• PHA6125: Pharmacochemistry and Biopharmaceutics
• PHA6170C: Pharmaceutical Product Formulation
• PHA6183: Pharmaceutical Gene Delivery
• PHA6185: Pharmaceutical Drug Development
Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA 5171: Pharmaceutical Biotechnology
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6806: Pharmacoeconomic Modeling
- PHA 6910: Supervised Research
- PHA 6935: Selected Topics in Pharmacy
- PHA 6936: Advanced Topics in Pharmaceutical Sciences
- PHA 6938: Research Seminar
- PHA 6940: Supervised Teaching
- PHA 6971: Research for Master's Thesis
- PHA 7979: Advanced Research
- PHA 7980: Research for Doctoral Dissertation

Pharmaceutical Outcomes and Policy Department

Chair: R. Segal
Graduate Coordinator: A. Winterstein

Complete faculty listing by department: Follow this link.

The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree. Complete descriptions of the requirements for these degrees are provided in the Graduate Degrees section of this catalog.

Other

Pharmaceutical Sciences (Pharmaceutical Outcomes and Policy)

College

College of Pharmacy

Department/School

Pharmaceutical Outcomes and Policy Department

Pharmaceutical Outcomes and Policy Program Information

The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree.
Research in the Department emphasizes the epidemiological, socio-behavioral, administrative, regulatory, and economic aspects of drug therapy and pharmaceutical services, including assessment of safety, effectiveness, efficiency and quality aspects of patient-oriented pharmaceutical services and medication use.

The department offers both a research-oriented residential M.S.P. and Ph.D. degree programs as well as an online M.S.P. program. For the research oriented degree programs, graduate studies include core curricula and four specializations in patient safety and program evaluation, pharmacoconomics, pharmacoepidemiology and social-behavioral research in medication use. Electives and required courses draw from the resources of the entire University. Graduates are prepared for leadership positions in academia, public service, pharmaceutical industry, and health service industry with a focus on the evaluation of drugs and related services.

The online non-thesis M.S.P. program is designed for working professionals, and focuses on pharmaceutical regulation and outcomes. Prior pharmacy experience/knowledge is not required and the program is available to persons located in the United States only. Coursework is delivered in both asynchronous and live, synchronous sessions. Students may choose among six specialty tracks including Pharmacy Regulation & Policy, Applied Pharmacoconomics, Drug Regulatory Affairs, Clinical Research Regulation in Pharmacy, Patient Safety & Medication Risk Management, and Institutional Pharmacy Leadership.

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Pharmaceutical Outcomes and Policy

optional second concentration in Clinical and Translational Science

Master of Science in Pharmacy

concentration in Medication Therapy Management

concentration in Pharmaceutical Outcomes and Policy

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmacoconomics
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmacoepidemiology and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development, Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
PHA 6290: Pharmaceutical Fraud and Abuse
PHA 6291: Pharmaceutical Health Care Systems
PHA 6717: Measurement in Pharmacy Administration Research
PHA 6793: Evidentiary Basis of Pharmaceutical Use
PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
PHA 6798: The Use and Abuse of Statistics in Drug Regulation
PHA 6799: Patient Safety Program Evaluation
PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
PHA 6860: Prevention of Pharmaceutical Crimes
PHA 6891: Introduction to Pharmacoepidemiology
PHA 6892: Practices and Procedures of the IRB
PHA 6893: Research Ethics
PHA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
PHA 6937: Topics in Pharmaceutical Administration
PHA 6206: Introduction to Pharmaceutical Microeconomics
PHA 6282: Pharmaceutical Policy Process
PHA 6283: Commercial Applications of Pharmacoeconomics

Medicinal Chemistry Courses

PHA 5475: Synthesis of Prodrugs
PHA 6115: Equilibria, Complexations, and Interactions of Drugs
PHA 6354: Natural Medicinal Products
PHA 6356: Structure Determination of Complex Natural Products
PHA 6357: Herbal & Dietary Supplements
PHA 6417: Pharmaceutical Analysis II
PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
PHA 6432: Fundamentals of Pharmaceutical Chemistry
PHA 6444: Pharmaceutical Chemistry I
PHA 6447: Drug Design
PHA 6448: High Throughput Drug Discovery
PHA 6471: Synthetic Medicinal Chemistry
PHA 6534: Toxicology of Chemical Weapons
PHA 6535: Principles of Nucleotide Activity
PHA 6543: Pharmaceutical Chemistry II
PHA 6556: Introduction to Clinical Toxicology
PHA 6557: Clinical Toxicology I
PHA 6840: Medicinal Chemistry of Drugs of Abuse
PHA 6850: Principles of Forensic Science
PHA 6851: Forensic Analysis of DNA
PHA 6853: Biological Evidence and Serology
PHA 6854: Forensic Immunology
PHA 6855: Forensic Genetics
PHA 6856: Blood Spatter and Distribution
PHA 6905C: Research Procedures in Medicinal Chemistry
PHA 6934: Seminar in Medicinal Chemistry
PHA 6852: Mammalian Molecular Biology
VME 6602: General Toxicology
VME 6605: Toxic Substances
VME 6613: Forensic Toxicology I
VME 6614: Forensic Toxicology II
VME 6650: Principles of Mammalian Pharmacology
VME 6766: Laboratory Quality Assurance/Quality Control

Pharmaceutics Departmental Courses

PHA 6116: In Vivo and In Vitro Stability of Drugs
PHA 6118: Molecular Diversity
PHA 6125: Pharmacokinetics and Biopharmaceutics
PHA 6170C: Pharmaceutical Product Formulation
PHA 6183: Pharmaceutical Gene Delivery
PHA 6185: Pharmaceutical Drug Development
PHA 6416: Pharmaceutical Analysis I
PHA 6427: Pharmacogenetics of Drug Metabolism
PHA 6440: Seminar in Drug Discovery
PHA 6449: Pharmacogenomics
PHA 6630: Medication Therapy Management: A Hematologic Focus
PHA 6631: Foundations of Medication Therapy Management I
PHA 6632: Foundations of Medication Therapy Management II
PHA 6633: Medication Therapy Management: A Cardiovascular Focus
PHA 6634: Medication Therapy Management: An Endocrine Focus
PHA 6635: Medication Therapy Management: A Renal Focus
PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
PHA 6637: Medication Therapy Management: A Psychiatric Focus
PHA 6638: Medication Therapy Management: A Neurologic Focus
PHA 6639: Medication Therapy Management: A Respiratory Focus
PHA 6694: Introduction to Graduate Studies
PHA 6696: Preclinical Drug Evaluation
Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7938: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA 5171: Pharmaceutical Biotechnology
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6806: Pharmacoeconomic Modeling
- PHA 6910: Supervised Research
- PHA 6935: Selected Topics in Pharmacy
- PHA 6936: Advanced Topics in Pharmaceutical Sciences
- PHA 6938: Research Seminar
- PHA 6940: Supervised Teaching
- PHA 6971: Research for Master's Thesis
- PHA 7979: Advanced Research
- PHA 7980: Research for Doctoral Dissertation

Pharmacotherapy and Translational Research Department

For a full list of faculty, please follow this link.
Description to be added

Other

Pharmaceutical Sciences (Pharmacotherapy and Translational Research)

Description to be added

College

College of Pharmacy

Department/School

Pharmacotherapy and Translational Research Department

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy
concentration in Clinical Pharmaceutical Sciences

Master of Science in Pharmacy

concentration in Clinical Pharmacy

Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6426: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6852: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6254: Pharmacoconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmacoeconomic Microeconomics
- PHA 6287: Pharmacoethical Health Economics
• PHA 6288: Critical Review of Research Methods
• PHA 6289: Regulating Clinical Research
• PHA 6290: Pharmaceutical Fraud and Abuse
• PHA 6291: Pharmaceutical Health Care Systems
• PHA 6717: Measurement in Pharmacy Administration Research
• PHA 6793: Evidentiary Basis of Pharmaceutical Use
• PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
• PHA 6798: The Use and Abuse of Statistics in Drug Regulation
• PHA 6799: Patient Safety Program Evaluation
• PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
• PHA 6806: Prevention of Pharmaceutical Crimes
• PHA 6891: Introduction to Pharmacoepidemiology
• PHA 6892: Practices and Procedures of the IRB
• PHA 6893: Research Ethics
• PHA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
• PHA 6937: Topics in Pharmaceutical Administration
• PHA 6938: Introduction to Pharmaceutical Microeconomics
• PHA 6939: Pharmaceutical Policy Process
• PHA 6939: Pharmaceutical Policy Process
• PHA 6940: Seminar in Drug Discovery
• PHA 6949: Pharmacogenomics
• PHA 6950: Medication Therapy Management: A Hematologic Focus
• PHA 6951: Foundations of Medication Therapy Management I
• PHA 6952: Foundations of Medication Therapy Management II
• PHA 6953: Medication Therapy Management: A Cardiovascular Focus
• PHA 6954: Medication Therapy Management: An Endocrine Focus
• PHA 6955: Medication Therapy Management: A Renal Focus
• PHA 6956: Medication Therapy Management: A Gastrointestinal Focus
• PHA 6957: Medication Therapy Management: A Psychiatric Focus
• PHA 6958: Medication Therapy Management: A Neurologic Focus
• PHA 6959: Medication Therapy Management: A Respiratory Focus
• PHA 6964: Introduction to Graduate Studies
• PHA 6965: Preclinical Drug Evaluation

Pharmacodynamics Courses

• PHA 6531: Neurotoxicology
• PHA 6508: Systems Physiology and Pathophysiology I
• PHA 6509: Systems Physiology and Pathophysiology II
• PHA 6512L: Experiential Research Training in Pharmacodynamics
• PHA 6521C: Research Techniques in Pharmacodynamics
• PHA 6522L: ICBR Molecular Techniques Laboratory
• PHA 6540: Neurochemical Foundation of Pharmacodynamics
• PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

• GMS 6563: Molecular Pharmacology
• GMS 6590: Seminar in Pharmacology
• GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
• GMS 6735: Neuropharmacology
• GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

• PHA 5171: Pharmaceutical Biotechnology
• PHA 6521C: Research Techniques in Pharmacodynamics
• PHA 6806: Pharmacoeconomic Modeling
• PHA 6910: Supervised Research
• PHA 6935: Selected Topics in Pharmacy
• PHA 6936: Advanced Topics in Pharmaceutical Sciences
• PHA 6938: Research Seminar
• PHA 6940: Supervised Teaching
Behavioral Science and Community Health Department

Chair: B. Curbow
Complete faculty listing by department: Follow this link.

The Department of Behavioral Science & Community Health (BSCH) is one of nine academic departments housed in the School of Public Health and Health Professions at the University of Florida. This department offers a Doctor of Philosophy (PhD) degree (SBS track). For more information about the program, please visit the link below.

Other

Public Health (Ph.D. - Social and Behavioral Sciences)

College

College of Public Health and Health Professions

Department/School

Behavioral Science and Community Health Department

Behavioral Science and Community Health Program Information

Social & Behavioral Sciences

The PhD in Public Health -Social and Behavioral Sciences (SBS) Track is targeted to individuals who wish to develop advanced knowledge and skills in the social and behavioral sciences theories and methods used in public health. Training is designed for those who desire public health careers in research, academics, government, or related health organizations. A prior graduate degree in public health or a related field is strongly preferred.

The program is focused upon the assumption that health and health behavior are impacted by multiple psychological, behavioral, social, and cultural factors. Central to addressing health problems and eliminating health disparities and inequalities, these factors must be understood and addressed at multiple social-ecological levels (individual, interpersonal, organizational, community, and population).

PhD students who concentrate in social and behavioral sciences explore the unique issues faced by diverse groups and populations and acquire skills to achieve social and behavioral change.

Contact
Dr. Giselle Carnaby (nee Mann), Program Director
gmann@phhp.ufl.edu
Phone: 352-273-6745 ext. 36497; ext. 36164 (lab)
Office: HPNP 4172; DG-140 (lab)

For more information, please visit http://sbs.phhp.ufl.edu/

Degrees Offered with a Major in Public Health

Doctor of Philosophy

concentration in Social and Behavioral Sciences

College of Public Health and Health Professions Courses
HSC 5938: Special Topics
HSC 6905: Independent Study
HSC 6939: Special Topics
HSC 6940: Supervised Teaching
PHC 6000: Epidemiology Methods I
PHC 6001: Principles of Epidemiology in Public Health
PHC 6002: Epidemiology of Infectious Diseases
PHC 6003: Epidemiology of Chronic Diseases and Disability
PHC 6009: Biology and Epidemiology of HIV/AIDS
PHC 6011: Epidemiology Methods II
PHC 6016: Social Epidemiology in Public Health
PHC 6036: Environmental Infectious Diseases: A Molecular Approach
PHC 6102: Introduction to Public Health Administrative Systems
PHC 6103: Systems Thinking for Public Health
PHC 6104: Evidence-Based Management of Public Health Programs
PHC 6148: Public Health Program Planning and Evaluation
PHC 6153: Public Policy and Aging
PHC 6183: Disaster Preparedness and Emergency Response
PHC 6194: Spatial Epidemiology
PHC 6195: Health information for Diverse Populations: Theory & Methods
PHC 6220: Overview of Long-Term Care
PHC 6251: Assessment and Surveillance in Public Health
PHC 6301: Aquatic Systems and Environmental Health
PHC 6309: Environmental Justice Issues in Public Health
PHC 6312: Water Quality and Human Health
PHC 6313: Environmental Health Concepts in Public Health
PHC 6316: Health, Risk, and Crisis Communication
PHC 6317: Risk Communication for Public Health Practice
PHC 6346: Occupational and Environmental Health Among Agriculture Workers
PHC 6370: Public Health Biology
PHC 6403: Adolescence, Risk Taking and Health
PHC 6404: Gender, Sexuality, and Health
PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
PHC 6413: Critical Incidents and Violence in Communities
PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
PHC 6419: Biomedical and Psychological Aspects of Very Late Life
PHC 6421: Public Health Law and Ethics
PHC 6441: Health Disparities in the United States
PHC 6445: Global Public Health and Development II
PHC 6447: Ecology of HIV/AIDS in the Rural South
PHC 6512: Environmental Management of Vector-Borne Diseases
PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
PHC 6519: Zoonotic Diseases in Humans and Animals
PHC 6520: Foodborne Diseases
PHC 6530: Public Health Issues of Mothers and Children
PHC 6543: Community Practice of Behavioral Health Risk Prevention
PHC 6544: Health Behavior Interventions in Practice
PHC 6561: Public Health Laboratory Techniques
PHC 6565: Health Promotion and Disease Prevention
PHC 6566: Interventions for Public Health
PHC 6607: Critical Issues in Public Health
PHC 6700: Social and Behavioral Research Methods
PHC 6702: Exposure Measurement and Assessment
PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
PHC 6762: International Public Health
PHC 6905: Independent Study
PHC 6917: Supervised Research Project
PHC 6931: Seminars in Public Health
PHC 6937: Special Topics in Public Health
PHC 6945: Public Health Practicum
PHC 6946: Public Health Internship
PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
PHC 7038: Psychiatric Epidemiology
PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
PHC 7727: Grant Writing for Population Health Research
PHC 7752: Seminar in Instrument Development for Public Health
PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
PHC 7907: Social and Behavioral Science Journal Club
RSD 6110: Rehabilitation Science Theory and Application I
RSD 6112: Rehabilitation Science Theory and Application II
RSD 6114: Rehabilitation in the United Kingdom
RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
RSD 6700: Rasch Measurement: Introduction and Application
Biostatistics Department

College of Public Health and Health Professions
College of Medicine

Interim Chair: Samuel Wu
Graduate Coordinator: Babette Brumback
Complete faculty listing by department: Follow this link.

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/](http://biostat.ufl.edu/education/phd-in-biostatistics/).

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in these primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/](http://biostat.ufl.edu/education/ms-in-biostatistics/).

Other

Biostatistics (PHHP)

College
The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to:

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/](http://biostat.ufl.edu/education/phd-in-biostatistics/).

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/](http://biostat.ufl.edu/education/ms-in-biostatistics/).

Degrees

Doctor of Philosophy

Master of Science

Biostatistics Departmental Courses

- **GMS 6818**: Design and Conduct Clinical Trials I
- **GMS 6819**: Design and Conduct Clinical Trials II
- **GMS 6827**: Advanced Clinical Trial Methods
- **GMS 6841**: Design and Analysis of Translational Research in Biomedical Sciences
- **GMS 6861**: Applied Biostatistics I
- **GMS 6862**: Applied Biostatistics II
- **PHC 6016**: Social Epidemiology in Public Health
- **PHC 6020**: Clinical Trial Methods
- **PHC 6050**: Statistical Methods for Health Sciences Research I
- **PHC 6050C**: Biostatistical Methods I
- **PHC 6051**: Biostatistical Methods II
- **PHC 6052**: Introduction to Biostatistical Methods
- **PHC 6053**: Regression Methods for the Health and Life Sciences
- **PHC 6055**: Biostatistical Computing Using R
- **PHC 6063**: Biostatistical Consulting
- **PHC 6080**: SAS for Public Health - Data
- **PHC 6081**: SAS for Public Health - Analysis
- **PHC 6517**: Public Health Concepts in Infectious Diseases
- **PHC 6937**: Special Topics in Public Health
- PHC 6946: Public Health Internship
- PHC 7013: Bias in Observational Research
- PHC 7056: Analysis of Longitudinal Data
- PHC 7066: Large Sample Theory
- PHC 7925: Biostatistics Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- STA 5223: Applied Sample Survey Methods
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 5503: Categorical Data Methods
- STA 5701: Applied Multivariate Methods
- STA 5715: Applied Survival Analysis
- STA 6092: Applied Statistical Practice
- STA 6166: Statistical Methods in Research I
- STA 7249: Generalized Linear Models
- STA 7346: Statistical Inference

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
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- PHC 6312: Water Quality and Human Health
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- PHC 6520: Foodborne Diseases
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- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6901: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
Clinical and Health Psychology Department

College of Public Health and Health Professions

Department Chair: William W. Latimer.
Graduate Coordinator: S.R. Boggs.

Complete faculty listing: Follow this link.

The Department of Clinical and Health Psychology is a unit of the College of Public Health and Health Professions. The department's programs are its doctoral clinical psychology studies leading to the Ph.D. degree in psychology; an American Psychological Association accredited doctoral internship program; and postdoctoral studies and research. Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

The clinical psychology doctoral curriculum adheres to the scientist-practitioner model of education and training. Program strengths include research, education, and professional training in health care psychology, with organized areas of concentration in clinical health psychology, clinical child/pediatric psychology, neuropsychology, neurorehabilitation and clinical neuroscience, and emotion Neuroscience/psychopathology. Education and training experiences are also available in rural psychology. Interested students can apply for acceptance into the Public Health Program and obtain dual M.P.H./Ph.D. degrees.

Progress in the program is determined by departmental policies which are consistent with American Psychological Association accreditation standards. The curriculum has been continuously accredited by the American Psychological Association since 1953.

Admission to the Department is through appropriate application to the Department's admission committee. A bachelor's degree is generally adequate preparation for graduate admission. It should include undergraduate courses in both experimental psychology and statistics, along with at least three courses from the following psychology areas: developmental, learning, perception, personality, physiological, and social.

For more information, please see the program page below and our website: http://chp.phhp.ufl.edu.
Psychology (Clinical and Health Psychology - PHHP)

College

College of Public Health and Health Professions

Department/School

Clinical and Health Psychology Department

Psychology (Clinical and Health Psychology) Program Information

The department of Clinical and Health Psychology is an academic and professional unit in the College of Public Health and Health Professions at the Health Science Center on the University of Florida campus in Gainesville. The doctoral program in clinical psychology has been accredited by the American Psychological Association since 1953 and adheres to the Scientist-Practitioner Model of education and training. The Clinical Psychology Doctoral program is unique in the country in that it is housed in an independent department of Clinical and Health Psychology in a major academic health science setting along with an APA accredited internship. These features foster program strengths in research, teaching and professional training in health care psychology.

To accommodate the broad range of career trajectories possible within Scientist-Practitioner education and training, the program offers a Scientist-Practitioner Emphasis and a Clinical Researcher Emphasis.

The **Scientist-Practitioner Emphasis** allows the student to obtain broad clinical, academic, and research training that readies them for careers anywhere along the science-practice continuum. The student obtains focused research mentorship in a faculty member's laboratory and obtains broad training in clinical assessment and intervention both in and outside of their designated area of concentration.

The **Clinical Researcher Emphasis** is designed to provide the interested student with more intensive mentor-based training for purposes of preparing for a research career. The Clinical Researcher Emphasis is designed for students who are clearly focused on a research career and therefore want an increased opportunity to perform mentored empirical work. This emphasis focuses on the acquisition of research skills, training in scientific methods and technologies to better understand behavior problems, psychopathology and psychological adjustment to illness and wellness, and to develop empirically validated assessment and treatment procedures. The primary goal of the Clinical Researcher emphasis is to train psychologists for academic settings and other employment venues in which research productivity and innovation is a major job expectancy. In comparison to the scientist-practitioner emphasis, more time is dedicated to research (less time is spent in supervised practicum with the general faculty), and advanced clinical training is focused on patient populations and methods in the student's area of research interest. The Clinical Researcher emphasis follows a "mentorship" model in which the faculty mentor is the student's overall guide and supervisor, and the student's primary research training is accomplished in his/her laboratory.

Students can elect the Clinical Researcher emphasis in the first or second year of study, based on their commitment to a clinical research career and the agreement of a faculty mentor. Students can apply for admission consideration to the Scientist-Practitioner emphasis, the Clinical Researcher emphasis, or both (see Application Procedures).

The Doctoral Program provides the student with training in the concepts, tools, roles, and functions of the clinical psychologist. The overall goals of the graduate program are to prepare the student to:

1. investigate meaningful, empirically testable questions in the quest for understanding a behavioral process, a patient's problem, or a professional issue;
2. function as a professional psychologist;
3. practice competently in the applied areas of psychological assessment/diagnosis, intervention/therapy, and consultation; and
4. contribute to the advancement of psychological knowledge through research or other creative scholarly activity.

Through a combination of general and specialized experiences in the classroom, laboratory, and clinic students develop knowledge and skills as scientist-practitioners. Attitudes are developed toward the practice of psychology and toward related professions which enable effective personal interaction and participation in the interdisciplinary approach to problems of research and practice. As students progress in the program they develop professional identity through acceptance of increased responsibility for professional decisions, through the execution of significant research projects, and through their contributions to the understanding of psychological problems and processes.

For more information please see our website: [http://chp.phhp.ufl.edu](http://chp.phhp.ufl.edu)

Degrees

**Doctor of Philosophy**

concentration in Clinical and Health Psychology

*optional second concentration in Clinical and Translational Science*

concentration in Clinical and Translational Science
Master of Arts

Master of Science

Clinical and Health Psychology Departmental Courses

- CLP 5316: Health Psychology
- CLP 5426: Introduction to Neuropsychology
- CLP 6304: Psychological Foundations of Clinical Psychology I
- CLP 6307: Human Higher Cortical Functioning
- CLP 6308: Psychological Foundations of Clinical Psychology II
- CLP 6309: Psychological Foundations of Clinical Psychology III
- CLP 6344C: Lifespan Foundations of Behavioral Health and Illness I
- CLP 6345: Lifespan Foundations of Behavioral Health and Illness II
- CLP 6375: Introduction to Clinical Psychology
- CLP 6407: Psychological Treatment I
- CLP 6417: Psychological Treatment II
- CLP 6425: Seminar in Clinical Neuropsychology
- CLP 6430: Clinical Psychological Assessment
- CLP 6434C: Clinical Psychology Assessment I
- CLP 6435C: Clinical Psychology Assessment II
- CLP 6446C: Psychological Assessment of Children
- CLP 6447C: Psychological Assessment of Adults
- CLP 6448: Psychological Assessment of Children
- CLP 6465: Lifespan Psychopathology
- CLP 6467: Lifespan Psychopathological Disabilities
- CLP 6528C: Measurement, Research Design, and Statistical Analysis in Clinical Psychology II
- CLP 6529: Applied Multivariate Methods in Psychology
- CLP 6905: Individual Work
- CLP 6910: Supervised Research
- CLP 6940: Supervised Teaching
- CLP 6943: Core Practicum in Clinical Psychology
- CLP 6945: Advanced Practicum in Neuropsychology
- CLP 6946: Advanced Practicum in Applied Medical Psychology
- CLP 6947: Practicum in Intervention
- CLP 6948: Advanced Practicum in Clinical Child Psychology
- CLP 6971: Research for Master's Thesis
- CLP 7317: Advanced Health Psychology and Behavior Medicine
- CLP 7404C: Special Issues, Methods, and Techniques in Psychological Treatment
- CLP 7427C: Neuropsychological Assessment of Children
- CLP 7428C: Neuropsychological Assessment of Adults
- CLP 7934: Special Topics in Clinical Psychology
- CLP 7949: Internship
- CLP 7979: Advanced Research
- CLP 7980: Research for Doctoral Dissertation
- DEP 6216: Psychological Disturbances of Children
- GEY 6306: Interpersonal Communication Within the Aging Network
- GEY 7408: Psychotherapy with Older Adults

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecualr Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
PHC 6220: Overview of Long-Term Care
PHC 6251: Assessment and Surveillance in Public Health
PHC 6301: Aquatic Systems and Environmental Health
PHC 6309: Environmental Justice Issues in Public Health
PHC 6312: Water Quality and Human Health
PHC 6313: Environmental Health Concepts in Public Health
PHC 6316: Health, Risk, and Crisis Communication
PHC 6317: Risk Communication for Public Health Practice
PHC 6346: Occupational and Environmental Health Among Agriculture Workers
PHC 6370: Public Health Biology
PHC 6403: Adolescence, Risk Taking and Health
PHC 6404: Gender, Sexuality, and Health
PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
PHC 6413: Critical Incidents and Violence in Communities
PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
PHC 6419: Biomedical and Psychological Aspects of Very Late Life
PHC 6421: Public Health Law and Ethics
PHC 6441: Health Disparities in the United States
PHC 6445: Global Public Health and Development II
PHC 6447: Ecology of HIV/AIDS in the Rural South
PHC 6512: Environmental Management of Vector-Borne Diseases
PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
PHC 6519: Zoonotic Diseases in Humans and Animals
PHC 6520: Foodborne Diseases
PHC 6530: Public Health Issues of Mothers and Children
PHC 6543: Community Practice of Behavioral Health Risk Prevention
PHC 6544: Health Behavior Interventions in Practice
PHC 6561: Public Health Laboratory Techniques
PHC 6565: Health Promotion and Disease Prevention
PHC 6566: Interventions for Public Health
PHC 6607: Critical Issues in Public Health
PHC 6700: Social and Behavioral Research Methods
PHC 6702: Exposure Measurement and Assessment
PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
PHC 6762: International Public Health
PHC 6905: Independent Study
PHC 6917: Supervised Research Project
PHC 6930: Seminar in Contemporary Public Health Issues
PHC 6931: Seminars in Public Health
PHC 6937: Special Topics in Public Health
PHC 6945: Public Health Practicum
PHC 6946: Public Health Internship
PHC 6950: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
PHC 7038: Psychiatric Epidemiology
PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
PHC 7727: Grant Writing for Population Health Research
PHC 7752: Seminar in Instrument Development for Public Health
PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
PHC 7907: Social and Behavioral Science Journal Club
PHC 7979: Advanced Research
PHC 7980: Research for Doctoral Dissertation
RHT 5156: Exercise Physiology
RHT 6125C: Concepts in Clinical Biomechanics
RHT 6127C: Control of Gait and Posture
RHT 6167C: Applied Neurophysiology for Physical Therapy
RHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
RHT 6316: Neurological Aspects of Orthopedic Rehabilitation
RHT 6615L: Research Instrumentation in Physical Therapy
RHT 6718: Neuropsychology: A Foundation for Neurorehabilitation
RSD 6110: Rehabilitation Science Theory and Application I
RSD 6112: Rehabilitation Science Theory and Application II
RSD 6114: Rehabilitation in the United Kingdom
RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
RSD 6600: Rasch Measurement: Introduction and Application
RSD 6705: Research Methods in Rehabilitation
RSD 6706: Scientific Writing for the Rehabilitation Professional
RSD 6900: College Classroom: Teaching Process and Practice
RSD 6905: Individual Work
RSD 6910: Supervised Research
RSD 6930: Special Topics in Rehabilitation Science
RSD 6940: Supervised Teaching
RSD 7979: Advanced Research
RSD 7980: Research for Doctoral Dissertation
RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
RCS 6060: Rehabilitation Issues in Human Growth and Development
RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
RCS 6412: Rehabilitation Counseling Theory and Practice
RCS 6470: Human Sexuality and Disability
RCS 6601: Forensic Rehabilitation Consultation I
RCS 6602: Forensic Rehabilitation Consultation II
RCS 6625: Community Counseling and Case Management
RCS 6841: Applied Case Management and Consultation in Rehabilitation Counseling
RCS 6940: Rehabilitation Research
Environmental and Global Health Department

Chair: G. C. Gray
Graduate Studies Program Assistant: N. Burke

Faculty listing: Follow this link

The Department of Environmental and Global Health focuses upon environmental factors that impact human health. Department faculty, scientists, and students employ numerous disciplines in studying these environmental factors: virology, bacteriology, parasitology, entomology, toxicology, epidemiology, water sciences, veterinary health, environmental engineering, aerosol biology, wildlife health, etc. Research work often involves international travel and collaboration. A central theme for the department is the interdisciplinary thinking called One Health, which reflects the collaborations necessary to tackle public health's most difficult problems. Faculty, students and staff often perform research in the laboratories in the Emerging Pathogens Institute, the Center for Environmental and Human Toxicology, or the Aquatic Pathobiology Laboratory.

The Department of Environmental and Global Health offers graduate work leading to the degrees of Doctor of Philosophy, Master of Health Science, and Master of Public Health.

Other

Environmental and Global Health (M.H.S. - One Health)

College

College of Public Health and Health Professions

Department

Environmental and Global Health Department

Degrees Offered With a Major in Environmental and Global Health

Master of Health Science

concentration in One Health

Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6160: Spatial Epidemiology
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Policy
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6565: Health Promotion and Disease Prevention
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6923: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neurophysiology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6800: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6940: Supervised Teaching
- RSD 7979: Advanced Research
- RSD 7980: Research for Doctoral Dissertation
Public Health (Ph.D. - Environmental and Global Health)

College

College of Public Health and Health Professions

Department/School

Environmental and Global Health

Degrees Offered With a Major in Public Health

Doctor of Philosophy

concentration in Environmental Health

Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
Public Health (Ph.D. - One Health)

College

Environmental and Global Health Department

Degrees Offered With a Major in Public Health

Doctor of Philosophy

concentration in One Health

Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6765: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6601: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neurophysiology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 610: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6940: Supervised Teaching
- RSD 7979: Advanced Research
- RSD 7980: Research for Doctoral Dissertation
The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: [http://epidemiology.phhp.ufl.edu](http://epidemiology.phhp.ufl.edu).

### Epidemiology Department

**College of Public Health and Health Professions**

**College of Medicine**

**Chair:** Linda Cottler  
**Ph.D. Program Director:** Cindy Prins  
**M.S. Program Director:** Catherine Woodstock Striley

Complete faculty listing by department: [Follow this link](http://epidemiology.phhp.ufl.edu).

The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: [http://epidemiology.phhp.ufl.edu](http://epidemiology.phhp.ufl.edu).

### Epidemiology Program Information

The **Ph.D. in Epidemiology program** is in the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The program requires a minimum of 90 semester credits beyond the bachelor's degree. All students must complete a minimum of 9 credits in Epidemiology foundation course work, at least 36 credits of epidemiology core courses, 6 credits of statistics electives, 18 credits of epidemiology electives, 15 credits of general electives, and 12 credits of dissertation research. Students must also complete at least two mentored teaching experiences. All entering students who do not hold MPH or equivalent degrees are also required by the College of Public Health and Health Professions to complete an Introduction to Public Health course.

Students in the Ph.D. program in Epidemiology are admitted to work with a research mentor on that mentor’s project, and that research mentor funds the student. Other funding sources are available such as the Graduate School and the Department.

The core course work is designed to incorporate competencies recommended in the report of the 2002 workshop on doctoral education in epidemiology from the American College of Epidemiology and the Association of Schools and Programs of Public Health, and criteria for applied epidemiology competencies. The overall outcomes expected of all graduates are as follows:

1. Apply epidemiological methods to address critical and/or emerging public health issues through the use of:
   - Appropriate epidemiological research designs
   - Advanced statistical analysis methods for health studies
   - Data structures and measurement methods for health research
   - Biological, behavioral and social theory applied to the understanding and prevention of contemporary threats to health and well-being
   - Depth of knowledge in an area of specialization
2. Assimilate the history, philosophy, and ethical principles of epidemiology into current research
3. Develop grant proposals and manage research projects
4. Write scientific papers for publication in peer-reviewed journals, and communicate research results to scientists, policy makers, and the public
5. Compete successfully for research and teaching positions in academic institutions, federal or state agencies, or private institutions.

Details of the Ph.D. in Epidemiology program and application information are available at our website: [http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2](http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2).

The Master of Science in Epidemiology degree is offered by the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The 36 credit program prepares students for careers in the public health arena that are focused on the surveillance and prevention of illnesses among diverse populations around the world. Students are trained in the foundational aspects of epidemiology including person, place and time, risk and protective factors, and the social determinants of health. Areas of focus include: chronic disease, infectious disease, geriatric, environmental, psychiatric, social, cancer and maternal and child health epidemiology.

Graduates of the M.S. in Epidemiology program are trained to:
- Apply surveillance, assessment, evaluation, and other foundational epidemiological research designs to areas of interest,
- Choose appropriate measurement and analytic methods to study health and disease in a population,
- Utilize biological, behavioral and social theory to understand how to prevent and intervene to promote the public health.

The program consists of required coursework and the successful completion of a thesis. The thesis is required to demonstrate skill in independent inquiry and investigation, under the tutelage of a mentor. Students may complete the course in three semesters with 36 credits.

More program information, including specific course requirements and elective options, is described at the program website: [http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2](http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2).

Degrees Offered with a Major in Epidemiology

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Master of Science

Epidemiology (PHHP/COM) Departmental Courses

- GMS 6200: Advanced Epidemiology Methods
- PHC 6008: Cardiovascular Epidemiology
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
- PHC 6034: Epidemic Investigation
- PHC 6070: Epidemiology of Aging
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6711: Measurement in Epidemiology and Outcomes Research
- PHC 6933: Special Topics in Public Health
- PHC 6938: Oral and Craniofacial Epidemiology
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7007: Cancer Epidemiology
- PHC 7038: Psychiatric Epidemiology
- PHC 7065: Critical Skills in Epidemiological Data Management
- PHC 7427: Ethics in Population Science
- PHC 7727: Grant Writing for Population Health Research
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7902: Epidemiology Supervised Research Writing Circle
- PHC 7910: International Field Epidemiology
- PHC 7916: National Field Epidemiology
- PHC 7934: Seminar I: Epidemiology Past, Present, and Future
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6601: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neurophysiology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
Health Services Research, Management, and Policy Department

Chair: Arch G. Mainous, III
Graduate Coordinator: Patricia Van Wert

Complete faculty listing: Follow this link.

The Department of Health Services Research, Management, and Policy offers degree programs at both the master's and doctoral level. The Master of Health Administration (M.H.A.) prepares individuals for management positions in the health care field. The Department also participates in the Master of Public Health (M.P.H.) degree by offering a concentration in Public Health Management and Policy (more information available here).

At the doctoral level, the Department offers the Ph.D. degree in Health Services Research. This full-time program prepares graduates to investigate and evaluate the complexities of health care systems in the U.S. and elsewhere. Health services research is a multidisciplinary field that examines the delivery, organization, financing, and outcomes of health care services.

Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below and our website: http://hsrmp.phhp.ufl.edu.

Other

Health Administration

College

College of Public Health and Health Professions

Department/School

Health Services Research, Management, and Policy Department

Health Administration Program Information

The Master of Health Administration (M.H.A.) is a two-year, lock-step program with a summer internship between the first and second years. Small class size permits individual attention and guidance from faculty members. The program prepares qualified individuals motivated by a social mission and responsibility to the community for various management positions in the health services industry. Organizations seek individuals who have the ability to solve business problems and build strategic relationships in a climate of continuous change.

The UF M.H.A. program develops engaged early health care careers to use evidence-based strategies to improve healthcare quality, affordability, and access. We provide students with fundamental knowledge using a cohort model in a campus-based setting that emphasizes experiential learning and data-driven problem solving both in the classroom and in the practice setting.
environment. Students will develop proficiency to detect, analyze, manage and respond to critical administrative issues in both provider and non-provider healthcare organizations. Our program embraces ethical conduct and professionalism, diversity and inclusion, practitioner involvement and team-based learning. Faculty inform practice with research and service to the community.

Applicants from any undergraduate major are considered. For more information about our program and details about the MBA/MHA dual degree, please see our website: http://hsrmhph.ufl.edu/academic-programs/master-of-health-administration.

Degrees

Master of Health Administration

Health Administration Program Courses

- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6177: Advanced Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6196: Health Services Operations Management
- HSA6198: Information Management in Health Administration
- HSA6342: Human Resource Management for Health Services Managers
- HSA6385: Performance Management for Health Care Managers
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6436: Health Economics
- HSA6855: Internship in Health Administration
- HSA6905: Individual Study in Health Administration
- HSA6939: Capstone Seminar in Health Administration

Health Services Research, Management, and Policy Departmental Courses

- HSA5103: Introduction to the U.S. Health Care System
- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6175: Health Care Financial Management
- HSA6177: Advanced Health Care Finance
- HSA6179: Introduction to Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6196: Health Services Operations Management
- HSA6198: Information Management in Health Administration
- HSA6197: Information Management in Health Administration
- HSA6198: Information Management in Health Administration
- HSA6342: Human Resource Management for Health Services Managers
- HSA6385: Performance Management for Health Care Managers
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6436: Health Economics
- HSA6855: Internship in Health Administration
- HSA6858: Internship in Health Services Research
- HSA6878: Etiology in Legal Aspects of Health Services Administration
- HSA6905: Individual Study in Health Administration
- HSA6910: Supervised Research
- HSA6911: Research Seminar in Health Services Research
- HSA6930: Special Topics in Health Services Administration
- HSA6935: Seminar in Health Administration
- HSA6939: Capstone Seminar in Health Administration
- HSA6940: Supervised Teaching
- HSA6946: Internship in Public Health Management and Policy
- HSA7106: Seminar in Health Care Access and Utilization
- HSA7116: Health Services Organizational Research
- HSA7157: Research Foundations of Health Policy
- HSA7414: Society, Health, and Medical Care
- HSA7437: Advanced Health Economics
- HSA7707: Health Services Research Methods I
HSA 7708: Health Services Research Methods II
HSA 7759: Quality and Outcomes in Health Services Research
HSA 7905: Advanced Individual Study in Health Services Research
HSA 7936: Seminar in Health Care Costs and Financing
HSA 7938: Advanced Seminar in Health Services Research
HSA 7979: Advanced Research
HSA 7980: Research for Doctoral Dissertation
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PHC 6917: Supervised Research Project
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PHC 6937: Special Topics in Public Health
PHC 6945: Public Health Practicum
PHC 6946: Public Health Internship
PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
PHC 7038: Psychiatric Epidemiology
PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
PHC 7727: Grant Writing for Population Health Research
PHC 7752: Seminar in Instrument Development for Public Health
PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
PHC 7907: Social and Behavioral Science Journal Club
PHC 7979: Advanced Research

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
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- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
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- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
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- PHC 6917: Supervised Research Project
- PHC 6931: Seminar in Contemporary Public Health Issues
- PHC 6933: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
Health Services Research

College

College of Public Health and Health Professions

Department/School

Health Services Research, Management, and Policy Department

Health Services Research Program Information

The Department of Health Services Research, Management and Policy offers a doctoral degree in Health Services Research. Health services research is a multidisciplinary field of inquiry, both basic and applied, that examines the use, costs, quality, accessibility, delivery, organization, financing, and outcomes of healthcare services. The objective is to increase knowledge and understanding of the structure and processes of the healthcare system, and to assess subsequent effects on individuals and populations. Health services research draws on a variety of disciplines, and integrates their conceptual frameworks and methods to provide new ways of studying and understanding the health care system.

The Ph.D. Program in Health Services Research prepares individuals to conduct inquiry that will inform government officials, corporate leaders, clinicians, health plan managers, and others making decisions about complex health-related problems and issues. Students in the Ph.D. Program in Health Services Research learn to apply research methods and scientific knowledge to the study of health services organizations and systems.

Graduates of the Ph.D. Program in Health Services Research will find career opportunities in academic, private sector, and public service settings. For example, some graduates will combine research interests with a teaching career and accept academic appointments in a wide range of health-related departments in the nation's colleges and universities. Other graduates will pursue health services research in the context of healthcare delivery and choose employment opportunities with hospitals and health systems, managed care companies, the pharmaceutical industry and consulting firms. Finally, graduates may pursue careers in government or other public service entities (such as private foundations), whose programs are increasingly dependent upon the findings and methodologies of health services research.

For more details about our program, please see our website: http://hsrmp.phhp.ufl.edu/academic-programs/ph-d-in-health-services-research.
Degrees

Doctor of Philosophy

Health Services Research Program Courses

- HSA 6910: Supervised Research
- HSA 6911: Research Seminar in Health Services Research
- HSA 6930: Special Topics in Health Services Administration
- HSA 6940: Supervised Teaching
- HSA 7108: Seminar in Health Care Access and Utilization
- HSA 7116: Health Services Organizational Research
- HSA 7157: Research Foundations of Health Policy
- HSA 7414: Society, Health, and Medical Care
- HSA 7437: Advanced Health Economics
- HSA 7707: Health Services Research Methods I
- HSA 7708: Health Services Research Methods II
- HSA 7759: Quality and Outcomes in Health Services Research
- HSA 7905: Advanced Individual Study in Health Services Research
- HSA 7936: Seminar in Health Care Costs and Financing
- HSA 7938: Advanced Seminar in Health Services Research
- HSA 7979: Advanced Research
- HSA 7980: Research for Doctoral Dissertation

Health Services Research, Management, and Policy Departmental Courses

- HSA 5103: Introduction to the U.S. Health Care System
- HSA 5174: Fundamentals of Health Care Finance
- HSA 6105: Professional Skills Seminar
- HSA 6114: U.S. Health Care System
- HSA 6115: Introduction to Management of Health Services Organizations
- HSA 6126: U.S. Health Insurance System
- HSA 6152: Overview of U.S. Health Policy
- HSA 6175: Health Care Financial Management
- HSA 6177: Advanced Health Care Finance
- HSA 6179: Introduction to Health Care Finance
- HSA 6188: Strategic Management in Health Administration
- HSA 6196: Health Services Operations Management
- HSA 6197: Information Management in Health Administration
- HSA 6198: Information Management in Health Administration
- HSA 6342: Human Resource Management for Health Services Managers
- HSA 6386: Performance Management for Health Care Managers
- HSA 6427: Legal and Ethical Issues in Health Administration
- HSA 6436: Health Economics
- HSA 6855: Internship in Health Administration
- HSA 6858: Internship in Health Services Research
- HSA 6878: Edemship in Legal Aspects of Health Services Administration
- HSA 6905: Individual Study in Health Administration
- HSA 6910: Supervised Research
- HSA 6911: Research Seminar in Health Services Research
- HSA 6930: Special Topics in Health Services Administration
- HSA 6935: Seminar in Health Administration
- HSA 6939: Capstone Seminar in Health Administration
- HSA 6940: Supervised Teaching
- HSA 6946: Internship in Public Health Management and Policy
- HSA 7106: Seminar in Health Care Access and Utilization
- HSA 7116: Health Services Organizational Research
- HSA 7157: Research Foundations of Health Policy
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- HSA 7437: Advanced Health Economics
- HSA 7707: Health Services Research Methods I
- HSA 7708: Health Services Research Methods II
- HSA 7759: Quality and Outcomes in Health Services Research
- HSA 7905: Advanced Individual Study in Health Services Research
- HSA 7936: Seminar in Health Care Costs and Financing
- HSA 7938: Advanced Seminar in Health Services Research
- HSA 7979: Advanced Research
- HSA 7980: Research for Doctoral Dissertation
- PHC 6313: Environmental Health Concepts in Public Health
College of Public Health and Health Professions Courses

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- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
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- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
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- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neurophysiology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuroplasticity: A Foundation for Neuromodulation
Occupational Therapy

Chair: W. C. Mann.
Graduate Coordinator: C. A. Velozo, J.J. Foss.

Complete faculty listing by department: Follow this link.

The Department of Occupational Therapy offers graduate programs in occupational therapy leading to the Master of Health Science (M.H.S.) degree (on-campus nonthesis and thesis options and distance learning nonthesis option) and the entry-level Master of Occupational Therapy (M.O.T.) degree. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

Master of Health Science: This program is designed for students who have earned an undergraduate degree in Occupational therapy. The thesis option requires four semesters of course work and a formal research thesis, while the nonthesis option requires three semesters of course work and a research project. The program emphasizes research and advanced theories related to occupational therapy practice. Preparation for teaching, administrative, and other occupational therapy roles is supplemented through elective courses. A coherent series of elective courses related to occupational therapy must be approved by the supervisory committee chairperson before the second semester of work.

In addition to the requirements of the Graduate School, admission requires the candidate to have completed a curriculum in occupational therapy accredited by the American Occupational Therapy Association or by the World Federation of Occupational Therapists.

The distance learning degree option for the Master of Health Science is specifically intended to meet the needs of the working professional. The nonthesis program is designed to improve the knowledge and skills of working occupational therapists for practice in a complex and challenging health care system. It provides preparation for new practice areas, leadership roles, and independent practice and is delivered through the Internet. In addition to the departmental requirements listed above, applicants to the distance learning program must have basic personal computer competency and access to a computer that meets minimal configuration requirements.

Additional information about the Master of Health Science is available at http://www.hp.ufl.edu or http://gradschool.rgp.ufl.edu or by telephone at (352)273-6817. For distance learning, see http://otdl.ufl.edu/ or call toll free (866)878-3297.

Master of Occupational Therapy: This entry-level degree program is designed for students who do not have an undergraduate degree in occupational therapy. The program provides students with a holistic perspective, including an understanding of the philosophical and theoretical bases for practice in the current health care environment. The M.O.T. program provides a strong background in theory, assessment, and therapeutic interventions. Before their professional preparation in the M.O.T. program, students receive a liberal education in their pre-professional baccalaureate studies, including several courses specifically focused for students planning to enter the M.O.T. program. Students may enroll in courses in the Bachelor of Health Science degree program at the bachelor’s level, or they may complete these courses on a postbaccalaureate level before starting the M.O.T. program. Students are only admitted into the M.O.T. program in summer term and graduate at the end of the fall term after 1.33 years of full-time study (5 semesters) and 58 credits.

Admission requirements include completion of an undergraduate degree and the prerequisite course work. Three letters of reference and a letter of application are required by the Department. Additional information is available at http://www.phhp.ufl.edu/ot/ and http://gradschool.rgp.ufl.edu or by telephone (352)273-6817.

This program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association. The address for ACOTE is 4720 Montgomery Lane, Box 31220, Bethesda, MD, 20814-1220. The phone number is (301) 652-2632. Graduates of the program are eligible to sit for the national certification exam administered by the National Board for Certification in Occupational Therapy (NBCOT). The website address of NBCOT is www.nbcot.org.

Other

Occupational Therapy

- RCS 6110: Rehabilitation Science Theory and Application I
- RCS 6112: Rehabilitation Science Theory and Application II
- RCS 6114: Rehabilitation in the United Kingdom
- RCS 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RCS 6700: Rasch Measurement: Introduction and Application
- RCS 6705: Research Methods in Rehabilitation
- RCS 6706: Scientific Writing for the Rehabilitation Professional
- RCS 6900: College Classroom: Teaching Process and Practice
- RCS 6905: Individual Work
- RCS 6910: Supervised Research
- RCS 6930: Special Topics in Rehabilitation Science
- RCS 6940: Supervised Teaching
- RCS 7079: Advanced Research
- RCS 7980: Research for Doctoral Dissertation
- RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
- RCS 6066: Rehabilitation Issues in Human Growth and Development
- RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
- RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
- RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
- RCS 6412: Rehabilitation Counseling Theory and Practice
- RCS 6470: Human Sexuality and Disability
- RCS 6601: Forensic Rehabilitation Consultation I
- RCS 6602: Forensic Rehabilitation Consultation II
- RCS 6625: Community Counseling and Case Management
- RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
- RCS 6740: Rehabilitation Research
- RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
- RCS 6801: Rehabilitation Counseling Practicum
- RCS 6825: Internship in Rehabilitation Counseling
- RCS 6905: Individual Work
- RCS 6910: Supervised Research
- RCS 6931: Special Topics
- RCS 6940: Supervised Teaching
- RCS 6945: Advanced Rehabilitation Counseling Practicum
- RCS 6971: Research for Master's Degree
Occupational Therapy Program Information

The UF Department of Occupational Therapy offers a Masters in Occupational Therapy (MOT). This program prepares students to meet the demands of a highly technological and fast-paced American health care system.

The Masters in Occupational Therapy Degree Program is designed for students who do not have an entry-level professional level OT degree. To prepare to enter the Masters in Occupational Therapy program, undergraduate students may complete the University of Florida Health Science (BHS) degree program and the pre-OT track.

Applicants that have earned an undergraduate degree in a program other than UF’s Health Science program can enter the MOT program through our Conditional Graduate program.

By completing the Liberal Arts prerequisites for the program, students study the biological, psychological and social systems that impact on the performance of occupational roles. The MOT program provides a strong background in theory, assessment and therapeutic interventions and assists students to develop a strong professional identity.

Students selected from the Health Science/pre-OT track undergraduate program can apply the 6 pre-OT track course toward the MOT requirements for the MOT program. Students who have graduated from the other colleges or universities can be admitted to the MOT program and complete the 6 pre-OT track courses as part of their graduate program prior to initiating coursework in the Masters in Occupational Therapy Degree Program. The six Health Science prerequisite courses are offered the Fall and Spring semesters preceding the Summer start of the MOT coursework.

For more information, please see our website: http://ot.phhp.ufl.edu/academics/mot/program-description.

Degrees

Master of Health Science

Master of Occupational Therapy

Occupational Therapy Courses

- OTH 5002: Foundations of Occupational Therapy
- OTH 5115C: Therapeutic Skills II: Areas of Occupation
- OTH 5324: Psychosocial Intervention
- OTH 5435: Therapeutic Skills I
- OTH 5722: Professional Development in Occupational Therapy
- OTH 5726C: Service Delivery and OT Management
- OTH 5770C: Research for Occupational Therapy
- OTH 5812: Practicum I
- OTH 5816: Practicum II
- OTH 5848: Internship I
- OTH 5849: Internship II
- OTH 6008: Neuroscience of Human Occupation
- OTH 6106: Assistive Technology and Occupational Performance
- OTH 6539: Occupational Therapy Theory
- OTH 6635: Principles of Occupational Therapy: Screening and Evaluation I
- OTH 6636: Principles of Occupational Therapy: Screening and Evaluation II
- OTH 6641: Occupational Therapy Interventions I
- OTH 6642: Occupational Therapy Interventions II
- OTH 6707: OT Manager
- OTH 6708: Issues in Occupational Therapy Practice I
- OTH 6709: Issues in Occupational Therapy Practice II
- OTH 6720: Trends and Issues in Health Care
- OTH 6763: Evidence Based Practice
- OTH 6881: Specialty Internship
- OTH 6905: Individual Work
- OTH 6907: Professional Development Project
- OTH 6933: Special Topics in Occupational Therapy
College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6941: Seminar in Contemporary Public Health Issues
- PHC 6951: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- RHT 5156: Exercise Physiology
- RHT 6125C: Concepts in Clinical Biomechanics
- RHT 6127C: Control of Gait and Posture
- RHT 6167C: Applied Neuropsychology for Physical Therapy
- RHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- RHT 6316: Neurological Aspects of Orthopedic Rehabilitation

- OTH 6971: Research for Master's Thesis
Audiology

Other
College of Public Health and Health Professions

Department/School

Speech, Language and Hearing Sciences Department

Degrees Offered with a Major in Audiology

Doctor of Audiology

Speech, Language and Hearing Sciences Departmental Courses

- ASL 5406: Manual Communication with the Hearing Impaired
- LAE 6505: Applied Preschool Language Disorders: Diagnosis and Treatment
- LIN 5741: Applied English Grammar
- SPA 5051: Clinical Observation in Audiology
- SPA 5102: Auditory Anatomy and Physiology
- SPA 5128: Speech Perception
- SPA 5204: Phonological Disorders
- SPA 5211: Voice Disorders
- SPA 5225: Principles of Speech Pathology: Stuttering
- SPA 5245: Communicative Disorders Related to Cleft Palate
- SPA 5254: Neurocognitive Language Disorders
- SPA 5304: Principles of Audiological Evaluation
- SPA 5315: Peripheral and Central Auditory Disorders
- SPA 5401: Speech Pathology Language Disorder
- SPA 5405: Language Disorders II
- SPA 5553: Instrumentation and Diagnosis in Speech-Language Pathology
- SPA 5563: Psychosocial Aspects of Hearing Loss
- SPA 5646: Speech and Language of the Deaf and Hard of Hearing
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6010: Basic Auditory Sciences
- SPA 6117: Science of Singing
- SPA 6133L: Hearing Aid Analysis Laboratory
- SPA 6207: Applied Phonological Disorders: Diagnosis and Treatment
- SPA 6211: Applied Voice Disorders: Diagnosis and Treatment
- SPA 6217: Vocal Health and Habilitation
- SPA 6229: Applied Fluency Disorders: Diagnosis and Treatment
- SPA 6233: Speech Motor Control Disorders
- SPA 6270: Auditory Processing Disorders
- SPA 6805: Introduction to Graduate Research
- SPA 6905: Pediatric Audiology
- SPA 6911: Medical Audiology
- SPA 6912: Advanced Audiology and Neuro-Otology
- SPA 6917: Vestibular Disorders
- SPA 6923: Audiologic Rehabilitation for Adults
- SPA 6924: Audiologic Rehabilitation for Children
- SPA 6930: Amplification I
- SPA 6941: Amplification II
- SPA 6942: Amplification III
- SPA 6990: Proseminar: Speech-Language Pathology and Audiology
- SPA 6410: Adult Language Disorders
- SPA 6416: Applied Neurogenic Disorders: Diagnosis and Treatment
- SPA 6430: Applied Developmental Disorders: Diagnosis and Treatment in Speech and Language
- SPA 6436: Issues in Autism Spectrum Disorders
- SPA 6506: Clinical Clerkship in Audiology
- SPA 6507: Applied Augmentative and Alternative Communication
- SPA 6521: Practicum in Speech-Language Diagnostics: UFSHC
- SPA 6524: Practicum in Speech-Language Therapy: UFSHC
- SPA 6531: Clinical Practice in Hearing Assessment
- SPA 6533: Clinical Practice in Aural Rehabilitation
- SPA 6559: Alternative and Augmentative Communication
- SPA 6564: Communication and Aging
- SPA 6566: Seminar in Dysphagia
- SPA 6568: Clinical Evaluation in Medical Speech-Language Pathology
- SPA 6570: Seminar: Professional Aspects of Speech-Language Pathology
- SPA 6581: Special Clinical
- SPA 6830: Communication Disorders in Medically Complex Pediatric Populations
**SPA 6905: Individual Study**
**SPA 6910: Supervised Research**
**SPA 6930: Proseminar in Speech-Language Pathology and Audiology**
**SPA 6935: Applied Reading Disabilities: Diagnosis and Treatment**
**SPA 6936: Special Topics**
**SPA 6940: Supervised Teaching**
**SPA 6942: Externship in Speech-Language Pathology**
**SPA 6971: Research for Master's Thesis**
**SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions**
**SPA 7306: Audiologic Assessment in a Medical Setting**
**SPA 7318: Clinical Auditory-Electrophysiology**
**SPA 7319: Balance Disorders: Evaluation and Treatment**
**SPA 7325: Audiologic Rehabilitation**
**SPA 7343: Cochlear Implants and Assistive Devices**
**SPA 7345: Principles of Amplification**
**SPA 7353: Environmental Hearing Conservation**
**SPA 7354: Seminar in Audiology Hearing Conservation and Noise Control**
**SPA 7391: Business and Professional Issues in Audiology**
**SPA 7415: Neurolinguistics of Adult Language Disorders**
**SPA 7500: Public School Practicum**
**SPA 7523: Practicum in Speech Pathology in a Medical/Dental Setting**
**SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders**
**SPA 7566: Counseling Individuals with Hearing Losses**
**SPA 7833: Audiology Research Project**
**SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities**
**SPA 7945: Graduate Practicum in Audiology**
**SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology**
**SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology**
**SPA 7958: Clinical Externship**
**SPA 7979: Advanced Research**
**SPA 7980: Research for Doctoral Dissertation**

**College of Public Health and Health Professions Courses**

- **HSC 5938: Special Topics**
- **HSC 6905: Independent Study**
- **HSC 6939: Special Topics**
- **HSC 6940: Supervised Teaching**
- **PHC 6000: Epidemiology Methods I**
- **PHC 6001: Principles of Epidemiology in Public Health**
- **PHC 6002: Epidemiology of Infectious Diseases**
- **PHC 6003: Epidemiology of Chronic Diseases and Disability**
- **PHC 6009: Biology and Epidemiology of HIV/AIDS**
- **PHC 6011: Epidemiology Methods II**
- **PHC 6016: Social Epidemiology in Public Health**
- **PHC 6036: Environmental Infectious Diseases: A Molecular Approach**
- **PHC 6050: Statistical Methods for Health Sciences Research I**
- **PHC 6102: Introduction to Public Health Administrative Systems**
- **PHC 6103: Systems Thinking for Public Health**
- **PHC 6104: Evidence-Based Management of Public Health Programs**
- **PHC 6146: Public Health Program Planning and Evaluation**
- **PHC 6153: Public Policy and Aging**
- **PHC 6183: Disaster Preparedness and Emergency Response**
- **PHC 6194: Spatial Epidemiology**
- **PHC 6195: Health information for Diverse Populations: Theory & Methods**
- **PHC 6220: Overview of Long-Term Care**
- **PHC 6251: Assessment and Surveillance in Public Health**
- **PHC 6301: Aquatic Systems and Environmental Health**
- **PHC 6309: Environmental Justice Issues in Public Health**
- **PHC 6312: Water Quality and Human Health**
- **PHC 6313: Environmental Health Concepts in Public Health**
- **PHC 6316: Health, Risk, and Crisis Communication**
- **PHC 6317: Risk Communication for Public Health Practice**
- **PHC 6346: Occupational and Environmental Health Among Agriculture Workers**
- **PHC 6370: Public Health Biology**
- **PHC 6403: Adolescence, Risk Taking and Health**
- **PHC 6404: Gender, Sexuality, and Health**
- **PHC 6410: Psychological, Behavioral, and Social Issues in Public Health**
- **PHC 6413: Critical Incidents and Violence in Communities**
- **PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology**
- **PHC 6419: Biomedical and Psychological Aspects of Very Late Life**
- **PHC 6421: Public Health Law and Ethics**
- **PHC 6441: Health Disparities in the United States**
- **PHC 6445: Global Public Health and Development II**
- **PHC 6447: Ecology of HIV/AIDS in the Rural South**
- **PHC 6512: Environmental Management of Vector-Borne Diseases**
- **PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety**
- **PHC 6519: Zoonotic Diseases in Humans and Animals**
- **PHC 6520: Foodborne Diseases**
- **PHC 6530: Public Health Issues of Mothers and Children**
- **PHC 6543: Community Practice of Behavioral Health Risk Prevention**
- **PHC 6544: Health Behavior Interventions in Practice**
### Communication Sciences and Disorders

#### College

**College of Public Health and Health Professions**

#### Department/School

**Speech, Language and Hearing Sciences Department**
Degrees Offered with a Major in Communication Sciences and Disorders

Doctor of Philosophy

Master of Arts

Speech, Language and Hearing Sciences Departmental Courses

- ASL 5406: Manual Communication with the Hearing Impaired
- LAE 6505: Applied Preschool Language Disorders: Diagnosis and Treatment
- LIN 5741: Applied English Grammar
- SPA 5051: Clinical Observation in Audiology
- SPA 5102: Auditory Anatomy and Physiology
- SPA 5128: Speech Perception
- SPA 5204: Phonological Disorders
- SPA 5211: Voice Disorders
- SPA 5225: Principles of Speech Pathology: Stuttering
- SPA 5245: Communicative Disorders Related to Cleft Palate
- SPA 5254: Neurocognitive Language Disorders
- SPA 5304: Principles of Audiological Evaluation
- SPA 5315: Peripheral and Central Auditory Disorders
- SPA 5401: Speech Pathology Language Disorder
- SPA 5405: Language Disorders II
- SPA 5553: Instrumentation and Diagnosis in Speech-Language Pathology
- SPA 5563: Psychosocial Aspects of Hearing Loss
- SPA 5646: Speech and Language of the Deaf and Hard of Hearing
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6010: Basic Auditory Sciences
- SPA 6117: Science of Singing
- SPA 6133L: Hearing Aid Analysis Laboratory
- SPA 6207: Applied Phonological Disorders: Diagnosis and Treatment
- SPA 6211: Applied Voice Disorders: Diagnosis and Treatment
- SPA 6217: Vocal Health and Habilitation
- SPA 6229: Applied Fluency Disorders: Diagnosis and Treatment
- SPA 6233: Speech Motor Control Disorders
- SPA 6270: Auditory Processing Disorders
- SPA 6805: Introduction to Graduate Research
- SPA 6305: Pediatric Audiology
- SPA 6311: Medical Audiology
- SPA 6312: Advanced Audiology and Neuro-Otology
- SPA 6317: Vestibular Disorders
- SPA 6323: Audiologic Rehabilitation for Adults
- SPA 6324: Audiologic Rehabilitation for Children
- SPA 6340: Amplification I
- SPA 6341: Amplification II
- SPA 6342: Amplification III
- SPA 6390: Proseminar: Speech-Language Pathology and Audiology
- SPA 6410: Adult Language Disorders
- SPA 6416: Applied Neurogenic Disorders: Diagnosis and Treatment
- SPA 6430: Applied Developmental Disorders: Diagnosis and Treatment in Speech and Language
- SPA 6436: Issues in Autism Spectrum Disorders
- SPA 6506: Clinical Clerkship in Audiology
- SPA 6507: Applied Augmentative and Alternative Communication
- SPA 6521: Practicum in Speech-Language Diagnostics: UFSHC
- SPA 6524: Practicum in Speech-Language Therapy: UFHSC
- SPA 6531: Clinical Practice in Hearing Assessment
- SPA 6533: Clinical Practice in Aural Rehabilitation
- SPA 6559: Alternative and Augmentative Communication
- SPA 6564: Communication and Aging
- SPA 6565: Seminar in Dysphagia
- SPA 6568: Clinical Evaluation in Medical Speech-Language Pathology
- SPA 6570: Seminar: Professional Aspects of Speech-Language Pathology
- SPA 6581: Special Clinical
- SPA 6830: Communication Disorders in Medically Complex Pediatric Populations
- SPA 6905: Individual Study
- SPA 6910: Supervised Research
- SPA 6930: Proseminar in Speech-Language Pathology and Audiology
- SPA 6935: Applied Reading Disabilities: Diagnosis and Treatment
- SPA 6936: Special Topics
- SPA 6940: Supervised Teaching
- SPA 6942: Edemship in Speech-Language Pathology
- SPA 6971: Research for Master's Thesis
SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
SPA 7306: Audiologic Assessment in a Medical Setting
SPA 7318: Clinical Auditory Electrophysiology
SPA 7319: Balance Disorders: Evaluation and Treatment
SPA 7343: Cochlear Implants and Assistive Devices
SPA 7348: Principles of Amplification
SPA 7500: Public School Practicum
SPA 7523: Practicum in Speech Pathology in a Medical/Dental Setting
SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
SPA 7566: Counseling Individuals with Hearing Losses
SPA 7833: Audiology Research Project
SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
SPA 7945: Graduate Practicum in Audiology
SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology
SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology
SPA 7956: Clinical Externship
SPA 7979: Advanced Research
SPA 7980: Research for Doctoral Dissertation

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6417: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
Animal Molecular and Cellular Biology Department

**Director:** P.J. Hansen

*Complete faculty listing by department: [Follow this link](http://www.animal.ufl.edu/amcb/).

For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at [http://www.animal.ufl.edu/amcb/](http://www.animal.ufl.edu/amcb/).

**Other**

**Animal Molecular and Cellular Biology**

**College**

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine
Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
- Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program's website at http://www.animal.ufl.edu/amcb/

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5905: Individual Study
- ALS 6046: Grant Writing
- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
- ANS 6666L: Molecular and Cellular Research Methods
- ANS 6702: Lactation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
- PCB 6816: Thermal Physiology
- ANS 6707: Growth Physiology in Farm Animals
- ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
- ANS 6715: Gastrointestinal and Feed Microbiology
- ANS 6716: Physiology in Farm Animals
- ANS 6718: Nutritional Physiology of Domestic Animals
- ANS 6723: Mineral Nutrition and Metabolism
- ANS 6745: Introduction to Statistical Genetics
- ANS 6750: Reproductive Physiology in Farm Animals
- ANS 6751: Physiology of Reproduction
- ANS 6751C
- ANS 6767: Molecular Endocrinology
- ANS 6905: Problems in Animal Science
- ANS 6910: Supervised Research
- ANS 6932: Special Topics in Animal Science
- ANS 6933: Graduate Seminar in Animal Science
- ANS 6936: Graduate Seminar in Animal Molecular and Cell Biology
- ANS 6939: Animal Molecular and Cellular Biology Colloquy
- ANS 6940: Supervised Teaching
- ANS 6971: Research for Master's Thesis
- ANS 7979: Advanced Research
- ANS 7980: Research for Doctoral Dissertation
- BCH 5045: Graduate Survey of Biochemistry
- BCH 6876: Recent Advances in Membrane Biology
- BME 5085: Patents, Product Development, and Technology Transfer
- BME 5401: Biomedical Engineering and Physiology I
- BCH 5143: Mammalian Molecular Biology and Genetics
- BCH 6740: Physical Biochemistry and Structural Biology
Departments and Programs within the College of Agricultural and Life Sciences

College of Agricultural and Life Sciences

Dear Elaine Turner

Complete faculty listings: Follow this link.

The College of Agricultural and Life Sciences offers academic programs and grants advanced degrees in 17 departments and the Schools of Forest Resources and Conservation, and Natural Resources and Environment. These academic units are all a part of the Institute of Food and Agricultural Sciences (IFAS). Additional components of IFAS include 16 research centers located throughout the state and cooperative extension offices in each of the 67 counties of the state.

The following courses are offered under the supervision of the office of the dean by an interdisciplinary faculty and deal with material of concern to two or more IFAS academic units. The courses are also open to students of other colleges, with the permission of the course instructor.

For more information, please see our website: http://cals.ufl.edu

Departments and Programs within the College of Agricultural and Life Sciences

College of Agricultural and Life Sciences Courses

Other

Genetics and Genomics

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Medicine

Genetics and Genomics Program

Chair: C. Mulligan
Graduate Coordinator: J. Bungert

Complete faculty listing: Follow this link or visit media.news.health.ufl.edu/misc/mgm/UFGI/search/members-list4.php

The University of Florida Genetics Institute is a multi-college, multi-faceted research center. Good geneticists are integrative geneticists, who incorporate many different subfields of genetics into their work. The core mission is to improve the quality of life of people throughout the world via integrative, genetics-based research. Accordingly, faculty interests and graduate research opportunities include a wide range of areas from advances in gene therapy to understanding the maintenance of genetic variation, from understanding plant immune responses to developing...
improved algorithms for identifying regulatory motifs in DNA sequences, and from the challenges of bioethics to strategies for controlling malaria.

The highlight of the first year core training is the research rotations program. Student laboratory rotations are a particularly exciting feature of the genetics and genomics doctoral program, and epitomize the philosophy that good geneticists are broadly trained and integrative. Many current Graduate Faculty members still vividly recall the transforming effects of their rotations during graduate school—they didn't always end up where they expected! Rotations can open students' eyes to areas of genetics that they had never considered and entice them into considering brand new career opportunities. Each student will sample the breadth and depth of genetics research at UF by carrying out three 8-week modules consisting of design, implementation, and analysis of genetics experiments. Each rotation is conducted in close association with a Graduate Faculty member. To ensure that students fully experience the impressive breadth of genetics research at UF, their rotations are hosted by Graduate Faculty in at least two different colleges. Students will also take PCB 5065, Advanced Genetics; GMS 6181, Special Topics in Microbiology (among the topics are genomics and bioinformatics, and ethics for genetics research); STA 6166, Statistical Methods I; and other electives as desired. In addition, throughout their tenure in the program, students participate in the Genetics Seminar, which is an opportunity to present their rotation plans and results of research to faculty and other students.

Prospective students should have strong backgrounds in biology and other hard sciences. Exceptional students with other backgrounds will also be considered. The research statement required as part of the application has a particularly important part in the admissions decision. Each applicant must describe his/her research interests, so that Graduate Faculty can evaluate knowledge of the discipline, fit to the program, and ability to articulate and motivate an interesting research problem. The required letters of recommendation are also extremely important in helping identify applicants with exceptional aptitude for genetics, and with research experience and promise.

For more information, write to the Genetics and Genomics Graduate Program, Attn: Graduate Secretary, Genetics Institute, University of Florida, PO Box 100196, Gainesville, FL 32610-0196.

Expanded information can be found at [http://www.ufgi.ufl.edu](http://www.ufgi.ufl.edu).

Degrees Offered with a Major in Genetics and Genomics

Doctor of Philosophy

Doctor of Philosophy - Clinical and Translational Science

Courses

- AGR 6322: Advanced Plant Breeding
- ANG 6532: Molecular Genetics of Disease
- ANG 7979: Advanced Research
- ANG 7980: Research for Doctoral Dissertation
- BCH 6415: Advanced Molecular and Cell Biology
- BCH 7410: Advanced Gene Regulation
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5805: Computer Simulation Concepts
- CIS 6930: Special Topics in CIS
- COT 5405: Analysis of Algorithms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6920: Genetics Journal Colloquy
- GMS 7979: Advanced Research
- GMS 7980: Research for Doctoral Dissertation
- HOS 6201: Breeding Perennial Cultivars
- PCB 5065: Advanced Genetics
- PCB 5235L: Experiments in Immunology
- PCB 5615: Molecular Evolution and Systematics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 6168: Statistical Methods in Research I
- STA 6167: Statistical Methods in Research II
- STA 6178: Genetic Data Analysis
- STA 6208: Basic Design and Analysis of Experiments
- STA 6329: Matrix Algebra and Statistical Computing
- STA 6934: Special Topics in Statistics
- STA 7979: Advanced Research
- STA 7980: Research for Doctoral Dissertation
- ZOO 6927: Special Topics in Zoology
- ZOO 7979: Advanced Research
- ZOO 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses
The degrees of Master of Science, Master of Engineering, and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog. Additional information can also be found on the graduate studies pages on the departmental website at www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

- **Agricultural production** includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.
- **Biological engineering** includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.
- **Information systems** includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.
- **Land and water resources** includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.
- **Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.**

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.
For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Degrees Offered with a Major in Agricultural and Biological Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Agricultural and Biological Engineering Courses

- ABE 5015: Empirical Models of Crop Growth and Yield Response
- ABE 5038: Recent Developments and Applications in Biosensors
- ABE 5152: Electro-Hydraulic Circuits and Controls
- ABE 5332: Advanced Agricultural Structures
College of Agricultural and Life Sciences Courses

- ABE 5442: Advanced Agricultural Process Engineering
- ABE 5643C: Biological Systems Modeling
- ABE 5646: Biological and Agricultural Systems Simulation
- ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials
- ABE 5663: Advanced Applied Microbial Biotechnology
- ABE 5707C: Agricultural Waste Management
- ABE 5815C: Food and Bioprocess Engineering Design
- ABE 6005: Applied Control for Automation and Robots
- ABE 6031: Instrumentation in Agricultural Engineering Research
- ABE 6035: Advanced Remote Sensing: Science and Sensors
- ABE 6037C: Remote Sensing in Hydrology
- ABE 6252: Advanced Soil and Water Management Engineering
- ABE 6254: Simulation of Agricultural Watershed Systems
- ABE 6265: Vadose Zone Modeling
- ABE 6266: Nanotechnology in Water Research
- ABE 6615: Advanced Heat and Mass Transfer in Biological Systems
- ABE 6644: Agricultural Decision Systems
- ABE 6816: Food and Bioprocess Sterilization
- ABE 6905: Individual Work in Agricultural and Biological Engineering
- ABE 6910: Supervised Research
- ABE 6931: Seminar
- ABE 6933: Special Topics in Agricultural and Biological Engineering
- ABE 6940: Supervised Teaching
- ABE 6971: Research for Master's Thesis
- ABE 6972: Research for Engineer's Thesis
- ABE 6974: Nonthesis Project
- ABE 6986: Applied Mathematics in Agricultural and Biological Engineering
- ABE 7979: Advanced Research
- ABE 7980: Research for Doctoral Dissertation
- AOM 5334C: Agricultural Chemical Application Technology
- AOM 5431: GIS and Remote Sensing in Agriculture and Natural Resources
- AOM 5435: Advanced Precision Agriculture
- AOM 6905: Individual Work in Agricultural Operations Management
- AOM 6932: Special Topics in Agricultural Operations Management
- CVR 6536: Stochastic Subsurface Hydrology
- PKG 5003: Advanced Distribution and Transport Packaging
- PKG 5006: Advanced Packaging Principles
- PKG 5105: Advanced Consumer Products Packaging
- PKG 5206C: Advanced Package Decoration
- PKG 5256C: Advanced Analytical Packaging Methods
- PKG 6100: Advanced Computer Tools for Packaging
- PKG 6905: Individual Work in Packaging
- PKG 6932: Special Topics in Packaging Sciences

Agricultural Education and Communication Department

Chair: E. W. Osborne
Graduate Coordinator: B. E. Myers

Complete faculty listing by department: Follow this link.

The Department of Agricultural Education and Communication offers the degrees of Master of Science and Doctor of Philosophy. Graduate students who obtain a degree in Agricultural Education and Communication will focus their study in one of four areas of specialization. The areas of specialization are agricultural communication, agricultural education, extension education, and leadership development. These degree programs are individually tailored to meet the student's unique needs for professional development. The requirements for each degree are described in the Graduate Degrees section of the University of Florida Graduate Catalog. More information about our program can be found by following the link below.

Other

Agricultural Education and Communication

College
College of Agricultural and Life Sciences

Department/School

Agricultural Education and Communication Department

Agricultural Education and Communication Program

The Master of Science program is designed to prepare graduates for domestic and international teaching, research, extension, administrative and leadership positions in both the public and private sectors. Courses are taught in an agricultural and natural resources context and are broadly applicable in educational, business, government, and agency settings. The Master of Science program is delivered on-campus and online via the AEC e-Learning Institute (eLI). The Doctor of Philosophy degree program is primarily designed to prepare graduates for academic positions in teaching, research, and extension within the realm of Agricultural Education and Communication. In addition, graduates may obtain positions in administration, human resource management, or training and development.

The Agricultural Communication specialization prepares students for professional communication careers in or dealing with agriculture and agribusiness. It is intended primarily for students who enter with a bachelor's degree in journalism, agricultural communication/journalism, advertising, broadcasting, public relations, or related fields. Graduates of this option are employed in: (1) communication or management positions with the numerous commodity or special-interest associations in agriculture and related fields; (2) communication support positions in agricultural extension and research information departments of land-grant universities, agencies of USDA, state Departments of Agriculture, and agricultural development projects overseas; (3) advertising and public relations positions with agribusiness firms or commodity associations; and (4) media positions involved in reporting on agriculture, agribusiness, and natural resource issues. Students in Agricultural Communication also develop strong skills/application in media writing, production, campaign strategies and/or Web design/desktop publishing. Graduates become prepared for positions in both public and private sectors in both industry and educational settings.

The Agricultural Education specialization is designed to enhance the careers of those employed in the educational professions in agriculture and natural resources. Regardless if one is employed in public school teaching, community college instruction, or training and development in agribusiness, students gain valuable knowledge and experience in designing, implementing, and evaluating educational programs. In addition, graduates of the program command added depth in the understanding of the teaching and learning process. This specialization may be designed to allow students to complete the requirements of teacher certification while completing their master's degree program. The PhD is a research-oriented degree that has a primary focus of preparing candidates to assume faculty positions in colleges or university teacher education programs. Candidates develop an individual program of study that provides a comprehensive knowledge of teaching and learning processes. The degree also seeks to extend the candidate's development by providing instruction, research opportunities, and experiences that enhance the depth and breadth of the candidate's prior learning opportunities.

The Extension Education specialization is designed to prepare students for careers in the Cooperative Extension service, outreach education, and/or other international agencies. Through coursework and research, students gain valuable knowledge and experience in designing, implementing, and evaluating educational programs. Extension graduate students choose between a domestic or international focus in regards to coursework and/or research. In addition, graduates of the program command tremendous depth in the teaching and learning process. Candidates who select the Extension Education specialization develop an individual program of study that focuses on such topics as program development, experiential education, the change process, educational technologies and extension, program evaluation and organizational accountability, administration and leadership, and international extension. Graduates become prepared for a variety of positions including extension specialists, county and district extension directors, outreach education coordinators for private and public agencies, 4-H Extension agents and specialists, and educator specialists with international agencies.

The Leadership Development specialization is designed to prepare students for educational leadership, training, and outreach positions in agricultural, extension, community and governmental agencies. Course work in the major will focus on a core of agricultural courses along with emphasis in designing educational/training programs, professional presentation enhancement, leadership development, teaching/training methods, and interpersonal communication. Candidates who select the Leadership Development specialization develop an individual program that focuses on leadership theory and measurement, critical and creative thinking, and leadership in cross-cultural settings. Students will encompass a strong research and theory-based program with a strong knowledge of training and development, and human resource management. Graduates become prepared for positions in both public and private sectors in both industry and educational settings.

Degrees Offered with a Major in Agricultural Education and Communication

Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development

Master of Science
Agricultural Education and Communication Courses

- AEC 5032: Agricultural Media Writing
- AEC 5037: Agricultural Media Production
- AEC 5060: Public Opinion and Agricultural and Natural Resource Issues
- AEC 5074: Agriculture, Resources, People, and the Environment: A Global Perspective
- AEC 5201: Teaching in Colleges of Agricultural and Life Sciences
- AEC 5203: Advanced Teaching in Colleges of Agricultural and Life Sciences
- AEC 5206: Teaching Methods in Agricultural Education
- AEC 5227: Teaching in Agricultural Education Laboratory Facilities
- AEC 5302: Professional Skill Development in Agriscience Education I
- AEC 5324: Philosophy and Development of Agricultural Education
- AEC 5454: Leadership Development for Extension and Community Nonprofit Organizations
- AEC 5501: Professional Skill Development in Agriscience Education II
- AEC 5541: Communication and Instructional Technologies in Agricultural and Life Sciences
- AEC 5544: Curriculum Development and Assessment Techniques in Emerging Agricultural Technologies
- AEC 5545: Special Methods in Teaching Agriculture
- AEC 5546: Program Planning in Agricultural Education
- AEC 5605: Advanced Curriculum and Teaching Methods
- AEC 6210: Designing Educational Programs in Agricultural Settings
- AEC 6211: Delivering Educational Programs in Agricultural Settings
- AEC 6212: Teacher Education in Agriculture
- AEC 6229: Laboratory Instruction: Theory and Practice
- AEC 6300: Methodology of Planned Change
- AEC 6316: From America to Zimbabwe: An Overview of International Extension Systems
- AEC 6321: The Land Grant University and University Governance
- AEC 6325: History and Philosophy of Agricultural Education
- AEC 6419: Communication and Competencies for Global Leadership
- AEC 6426: Development of a Volunteer Leadership Program
- AEC 6512: Program Development in Extension Education
- AEC 6540: Agricultural and Natural Resources Communications Theory and Strategies
- AEC 6543: Teaching and Learning Theory: Applications in Agricultural Education
- AEC 6552: Evaluating Programs in Extension Education
- AEC 6611: Agricultural and Extension Adult Education
- AEC 6704: Extension Administration and Supervision
- AEC 6767: Research Strategies in Agricultural Education and Communication
- AEC 6905: Problems in Agricultural and Extension Education
- AEC 6910: Supervised Research
- AEC 6912: Nonthesis Research in Agricultural and Extension Education
- AEC 6933: Seminar in Agricultural Education and Communication
- AEC 6940: Supervised Teaching
- AEC 6945: Practicum in Agricultural Education and Communication
- AEC 6947: Experiential Learning in Agricultural Education
- AEC 6971: Research for Master's Thesis
- AEC 7979: Advanced Research
- AEC 7980: Research for Doctoral Dissertation
- AGG 5504: Critical and Creative Thinking in Problem Solving and Decision Making

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Agronomy Department
The Agronomy Department offers the degrees of Doctor of Philosophy and Master of Science (thesis and non-thesis options) in agronomy with specializations in plant physiology, ecology, management and nutrition, weed science (terrestrial and aquatic), and plant breeding and genetics. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate programs emphasize the development and subsequent application of basic principles in each specialization to the management of agricultural and natural ecosystems in Florida and throughout the world. The continuing need for increased plant production for food, fiber and energy to meet the demands of a rapidly escalating population is reflected in departmental research programs. When compatible with a student’s program and permitted by prevailing circumstances, some thesis and dissertation research may be conducted wholly or in part in one or more of several countries.

Students seeking a graduate program in the Agronomy Department should hold a Bachelor of Science degree from an accredited college or university with a major in an area of plant science, or closely related discipline. A science background with basic courses in biology, botany, mathematics, chemistry, and physics is required of new graduate students.

### Degrees Offered with a Major in Agronomy

#### Doctor of Philosophy

- without a concentration
- concentration in Toxicology
- concentration in Tropical Conservation and Development

#### Master of Science
Agronomy Departmental Courses

- AGR 5215C: Integrated Field Crop Science
- AGR 5230C: Florida Grassland Agroecosystems
- AGR 5266C: Field Plot Techniques
- AGR 5277C: Tropical Crop Production
- AGR 5307: Molecular Genetics for Crop Improvement
- AGR 5321C: Genetic Improvement of Plants
- AGR 5444: Ecophysiology of Crop Production
- AGR 5511: Crop Ecology
- AGR 6233: Tropical Grassland Agroecosystems
- AGR 6237C: Research Techniques in Forage Evaluation
- AGR 6311: Population Genetics
- AGR 6322: Advanced Plant Breeding
- AGR 6325L: Plant Breeding Techniques
- AGR 6352: Cytogenetics
- AGR 6422C: Environmental Crop Nutrition
- AGR 6442C: Physiology of Agronomic Plants
- AGR 6905: Agronomic Problems
- AGR 6910: Supervised Research
- AGR 6932: Topics in Agronomy
- AGR 6933: Graduate Agronomy-Seminar
- AGR 6940: Supervised Teaching
- AGR 6971: Research for Master's Thesis
- AGR 7979: Advanced Research
- AGR 7980: Research for Doctoral Dissertation
- ALS 5155: Global Agroecosystems
- PM 5305: Principles of Pesticides
- PLS 5632C: Integrated Weed Management
- PLS 5652: Advanced Weed Science
- PLS 6623: Weed Ecology
- PLS 6655: Invasive Plant Ecology
- PLS 6656: Plant/Herbicide Interaction

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6926: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link
For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/.

Other

Animal Molecular and Cellular Biology

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine

Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
- Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program's website at http://www.animal.ufl.edu/amcb/.

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5905: Individual Study
- ALS 6046: Grant Writing
- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
- ANS 6668L: Molecular and Cellular Research Methods
- ANS 6702: Lactation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
- PCB 6816: Thermal Physiology
- ANS 6707: Growth Physiology in Farm Animals
- ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
- ANS 6715: Gastrointestinal and Feed Microbiology
- ANS 6716: Physiology in Farm Animals
- ANS 6718: Nutritional Physiology of Domestic Animals
- ANS 6723: Mineral Nutrition and Metabolism
- ANS 6745: Introduction to Statistical Genetics
- ANS 6750: Reproductive Physiology in Farm Animals
Animal Sciences is an academic department of the College of Agriculture and Life Sciences (CALS), a unit of the Institute of Food and Agricultural Sciences (IFAS). Creating new solutions to tomorrow's problems underlies everything we do in the Animal Sciences Program. In the areas of teaching, research, and extension, our faculty integrates the most modern technologies available with personal expertise and attention to the needs of students and our industry. For more information about the Animal Sciences program, please follow the link below.
Other

Animal Sciences

College

College of Agricultural and Life Sciences

Department/School

Animal Sciences Department

Animal Sciences Program

The Department of Animal Sciences offers the degrees of Master of Science and Doctor of Philosophy in animal sciences with emphasis in beef or dairy cattle, swine, or equine. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The following specializations are available:

- Breeding and genetics
- Management
- Nutrition (nutritional physiology, nutrient metabolism, and feedstuff utilization)
- Physiology (environmental, lactational, and reproductive)
- Molecular biology (embryology, endocrinology, and genetics)
- Meat science (meat processing, meat quality, muscle biology, and food safety)

A student may work on a problem covering more than one area of study. Animal resources (beef cattle, dairy cattle, horses, swine, sheep, and laboratory animals) are available for use in various research programs. Nutrition, physiology, and meats laboratories are available for detailed chemical and carcass quality evaluations, and excellent computer facilities are available. Special arrangements may be made to conduct research at the various branch agricultural experiment stations throughout Florida.

Departmental and program prerequisites for admission to graduate study include a sound science background, with basic courses in microbiology, biology, mathematics, and chemistry. All courses in the animal sciences program area are acceptable for graduate credit as part of the candidate's major.

The Graduate School restricts graduate students from pursuing minors in academic units that contribute major credit toward their degree program. Therefore, graduate students majoring in Animal Sciences cannot pursue a minor in Food and Resource Economics, Food Science and Human Nutrition, Medicine-Biochemistry, and Veterinary Medical Sciences. In addition, undergraduate credits at the 3000–4000 level in the major of any of these listed academic units are not eligible to count toward degree requirements.

Degrees Offered with a Major in Animal Sciences

Doctor of Philosophy

without a concentration

concentration in Animal Molecular and Cellular Biology

Master of Science

without a concentration
Animal Sciences Departmental Courses

- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6314: Experimental Embryology
- ANS 6447: Ruminant Nutrition
- ANS 6449: Wamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
- ANS 6702: Lactation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
- ANS 6706: Muscle Physiology
- ANS 6707: Growth Physiology in Farm Animals
- ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
- ANS 6715: Gastrointestinal and Feed Microbiology
- ANS 6716: Physiology in Farm Animals
- ANS 6718: Nutritional Physiology of Domestic Animals
- ANS 6723: Mineral Nutrition and Metabolism
- ANS 6750: Reproductive Physiology in Farm Animals
- ANS 6751: Physiology of Reproduction
- ANS 6767: Molecular Endocrinology
- ANS 6775: Essentials of Livestock Immunology
- ANS 6905: Problems in Animal Science
- ANS 6910: Supervised Research
- ANS 6932: Special Topics in Animal Science
- ANS 6933: Graduate Seminar in Animal Science
- ANS 6936: Graduate Seminar in Animal Molecular and Cell Biology
- ANS 6939: Animal Molecular and Cellular Biology Journal Colloquy
- ANS 6940: Supervised Teaching
- ANS 6971: Research for Master's Thesis
- ANS 7979: Advanced Research
- ANS 7980: Research for Doctoral Dissertation
- PCB 6816: Thermal Physiology

Additional Courses for Major Credit in Animal Sciences

- AEB 5326: Agribusiness Financial Management
- AEB 6385: Management Strategies for Agribusiness Firms
- AEB 7182: Agricultural Risk Analysis and Decision Making
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5732: Current Issues in Food Regulations
- FOS 5126C: Psychophysical Aspects of Foods
- FOS 6226C: Advanced Food Microbiology
- FOS 6315C: Advanced Food Chemistry
- FOS 6317C: Flavor Chemistry and Technology
- FOS 6355C: Instrumental Analysis and Separations
- FOS 6428C: Advanced Food Processing
- FOS 6455C: Industrial Food Fermentations
- HUN 5447: Nutrition and Immunity
- HUN 6245: Advanced Human Nutrition
- HUN 6301: Nutritional Aspects of Lipid Metabolism
- HUN 6305: Nutritional Aspects of Carbohydrates
- HUN 6321: Proteins and Amino Acids in Nutrition
- VME 5162C: Avian Diseases
- VME 5244: Physiology: Organ Systems

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry
Entomology and Nematology Department

College of Agricultural and Life Sciences

Chair: John L. Capinera.
Graduate Coordinator: Heather J. McAuslane.

Complete faculty listing by department: Follow this link.

The Entomology and Nematology Department offers the Master of Science (thesis and nonthesis options) and Doctor of Philosophy degrees in entomology and nematology with the following specializations: entomology, nematology, and pest management. Minimum requirements for the M.S. and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

The Department also offers a cooperative Doctor of Philosophy degree with Florida A&M University and distance education courses leading to the M.S. degree. Members of the Graduate Faculty include the department resident faculty, faculty located on University of Florida campuses away from Gainesville, scientists with other State of Florida agencies such as the Division of Plant Industry and Florida Department of Agriculture and Consumer Services, and scientists of the U.S. Department of Agriculture. The Graduate Faculty is qualified to direct graduate students in all specialties of entomology, nematology, and acarology.

New graduate students should have backgrounds in biology, chemistry, physics, and mathematics. Minor deficiencies may be made up after entering graduate school.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

For more information, please see the program page below, and visit our website: http://entnemdept.ufl.edu.

Other

Entomology and Nematology

College

College of Agricultural and Life Sciences

Department/School

Entomology and Nematology Department

Entomology and Nematology Program Information

The Entomology and Nematology department offers research-based M.S. (thesis) and Ph.D. degrees in entomology and in nematology. Our large faculty in Gainesville and at Research and Education Centers around the state allow for study in many important areas, including behavior, ecology, systematics, biological control, nematology, pest management, and medical, veterinary and urban entomology. Molecular, whole organism and population ecology studies are all within the range of supported research in the Entomology and Nematology department, and our nematology program is one of the most comprehensive in the nation.

The M.S. degree can be taken in a non-thesis format, in Gainesville or entirely online, with a specialization in either entomology or pest management. Online M.S. degrees are designed to accommodate place-bound students interested in biological science with emphasis on insects and other arthropods, including extension faculty and other educators; state and federal employees in agricultural, environmental and regulatory positions; consultants; pest control industry personnel; and others who want to further their education.

Certificates, comprising 15 credit hours of specific coursework, are available online or to residential students with concentrations in urban pest management, landscape pest management or medical entomology. These certificates document specialization and proficiency in sub-disciplines within entomology for enrolled graduate students and provide evidence of expertise for non-degree seeking students.

Students entering graduate programs in entomology and nematology should have a strong science background, including biology, chemistry, and algebra. Physics and statistics are recommended. Admissions criteria can be found on the Graduate School's Admission page.

Degrees Offered with a Major in Entomology and Nematology

Doctor of Philosophy

Master of Science
Entomology and Nematology Departmental Courses

- ALS 5156: Agricultural Ecology Principles and Applications
- ALS 6046: Grant Writing
- ALS 6166: Exotic Species and Biosecurity Issues
- ALS 6935: Topics in Biological Invasions
- ENY 5006: Graduate Survey of Entomology
- ENY 5006L: Graduate Survey of Entomology Laboratory
- ENY 5031C: Insect Field Biology
- ENY 5151C: Techniques in Insect Systematics
- ENY 5160C: Survey of Science with Insects
- ENY 5164: Graduate Survey of Invertebrate Field Biology
- ENY 5212: Insects and Wildlife
- ENY 5223C: Biology and Identification of Urban Pests
- ENY 5228C: Principles of Urban Pest Management
- ENY 5332: Graduate Survey of Urban Vertebrate Pest Management
- ENY 5236: Insect Pest and Vector Management
- ENY 5241: Biological Control
- ENY 5245: Agricultural Acarology
- ENY 5405: Insects as Vectors of Plant Pathogens
- ENY 5516: Turf and Ornamental Entomology
- ENY 5566: Tropical Entomology
- ENY 5567: Tropical Entomology Field Laboratory
- ENY 5572: Advanced Apiculture
- ENY 5611: Immature Insects
- ENY 5620: Insect Molecular Genetics
- ENY 6166: Insect Classification
- ENY 6203: Insect Ecology
- ENY 6203L: Insect Ecology Laboratory
- ENY 6248: Termite Biology and Control
- ENY 6401: Insect Physiology
- ENY 6401L: Insect Physiology Laboratory
- ENY 6454: Behavioral Ecology and Systematics of Insects
- ENY 6591C: Advanced Mosquito Identification
- ENY 6593: Advanced Mosquito Biology
- ENY 6651C: Insect Toxicology
- ENY 6655: Advanced Medical and Veterinary Entomology Laboratory
- ENY 6656: Advanced Medical and Veterinary Entomology Laboratory
- ENY 6706: Forensic Entomology
- ENY 6706L: Forensic Entomology Laboratory
- ENY 6821: Insect Microbiology
- ENY 6822C: Molecular Biology Techniques with Invertebrates and Their Pathogens
- ENY 6905: Problems in Entomology
- ENY 6910: Supervised Research
- ENY 6931: Entomology Seminar
- ENY 6932: Special Topics in Entomology
- ENY 6934: Selected Studies in Entomology
- ENY 6940: Supervised Teaching
- ENY 6942: Insect Diagnostics
- ENY 6943: Entomology Internship
- ENY 6944: Entomology Extension Internship
- ENY 6971: Research for Master's Thesis
- ENY 7979: Advanced Research
- ENY 7980: Research for Doctoral Dissertation
- NEM 5004C: Graduate Survey of Nematology
- NEM 5707C: Plant Nematology
- NEM 6101C: Nematode Morphology and Anatomy
- NEM 6102: Nematode Systematics and Molecular Phylogeny
- NEM 6102L: Nematode Systematics and Molecular Phylogeny Laboratory
- NEM 6103: Insect Parasitic Nematodes
- NEM 6104L: Insect Parasitic Nematodes Laboratory
- NEM 6201: Nematode Ecology
- NEM 6708: Field Plant Nematology
- NEM 6905: Problems in Nematology
- NEM 6931: Nematology Seminar
- NEM 6932: Special Topics in Nematology
- NEM 6934: Selected Studies in Nematology
- NEM 6940: Supervised Teaching
- NEM 6942: Nematode Diagnostics
- NEM 6943: Nematode Internship
- NEM 6944: Nematode Extension Internship
- NEM 6971: Research for Master's Thesis
- NEM 7979: Advanced Research
- NEM 7980: Research for Doctoral Dissertation
- PMA 5205: Citrus Pest Management
- PMA 6228: Field Techniques in Integrated Pest Management

College of Agricultural and Life Sciences Courses
Plant Medicine

College

College of Agricultural and Life Sciences

Department/School

Entomology and Nematology Department

Plant Medicine Program Information

Coordinator: Amanda C. Hodges

The Doctor of Plant Medicine (DPM) program is an intensive doctorate-level graduate level training program for students interested in plant health diagnosis and management. Requirements for the degree can be found in the Graduate Degrees section of this catalog.

DPM students complete rigorous coursework and intensive internships. Only DPM students jointly enrolled in one of our discipline department M.S. or Ph.D. programs complete a thesis or dissertation. DPM students often participate in applied research within laboratory programs, and may participate in the publication of peer-reviewed scientific and extension papers. More information regarding the latest policies for the DPM program is available in the DPM graduate handbook.

The DPM program is a partnership among faculty mentors and teaching faculty within the following primary departments:

- Entomology and Nematology Department
- Department of Plant Pathology
- Agronomy Department
- Horticulture Sciences Department
- Environmental Horticulture Department
- Soil and Water Sciences Department
- Food Science and Human Nutrition Department

For more information, please see the DPM website: http://dpm.ifas.ufl.edu.

Degrees Offered with a Major in Plant Medicine

Doctor of Plant Medicine

- without a concentration

- concentration in Tropical Conservation and Development

Agronomy Departmental Courses
• AGR 5215C: Integrated Field Crop Science
• AGR 5230C: Florida Grassland Agroecosystems
• AGR 5266C: Field Plot Techniques
• AGR 5277C: Tropical Crop Production
• AGR 5307: Molecular Genetics for Crop Improvement
• AGR 5321C: Genetic Improvement of Plants
• AGR 5444: Ecophysiology of Crop Production
• AGR 5511: Crop Ecology
• AGR 6233: Tropical Grassland Agroecosystems
• AGR 6237C: Research Techniques in Forage Evaluation
• AGR 6311: Population Genetics
• AGR 6322: Advanced Plant Breeding
• AGR 6325L: Plant Breeding Techniques
• AGR 6353: Cytogenetics
• AGR 6422C: Environmental Crop Nutrition
• AGR 6442C: Physiology of Agronomic Plants
• AGR 6905: Agronomic Problems
• AGR 6910: Supervised Research
• AGR 6932: Topics in Agronomy
• AGR 6933: Graduate Agronomy Seminar
• AGR 6940: Supervised Teaching
• AGR 6971: Research for Master's Thesis
• AGR 7979: Advanced Research
• AGR 7980: Research for Doctoral Dissertation
• ALS 5155: Global Agroecosystems
• IPM 5305: Principles of Pesticides
• PLS 5632C: Integrated Weed Management
• PLS 5652: Advanced Weed Science
• PLS 6623: Weed Ecology
• PLS 6628: Invasive Plant Ecology
• PLS 6655: Plant/Herbicide Interaction

Botany Courses

• BOT 5225C: Plant Anatomy
• BOT 5305: Paleobotany
• BOT 5505C: Intermediate Plant Physiology
• BOT 5625: Plant Geography
• BOT 5655C: Physiological Plant Ecology
• BOT 5685C: Tropical Botany
• BOT 5695C: Ecosystems of Florida
• BOT 5725C: Taxonomy of Vascular Plants
• BOT 6508C: Proteomics Theory and Practice
• BOT 6516: Plant Metabolism
• BOT 6556: Plant Growth and Development
• BOT 6716C: Advanced Taxonomy
• BOT 6726C: Principles of Systematic Biology
• BOT 6905: Individual Studies in Botany
• BOT 6910: Supervised Research
• BOT 6927: Advances in Botany
• BOT 6935: Special Topics
• BOT 6936: Graduate Student Seminar
• BOT 6940: Supervised Teaching
• BOT 6943: Internship in College Teaching
• BOT 6971: Research for Master's Thesis
• BOT 7979: Advanced Research
• BOT 7980: Research for Doctoral Dissertation
• PCB 5046C: Advanced Ecology
• PCB 5338: Principles of Ecosystem Ecology
• PCB 5356: Tropical Ecology
• PCB 6675C: Evolutionary Biogeography
• FLP 6566C: Fungal Biology

Entomology and Nematology Departmental Courses

• ALS 5156: Agricultural Ecology Principles and Applications
• ALS 6046: Grant Writing
• ALS 6166: Exotic Species and Biosecurity Issues
• ALS 6935: Topics in Biological Invasions
• ENY 5006: Graduate Survey of Entomology
• ENY 5006L: Graduate Survey of Entomology Laboratory
• ENY 5031C: Insect Field Biology
• ENY 5151C: Techniques in Insect Systematics
• ENY 5160C: Survey of Science with Insects
• ENY 5164: Graduate Survey of Invertebrate Field Biology
• ENY 5212: Insects and Wildlife
• ENY 5223C: Biology and Identification of Urban Pests
• ENY 5228C: Principles of Urban Pest Management
• ENY 5332: Graduate Survey of Urban Vertebrate Pest Management
ENY 5236: Insect Pest and Vector Management
ENY 5241: Biological Control
ENY 5245: Agricultural Acarology
ENY 5405: Insects as Vectors of Plant Pathogens
ENY 5516: Turf and Ornamental Entomology
ENY 5566: Tropical Entomology Field Laboratory
ENY 5572: Advanced Apiiculture
ENY 5611: Immature Insects
ENY 5620: Insect Molecular Genetics
ENY 6166: Insect Classification
ENY 6203: Insect Ecology
ENY 6203L: Insect Ecology Laboratory
ENY 6248: Termiticide Biology and Control
ENY 6401: Insect Physiology
ENY 6401L: Insect Physiology Laboratory
ENY 6454: Behavioral Ecology and Systematics of Insects
ENY 6591C: Advanced Mosquito Identification
ENY 6593: Advanced Mosquito Biology
ENY 6651C: Insect Toxology
ENY 6655: Advanced Medical and Veterinary Entomology Laboratory
ENY 6655L: Advanced Medical and Veterinary Entomology Laboratory
ENY 6706: Forensic Entomology
ENY 6706L: Forensic Entomology Laboratory
ENY 6822C: Molecular Biology Techniques with Invertebrates and Their Pathogens
ENY 6905: Problems in Entomology
ENY 6910: Supervised Research
ENY 6931: Entomology Seminar
ENY 6932: Special Topics in Entomology
ENY 6934: Selected Studies in Entomology
ENY 6940: Supervised Teaching
ENY 6942: Insect Diagnostics
ENY 6943: Entomology Internship
ENY 6944: Entomology Extension Internship
ENY 6971: Research for Master’s Thesis
ENY 7979: Advanced Research
ENY 7980: Research for Doctoral Dissertation
NEM 5004C: Graduate Survey of Nematology
NEM 5004L: Graduate Survey of Nematology Laboratory
NEM 5707C: Plant Nematology
NEM 6101C: Nematode Morphology and Anatomy
NEM 6102: Nematode Systematics and Molecular Phylogeny
NEM 6102L: Nematode Systematics and Molecular Phylogeny Laboratory
NEM 6103: Insect Parasitic Nematodes
NEM 6104L: Insect Parasitic Nematodes Laboratory
NEM 6201: Nematode Ecology
NEM 6708: Field Plant Nematology
NEM 6905: Problems in Nematology
NEM 6931: Nematology Seminar
NEM 6932: Special Topics in Nematology
NEM 6934: Selected Studies in Nematology
NEM 6940: Supervised Teaching
NEM 6942: Nematode Diagnostics
NEM 6943: Nematode Internship
NEM 6944: Nematode Extension Internship
NEM 6971: Research for Master’s Thesis
NEM 7979: Advanced Research
NEM 7980: Research for Doctoral Dissertation
PMA 5205: Citrus Pest Management
PMA 6228: Field Techniques in Integrated Pest Management

School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

GIS 6103: GIS Programming and Customization
GIS 6116: Geographic Information Systems Analysis
SUR 5365: Digital Mapping
SUR 5385: Remote Sensing Applications
SUR 5386: Image Processing for Remote Sensing
SUR 5391C: Geomatics: Spatial Foundations of GIS
SUR 5425: Cadastral Information Systems
SUR 5525: Least Squares Adjustment Computations
SUR 6375: Terrain Analysis and Mapping
SUR 6395: Topics in Geographic Information Systems
SUR 6427: Land Tenure and Administration
SUR 6535: GPS-INS Integration
SUR 6905: Special Problems in Geomatics
SUR 6934: Topics in Geomatics
Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5278C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5901: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Phyology
- FAS 6256: Fish and Aquatic Invertebrate Histology
- FAS 6272: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6932: Special Topics in Fisheries and Aquatic Sciences
- FAS 6933: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
- FAS 6940: Supervised Teaching
- FAS 6971: Research for Master's Thesis
- FAS 7979: Advanced Research
- FAS 7980: Research for Doctoral Dissertation

Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6564: Hydrology
- FOR 5157: Ecosystem Restoration Principles and Practice
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5626: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6628: Community Forest Management
- FOR 6665: Landscape Planning for Ecotourism
- FOR 6905: Research Problems in Forest Resources and Conservation
- FOR 6910: Supervised Research
- FOR 6933: Seminar
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 6940: Supervised Teaching
- FOR 6971: Research for Master's Thesis
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6555: Introduction to Quantitative Genetics

Horticultural Sciences Departmental Courses

- ALS 5934: Graduate Professional Development Seminar
- HCS 5085C: Principles of Postharvest Horticulture
- HCS 5115C: Horticultural Plant Morphology and Identification
- HCS 5242: Genetics & Breeding of Vegetable Crops
- HCS 5306: Molecular Biology of Plant Hormones
- HCS 5330: Postharvest Technologies for Horticultural Crops
- HCS 5432: Advanced Nutritional Management of Ornamental Crops
- HCS 5515C: Greenhouse and Nursery Operations
- HCS 5516C: Advanced Production of Greenhouse and Nursery Crops
- HCS 5555C: Tropical Fruit Production and Research in Florida
- HCS 5711: Phytochemicals in Food & Health
- HCS 6201: Breeding Perennial Cultivars
- HCS 6236: Molecular Marker Assisted Plant Breeding
HOS 6331: Postharvest Biology  
HOS 6345: Environmental Physiology  
HOS 6412: Nutrition of Horticultural Crops  
HOS 6523: Research and Development in Turfgrass Science  
HOS 6545: Advanced Citiculture I  
HOS 6546: Advanced Citiculture II  
HOS 6905: Problems in Horticultural Science  
HOS 6910: Supervised Research  
HOS 6931: Horticultural Science Seminar  
HOS 6932: Special Topics  
HOS 6940: Supervised Teaching  
HOS 6941: Practicum in Horticultural Science  
HOS 6971: Research for Master's Thesis  
HOS 7979: Advanced Research  
HOS 7980: Research for Doctoral Dissertation  
ORH 5026C: Advanced Annual and Perennial Gardening  
ORH 5086: Advanced Golf and Sports Turf Management  
ORH 5282: Orchid Biology and Culture  
ORH 5522C: Palm Biology and Culture  
ORH 5817C: Advanced Florida Native Landscaping  
ORH 7941: Doctor of Plant Medicine: Internship in Environmental Horticulture  
PCB 5065: Advanced Genetics  
PCB 5530: Plant Molecular Biology and Genomics  
PCB 6528: Plant Cell and Developmental Biology  
PLS 5222C: Propagation of Horticultural Crops  
PLS 5241C: Advanced Plant Micropropagation  
PLS 5405: Advanced Composting Technology  

Plant Pathology Departmental Courses

- PLP 5005C: General Plant Pathology  
- PLP 5102: Theory and Practice of Plant Disease Control  
- PLP 5115C: Citrus Pathology  
- PLP 5155: Microbiological Control of Plant Diseases and Weeds  
- PLP 6656C: Fungal Biology  
- PLP 6223C: Viral Pathogens of Plants  
- PLP 6241C: Bacterial Plant Pathogens  
- PLP 6262C: Fungal Plant Pathogens  
- PLP 6291: Plant Disease Diagnosis  
- PLP 6303: Host-Parasite Interactions II  
- PLP 6404: Epidemiology of Plant Disease  
- PLP 6502: Host-Parasite Interactions I  
- PLP 6621C: Pop Genetics Microbes  
- PLP 6905: Problems in Plant Pathology  
- PLP 6910: Supervised Research  
- PLP 6921: Colloquium in Principles of Plant Pathology  
- PLP 6932: Seminar in Plant Pathology  
- PLP 6940: Supervised Teaching  
- PLP 6942: Professional Internship in Plant Disease Clinic  
- PLP 6971: Research for Master's Thesis  
- PLP 7946: Plant Pathology Internship  
- PLP 7979: Advanced Research  
- PLP 7980: Research for Doctoral Dissertation  

Soil and Water Science Departmental Courses

- ALS 5027: Reusable Learning Objects  
- ALS 5155: Global Agroecosystems  
- CWR 6537: Contaminant Subsurface Hydrology  
- SWS 5050: Soils for Environmental Professionals  
- SWS 5050L: Soils for Environmental Professionals Laboratory  
- SWS 5115: Environmental Nutrient Management  
- SWS 5132: Tropical Soil Management  
- SWS 5182: Earth System Analysis  
- SWS 5208: Sustainable Agricultural and Urban Land Management  
- SWS 5234: Environmental Soil, Water, and Land Use  
- SWS 5235: South Florida Ecosystems  
- SWS 5244: Environmental Biogeochemistry  
- SWS 5246: Water Resource Sustainability  
- SWS 5247: Hydric Soils  
- SWS 5248: Wetlands and Water Quality  
- SWS 5305C: Soil Microbial Ecology  
- SWS 5308: Ecology of Waterborne Pathogens  
- SWS 5406: Soil and Water Chemistry  
- SWS 5424C: Soil Chemical Analysis  
- SWS 5551: Soils, Water, and Public Health  
- SWS 5605C: Environmental Soil Physics  
- SWS 5716C: Environmental Pedology  
- SWS 5721C: GIS in Land Resource Management  

Family, Youth, and Community Sciences Department

Interim Chair: Tracy Irani
Graduate Coordinator: Larry F. Forthun

Complete faculty listing by department: Follow this link

The FYCS graduate program is an interdisciplinary applied social science program that prepares students for advanced degrees (e.g., Ph.D.) and careers in such areas as family and youth services, Extension and community-based education, community development and nonprofit management, program planning and evaluation, and social policy. Graduates find careers in both the public and private sectors including:

- Child and Youth Development in areas such as juvenile justice, dropout prevention programs, recreational and camp programs, and youth ministry;
- Community Development Practice in local and regional government, private nonprofit organizations (such as chambers of commerce, local development corporations, and local, national and international foundations) and citizen's groups;
- Nonprofit Organizational Management, such as management of community based, nonprofit organizations;
- Family and Social Services, such as family preservation programs, assistance for abused and neglected children and other public assistance programs; and
- Cooperative Extension Service in such areas as youth development, family and consumer sciences and community development.

Contact the graduate coordinator for more information.

Other

Family, Youth, and Community Sciences

College

College of Agricultural and Life Sciences

Department/School

Family, Youth, and Community Sciences Department

Master of Science in Family, Youth and Community Sciences
The Master of Science in FYCS offers two degree options—a thesis and a non-thesis. Both options prepare students for advanced professional positions. FYCS students in either option may complete the FYCS Concentration in Nonprofit Organizational Development, the Certificate in Nonprofit Organizational Development, or the Certificate in Personal & Family Financial Planning.

**Thesis Option** prepares students to conduct independent research needed to develop science-based solutions to problems, issues and policies that affect families, youth and communities. Students develop expertise in a subject matter area directly relevant to the problem or need they want to address with the thesis research.

**Non-Thesis Project Option** provides the student with a broad base of knowledge and skills in the discipline. Students complete a non-thesis project determined in consultation with the supervisory committee. Projects vary in nature and may include directed research, program evaluation, or other empirically-based projects.

**The Minor in Family, Youth and Community Sciences** provides students with knowledge about the theories and body of research that explain how families, youth and communities develop and interact. The minor consists of nine hours of study.

**The Minor in Organizational Leadership for Nonprofits** provides students with an understanding of how to develop not-for-profit organizations to address problems facing families, youth and communities. The minor consists of six hours of study (nine hours for doctoral students).

**Concentration in Nonprofit Organizational Development** The nonprofit organizational development concentration will prepare students to work with tax exempt nonprofit organizations and informal community based groups that serve a charitable purpose for the public good. The concentration includes the study of the historical development of nonprofits in the US that enable students to understand the unique aspects of nonprofits and their growing importance and impact on our society. It provides students with a knowledge base for aspiring nonprofit organizational leaders and proven competencies for practicing professionals in the nonprofit sector.

**The Graduate Certificate in Nonprofit Leadership** will prepare students to work with all 501(c) nonprofit organizations, tax exempt and others. Courses provide an in depth understanding for developing and sustaining and efficient and effective nonprofit organization. Core competencies in governance, strategic planning, fund raising, and risk management are included as well as other tools.

**The Graduate Certificate in Personal and Family Financial Planning** The certificate addresses the Certified Financial Planner™ (CFP) Board of Standards education requirement for sitting for the CFP examination, including insurance, personal investing, retirement planning, tax planning, behavioral finance, financial planning practice management and foundational family economic theories. The CFP designation is the leading standard in financial planning and our program is registered with the CFP Board of Standards enabling students to sit for the exam upon completion of the certificate.

## Degrees Offered with a Major in Family, Youth, and Community Sciences

**Master of Science**

- without a concentration
- concentration in Community Studies
- concentration in Family and Youth Development
- concentration in Nonprofit Organization Development

## Courses

- FYC 5008: Personal and Family Tax Planning
- FYC 5009: Personal and Family Insurance Planning
- FYC 5106: Personal and Family Retirement and Estate Planning
- FYC 5935: Personal and Family Financial Planning Capstone
- FYC 6020: Principles of Family, Youth, and Community Sciences
- FYC 6111: Families and Violence
- FYC 6117: Military Families in Community Context
- FYC 6131: Ethics for FYCS Practitioners
- FYC 6207: Adolescent Problematic Behavior
- FYC 6221: Grant Proposals for Community-Based Organizations
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Food and Resource Economics Department

College of Agricultural and Life Sciences

Interim Chair: Rodney L. Clouser
Acting Graduate Coordinator: Sherry Larkin

Complete faculty listing by department: Follow this link

The Food and Resource Economics Department offers the Master of Agribusiness (M.AB) (non-thesis), Master of Science with Concentration in Agribusiness (M.S.AB.) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Department participates in programs with the Center for Latin American Studies, the Center for African Studies, the Center for Tropical Agriculture, the School of Natural Resources and Environment, the College of Law, and the Florida Sea Grant College Program.

The Department programs reflect the diversity of Florida's agriculture which has more than fifty major commodities. With over thirty faculty involved in a full range of research, extension, and teaching programs in areas including Agricultural Marketing, International Trade, Policy, Production/Farm Management, International Development, Marine Economics, Natural Resource and Environmental Economics, Community/Regional Development and Labor Economics. In addition to the main campus location, the department has faculty at research centers throughout the state.

Several members of the faculty have garnered international reputations in diverse fields such as trade policy, generic advertising, citrus economics, sugar policy, business retention and expansion, leadership development, consumer attitudes towards genetically modified food, and dairy marketing.

The Department offers a combined bachelor's/master's degree program for the Master of Science and Master of Science with Concentration in Agribusiness. Contact the Graduate Program Office in 1170 McCarty Hall for information.

For more information, please see the program pages below, and see our website: http://www.fred.ifas.ufl.edu.

Other

Food and Resource Economics

College

College of Agricultural and Life Sciences
Food and Resource Economics Program Information

The Food and Resource Economics Department offers the Master of Agribusiness (M.AB.) (non-thesis), Master of Science with Concentration in Agribusiness (M.S.AB.) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Ph.D. in Food and Resource Economics is designed to provide the student with rigorous training in economics, statistics, and applied quantitative techniques. Each student is exposed to core theory and to fields of specialization with the purpose to prepare the candidate for a professional career in post-secondary education, government, non-governmental organizations, private business, and international agencies.

The Master of Agribusiness is designed specifically for students with no academic background in economics or agricultural economics. The program is made up of students from diverse backgrounds including Accounting, Agricultural Education and Communication, Agricultural Operations Management, Animal Science, Business Administration, Finance, Food Science, Horticulture, Management, Turfgrass, and Wildlife Ecology and Conservation. The graduate coursework complements the student's undergraduate background and prepares them for careers in financial analysis, sales, management, marketing, human resources, policy, production, and entrepreneurial pursuits working in private industry, international firms, non-profit organizations and government.

The Master of Science in the Food and Resource Economics Department provides broad training in applied economics as it relates to food production, marketing and trade, regional economics, and natural resource issues. Students are taught to use basic economic principles and quantitative methods to address empirical problems. The core consists of graduate level courses in microeconomics, policy, econometrics, statistics and survey research methods. Many students elect to continue their education with a Ph.D. degree while others opt for employment with government agencies, non-governmental organizations, foreign agencies, private consulting firms, or corporations.

The Master of Science with Concentration in Agribusiness is designed specifically for students with an educational background in economics and agricultural economics. The quantitative courses include microeconomics, policy, econometrics and survey research methods and provide solid economic theory to prepare students for careers in financial analysis, sales, management, marketing, human resources, policy, production, and entrepreneurial pursuits working in private industry, international firms, non-profit organizations and government.

For more information, please see our website: http://www.fred.ifas.ufl.edu.

Degrees Offered with a Major in Food and Resource Economics

Doctor of Philosophy

without a concentration

with a concentration in Hydrologic Sciences

with a concentration in Toxicology

with a concentration in Tropical Conservation and Development

Master of Agribusiness

without a concentration
Master of Science

without a concentration

with a concentration in Agribusiness

with a concentration in Hydrologic Sciences

with a concentration in Toxicology

with a concentration in Tropical Conservation and Development

Courses

- AEB 5167: Economic Analysis in Small Farm Livelihood Systems
- AEB 5188: Economics of Agribusiness Decisions
- AEB 5326: Agribusiness Financial Management
- AEB 5516: Quantitative Methods in Agribusiness Decisions
- AEB 5757: Strategic Agribusiness Human Resource Management
- AEB 6106: Microeconomic Principles and Analysis
- AEB 6139: Strategic Agribusiness Management
- AEB 6145: Agricultural Finance
- AEB 6183: Agribusiness Risk Management
- AEB 6225: Public Policy and the Agribusiness Firm
- AEB 6301: Food Wholesale and Retail Marketing
- AEB 6363: Agricultural Marketing
- AEB 6385: Management Strategies for Agribusiness Firms
- AEB 6533: Static and Dynamic Optimization Models in Agriculture
- AEB 6553: Elements of Econometrics
- AEB 6592: Mathematical Programming for Economic Analysis
- AEB 6675: International Agribusiness Marketing
- AEB 6815: Science and Research Methodology
- AEB 6817: Survey Research Methods for Economists
- AEB 6905: Problems in Food and Resource Economics
- AEB 6910: Supervised Research
- AEB 6921: Workshop in Food and Resource Economics I
- AEB 6933: Special Topics
- AEB 6934: Workshop in Food and Resource Economics II
- AEB 6942: Advanced Applications in Agribusiness Experience
- AEB 6971: Research for Master's Thesis
- AEB 7108: Microeconomic Theory II
- AEB 7174: Economic Coordination and Organizational Behavior in Agribusiness
- AEB 7182: Agricultural Risk Analysis and Decision Making
- AEB 7184: Production Economics
- AEB 7240: Macroeconomic Theory in Open Economies II
- AEB 7373: Consumer Demand and Applied Analysis
- AEB 7453: Natural Resource and Environmental Economics
- AEB 7463: Seminar in Natural Resource and Environmental Economics
- AEB 7571: Econometric Methods I
- AEB 7572: Econometric Methods II
- AEB 7645: Economic Development and Agriculture
- AEB 7979: Advanced Research
College of Agricultural and Life Sciences Courses

- AEB 7980: Research for Doctoral Dissertation
- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5902: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Food Science and Human Nutrition Department

College of Agricultural and Life Sciences

Chair: Susan S. Percival
Graduate Coordinators: Harry S. Sitren (M.S. in Food Science and Human Nutrition / Ph.D. in Food Science), James F. Collins (Ph.D. in Nutritional Sciences)

Complete faculty listing by department: Follow this link.

The Food Science and Human Nutrition Department (FSHN) is one of the world's largest combined academic programs where food science, nutritional sciences, and dietetics are all studied within one department. FSHN has nearly 30 full-time faculty members, 80 graduate assistants, and close to 1,000 undergraduate students. Our programs are accredited by the Institute of Food Technologists (IFT) and the Academy of Nutrition and Dietetics. After completing undergraduate degrees, our students typically move on to professional employment, further education or training in food or nutrition graduate programs, or on to professional school programs. We have a strong record of excellent placement of our graduate students in industry and professional organization employment positions, as faculty members at colleges and universities, or in postdoctoral training experiences.

Our faculty has trained at institutions from around the world; they have been widely successful in their teaching, research, and extension efforts. Throughout our programs in food science, nutrition, and dietetics, our faculty is recognized nationally and internationally as experts in their respective fields.

The Food Science and Human Nutrition Department offers programs leading to the degrees of Master of Science in Food Science and Human Nutrition, Doctor of Philosophy in Food Science, and Doctor of Philosophy in Nutritional Sciences (offered under the auspices of the Center for Nutritional Sciences). Minimum requirements for these degrees are located in the Graduate Degrees section of this catalog.

For more information please click the links to the program pages below, or see our website: http://fshn.ifas.ufl.edu.

Other

Food Science

College

College of Agricultural and Life Sciences

Department/School

Food Science and Human Nutrition Department

Food Science Program Information

The Ph.D. program in Food Science is a multidisciplinary program consisting of Food Chemistry, Food Processing and Engineering, and Food Microbiology and Safety. Students are expected to obtain a breadth of food science knowledge by taking courses in all program areas with the majority of courses stressing one of the three areas of emphasis.

For further information, please see our website at: http://fshn.ifas.ufl.edu.

Doctor of Philosophy

without a concentration
concentration in Toxicology

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6938: Advanced Dietetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II
- DIE 6949: Dietetic Internship in Sports Nutrition
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5561C: Citrus Processing Technology
- FOS 5645: Functional Foods and Nutraceuticals
- FOS 5732: Current Issues in Food Regulations
- FOS 6125C: Sensory Evaluation of Food
- FOS 5126C: Psychophysical Aspects of Foods
- FOS 6215: Principles of Food Safety
- FOS 6216: Food Safety Systems
- FOS 6217: Food Safety, Sanitation, and Microbiology
- FOS 6226C: Advanced Food Microbiology
- FOS 6315C: Advanced Food Chemistry
- FOS 6317C: Flavor Chemistry and Technology
- FOS 6355C: Instrumental Analysis and Separations
- FOS 6428C: Advanced Food Processing
- FOS 6455C: Industrial Food Fermentations
- FOS 6736: Food Regulations
- FOS 6905: Problems in Food Science
- FOS 6910: Supervised Research
- FOS 6915: Research Planning
- FOS 6936: Topics in Food Science
- FOS 6938: Food Science Seminar
- FOS 6940: Supervised Teaching
- FOS 6971: Research for Master's Thesis
- FOS 7979: Advanced Research
- FOS 7980: Research for Doctoral Dissertation
- HUN 5246: Current Issues in Dietary Supplements
- HUN 5441: Metabolic Response to Enteral and Parenteral Nutrition
- HUN 5447: Nutrition and Immunity
- HUN 6245: Advanced Human Nutrition
- HUN 6255: Clinical Nutrition
- HUN 6301: Nutritional Aspects of Lipid Metabolism
- HUN 6305: Nutritional Aspects of Carbohydrates
- HUN 6321: Proteins and Amino Acids in Nutrition
- HUN 6331: Vitamins in Human Nutrition
- HUN 6356: Minerals in Nutrition
- HUN 6812C: Analytical Techniques in Nutritional Biochemistry
- HUN 6905: Problems in Nutritional Sciences
- HUN 6910: Supervised Research
- HUN 6936: Topics in Nutritional Sciences
- HUN 6938: Nutritional Sciences Seminar
- HUN 6939: Advanced Clinical Nutrition
- HUN 6940: Supervised Teaching
- HUN 6971: Research for Master's Thesis
- HUN 7979: Advanced Research
- HUN 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
Food Science and Human Nutrition

College

College of Agricultural and Life Sciences

Department/School

Food Science and Human Nutrition Department

Food Science and Human Nutrition Program

The M.S. program offers tracks in food science and in nutritional sciences. The Institute of Food Technologists and the American Society for Nutrition recognize these concentrations. The department also offers a combined Master of Science-Dietetics Internship (MS-DI) program accredited by the Commission on Accreditation for Dietetic Education (CADE). Students who complete this program are eligible to take the national registration examination to become a registered dietitian. Only graduates from a CADE accredited/approved Didactic Program in Dietetics are eligible for the MS-DI program.

Specific areas of study include nutritional biochemistry/molecular biology, nutrient function/metabolism, medical nutrition therapy/dietetics, nutritional immunology, food processing/engineering, food chemistry/biochemistry, and food safety/microbiology/quality.

Applicants must have an adequate background in physical and biological sciences and food science or nutritional sciences. Students with specific deficiencies will be required to take prerequisite courses.

For further information, please see our website at: [http://fshn.ifas.ufl.edu](http://fshn.ifas.ufl.edu).

Degrees Offered with a Major in Food Science and Human Nutrition

Master of Science

without a concentration

concentration in Nutritional Sciences

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6938: Advanced Dietetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II
- DIE 6949: Dietetic Internship in Sports Nutrition
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5561C: Citrus Processing Technology
- FOS 5645: Functional Foods and Nutraceuticals
- FOS 5732: Current Issues in Food Regulations
- FOS 6125C: Sensory Evaluation of Food
- FOS 5126C: Psychophysical Aspects of Foods
The field of nutritional science has unprecedented public interest. This is fostered by evolving links between diet and health, and the impact of one's individual genetic makeup on nutrient utilization. The Ph.D. degree program in Nutritional Sciences is interdisciplinary, with participating CALS, COM, CLAS, and CVM faculty directing research of doctoral students, where the full spectrum of Nutritional Sciences is available. Emphasis areas include basic nutritional sciences, biochemistry and molecular biology, genetics, immunology, physiology, clinical nutrition, microbiology, and biostatistics.
Students are admitted to the program after the bachelor's degree or a master's degree in nutritional sciences or a related field. Applicants should have a strong undergraduate background in biological sciences and chemistry. Deficiencies may be made up during the first year of graduate study.

Additional information can be found at [http://nutritionalsciences.centers.ufl.edu](http://nutritionalsciences.centers.ufl.edu).

For additional information, e-mail Dr. Mitchell D. Knutson, Director at mknutson@ufl.edu or Dr. James F. Collins, Graduate Coordinator at jfcollins@ufl.edu.

Degrees Offered with a Major in Nutritional Sciences

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Nutritional Sciences Program Core Courses

- BCH 6206: Advanced Metabolism
- HUN 6938: Nutritional Sciences Seminar
- STA 6166: Statistical Methods in Research I
- HUN 6301: Nutritional Aspects of Lipid Metabolism
- HUN 6305: Nutritional Aspects of Carbohydrates
- HUN 6321: Proteins and Amino Acids in Nutrition
- HUN 6331: Vitamins in Human Nutrition
- HUN 6356: Minerals in Nutrition

Additional Course Offerings

The following courses may be taken to contribute to the overall degree award requirements.

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6938: Advanced Dietetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II
- DIE 6949: Dietetic Internship in Sports Nutrition
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5561C: Citrus Processing Technology
- FOS 5645: Functional Foods and Nutraceuticals
- FOS 5732: Current Issues in Food Regulations
- FOS 6125C: Sensory Evaluation of Food
- FOS 5126C: Psychophysical Aspects of Foods
- FOS 6215: Principles of Food Safety
- FOS 6216: Food Safety Systems
- FOS 6217: Food Safety, Sanitation, and Microbiology
- FOS 6226C: Advanced Food Microbiology
- FOS 6315C: Advanced Food Chemistry
- FOS 6317C: Flavor Chemistry and Technology
- FOS 6355C: Instrumental Analysis and Separations
- FOS 6428C: Advanced Food Processing
- FOS 6455C: Industrial Food Fermentations
- FOS 6736: Food Regulations
- FOS 6905: Problems in Food Science
- FOS 6910: Supervised Research
FOS 6915: Research Planning
FOS 6936: Topics in Food Science
FOS 6938: Food Science Seminar
FOS 6940: Supervised Teaching
FOS 6971: Research for Master's Thesis
FOS 7979: Advanced Research
FOS 7980: Research for Doctoral Dissertation
HUN 5246: Current Issues in Dietary Supplements
HUN 5441: Metabolic Response to Enteral and Parenteral Nutrition
HUN 5447: Nutrition and Immunity
HUN 6245: Advanced Human Nutrition
HUN 6255: Clinical Nutrition
HUN 6301: Nutritional Aspects of Lipid Metabolism
HUN 6305: Nutritional Aspects of Carbohydrates
HUN 6321: Proteins and Amino Acids in Nutrition
HUN 6331: Vitamins in Human Nutrition
HUN 6356: Minerals in Nutrition
HUN 6812C: Analytical Techniques in Nutritional Biochemistry
HUN 6905: Problems in Nutritional Sciences
HUN 6910: Supervised Research
HUN 6936: Topics in Nutritional Sciences
HUN 6938: Nutritional Sciences Seminar
HUN 6939: Advanced Clinical Nutrition
HUN 6940: Supervised Teaching
HUN 6971: Research for Master's Thesis
HUN 7979: Advanced Research
HUN 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Horticultural Sciences Department

College of Agricultural and Life Sciences

Chairs: K.M. Folta (Interim Chair, Horticultural Sciences) and W. Mackay (Environmental Horticulture)
Graduate Coordinator: G. A. Moore (Horticultural Sciences) and L. Trenholm (Environmental Horticulture)

Complete faculty listing: Follow this link.

The Horticultural Sciences Department Graduate Program at the University of Florida has a wide array of opportunities for graduate study.

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HSE) and Horticultural Sciences (HS) departments and offers graduate programs leading to the Master of Science (thesis or nonthesis options) and the Doctor of Philosophy degrees. Members of the program's Graduate Faculty include department resident faculty and faculty at University of Florida Research and Education Centers located throughout Florida.

The Horticultural Sciences Department offers a combined bachelor's/master's degree program. Please contact the graduate coordinator for information.

For admission to the HOS graduate program, apply to either the HS or HSE departments, depending on your career/research interest. Details about the program and how to apply are listed on their website: http://hos.ufl.edu.

Other

Horticultural Sciences

College

College of Agricultural and Life Sciences

Department/School
Horticultural Sciences Program Information

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HSE) and Horticultural Sciences (HS) departments and offers graduate programs leading to the Master of Science (thesis or nonthesis options) and the Doctor of Philosophy degrees. The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information. Members of the program's Graduate Faculty include department resident faculty and faculty at University of Florida Research and Education Centers located throughout Florida.

For admission to the HOS graduate program, apply to either the HS or HSE departments, depending on your career/research interest.

Requirements:
A strong undergraduate or graduate background in horticultural, biological, agronomic, or other disciplines in the life sciences and undergraduate coursework in chemistry, physics, and mathematics. A prospective graduate student need not have majored in horticulture as an undergraduate or master's student; however, students with curriculum deficiencies are required to take prerequisite subjects during the first year of graduate study. Undergraduate courses taken to correct curriculum deficiencies do not count for graduate program credit.

Specializations in the HS department focus on vegetable and fruit crops and include:
- Plant Breeding and Genetics
- Crop Production and Nutrient Management
- Postharvest Biology
- Organic Sustainable Agriculture
- Weed Science
- Physiology and Biochemistry
- Plant Molecular Biology
- Protected Agriculture

Numerous HS and HSE faculty participate in the interdisciplinary Plant Molecular and Cellular Biology Program. Students interested in molecular biology/biotechnology may pursue molecular-oriented studies in any listed specialization. Students interested in full specialization in molecular and related disciplines should contact the Plant Molecular and Cellular Biology interdisciplinary program for specific requirements.

Specializations in the HSE department:
- Breeding and Genetics
- Restoration Ecology
- Floriculture
- Foliage Production
- Plant anatomy and development
- Plant Biotechnology
- Plant Restoration Conservation Biotechnology
- Stress Physiology
- Taxonomy
- Tissue Culture
- Turfgrass Science
- Woody Plants

Graduate School Degree Program Requirements Master of Science (thesis option):
Students must earn at least 30 credits as a graduate student at UF. No more than 9 of the 30 credits (earned with a grade of A, B+, or B) may be transferred from institutions approved for this purpose by the Dean of the Graduate School. A minimum of 12 credits is required in the Horticultural Sciences major; additionally, a minimum of 6 credits in HOS 6971- Master's Research - may be counted toward the total credits. See here for information on M.S. graduate degrees.

A minor may be chosen in an academic unit other than the major. If a minor is chosen, at least 6 credits of course work are required in the minor field. Two 6-credit minors may be taken with the major academic unit's permission. A 3.00 (truncated) GPA is required for minor credit. In addition, a representative from the department in which the minor is being received must be on the supervisory committee.

Master of Science non-thesis option:
This option offers additional training beyond the bachelor's degree in a horticultural specialization. Essential elements of this program include a program of courses and a comprehensive written and/or final oral qualifying examination. There is no thesis requirement. A minimum of 30 credit hours of course work is required. Courses taken for program credit must be numbered 5000 or higher with at least 15 of these credits in the Horticultural Science major. With supervisory committee and college dean approval, 6 hours of 3000- or 4000-level undergraduate courses, taught outside the major department, may count toward the minimum requirements for the degree. Click for information on all graduate degrees.

A minor may be chosen in an academic unit other than the major. If a minor is chosen, at least 6 credits of course work are required in the minor field. Two 6-credit minors may be taken with the major academic unit's permission. A 3.00 (truncated) GPA is required for minor credit. In addition, a representative from the department in which the minor is being received must be on the supervisory committee.

Doctor of Philosophy:
The Doctor of Philosophy is a research degree and is granted on evidence of general proficiency, distinctive attainment in a special field, and ability to conduct independent investigation as demonstrated in a dissertation presenting original research with a high degree of literary skill. Consequently, doctoral programs are more flexible and varied than those leading to M.S. degree programs. The Ph.D. degree requires at least 90 credits beyond the bachelor's degree, although specific course requirements vary from field to field and from student to student. Up to 30 credits of master's degree may be transferred to a doctoral program. Any credits counted from an M.S. degree program must have been earned within the previous seven years (or by petition). The Graduate Council does not specify the courses required for the Ph.D. degree.

General requirements for the program include:
- a clear objective for research
- approval of the student's entire supervisory committee
- an appropriate number of credits of doctoral research

Click for information on all graduate degrees.

Minor:
With the supervisory committee's approval, the student may choose one or more minor fields. Minor work may be completed in any academic unit outside the major, if approved for M.S. or doctoral programs listed in this catalog. The collective grade for courses included in a minor must be "B" (3.00) or higher. If one minor is chosen, the supervisory committee member representing the minor suggests 12 to 24 credits of courses numbered 5000 or higher as preparation for a qualifying examination. Part of this credit may have been earned in the M.S. degree program. If two minors are chosen, each must include at least 8 credits. Competence in the minor area is demonstrated by written examination by the minor academic unit, or by the oral qualifying examination. Minor course work at the doctoral level may include courses in more than one academic unit; if the objective of the minor is clearly stated and the combination of courses is approved by the Graduate School (this approval is not required for a minor in one academic unit). Further requirements for the Master of Science and the Doctor of Philosophy...
Degrees are listed under those headings in the General Information section of this catalog.

Degrees Offered with a Major in Horticultural Sciences

Doctor of Philosophy

without a concentration

concentration in Environmental Horticulture

concentration in Horticultural Sciences

concentration in Toxicology

Master of Science

without a concentration

concentration in Environmental Horticulture

concentration in Horticultural Sciences

Horticultural Sciences Program Courses

- ALS 6935: Topics in Biological Invasions
- BCH 5045: Graduate Survey of Biochemistry
- BOT 6935: Special Topics
- HCS 6934: Professional Seminar Preparation
- PLS 5222C: Propagation of Horticultural Crops
- PLS 5241C: Advanced Plant Micropropagation
- PLS 5405: Advanced Composting Technology

Additional Course Offerings

The following courses may be taken to contribute to the overall degree award requirements.
Horticultural Sciences Departmental Courses

- ALS 5934: Graduate Professional Development Seminar
- HOS 5085C: Principles of Postharvest Horticulture
- HOS 5115C: Horticultural Plant Morphology and Identification
- HOS 5242: Genetics & Breeding of Vegetable Crops
- HOS 5306: Molecular Biology of Plant Hormones
- HOS 5330: Postharvest Technologies for Horticultural Crops
- HOS 5432: Advanced Nutritional Management of Ornamental Crops
- HOS 5515C: Greenhouse and Nursery Operations
- HOS 5516C: Advanced Production of Greenhouse and Nursery Crops
- HOS 5555: Tropical Fruit Production and Research in Florida
- HOS 5711: Phytochemicals in Food & Health
- HOS 6201: Breeding Perennial Cultivars
- HOS 6236: Molecular Marker Assisted Plant Breeding
- HOS 6331: Postharvest Biology
- HOS 6345: Environmental Physiology
- HOS 6412: Nutrition of Horticultural Crops
- HOS 6523: Research and Development in Turfgrass Science
- HOS 6545: Advanced Citriculture I
- HOS 6546: Advanced Citriculture II
- HOS 6906: Problems in Horticultural Science
- HOS 6910: Supervised Research
- HOS 6931: Horticultural Science Seminar
- HOS 6932: Special Topics
- HOS 6940: Supervised Teaching
- HOS 6941: Practicum in Horticultural Science
- HOS 6971: Research for Master's Thesis
- HOS 7979: Advanced Research
- HOS 7980: Research for Doctoral Dissertation
- ORH 5026C: Advanced Annual and Perennial Gardening
- ORH 5086: Advanced Golf and Sports Turf Management
- ORH 5282: Orchid Biology and Culture
- ORH 5322C: Palm Biology and Culture
- ORH 5817C: Advanced Florida Native Landscaping
- ORH 7941: Doctor of Plant Medicine: Internship in Environmental Horticulture
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PLS 5222C: Propagation of Horticultural Crops
- PLS 5241C: Advanced Plant Micropropagation
- PLS 5405: Advanced Composting Technology

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
- BOT 5725C: Taxonomy of Vascular Plants
- BOT 6508C: Proteomics Theory and Practice
- BOT 6516: Plant Metabolism
- BOT 6556: Plant Growth and Development
- BOT 6716C: Advanced Taxonomy
- BOT 6726C: Principles of Systematic Biology
- BOT 6905: Individual Studies in Botany
- BOT 6910: Supervised Research
- BOT 6927: Advances in Botany
- BOT 6935: Special Topics
Microbiology and Cell Science Department

Chair: E. Triplett.
Graduate Coordinator: Tony Romeo.

Complete faculty listing by department: Follow this link.

Graduate study is offered leading to the Master of Science and Doctor of Philosophy degrees in microbiology and cell science, with emphasis in one or more of the disciplines of biochemistry, cell biology, and microbiology.

Requirements for these degrees are provided in the Graduate Degrees section of this catalog and also at the Department webpage: http://microcell.ufl.edu/.

Instruction and guidance are collaborative among faculty in the Colleges of Agricultural and Life Sciences, Liberal Arts and Sciences, and Medicine.

Research spans broad areas in the cellular and molecular aspects of bacterial, plant, and animal life functions: Areas of research include microbial biochemistry, biotechnology; biomass conversion; genetic and metabolic regulation; environmental microbiology; cell biology; molecular biology; molecular genetics; genomics and bioinformatics; immunology; virology; parasitology; host-pathogen interactions; cellular ultrastructure.

Prerequisites for admission to graduate study, in addition to those of the Graduate School, are a broad educational background including mathematics, physics, and chemistry through organic, analytical, and physical chemistry; basic courses in biology, botany, and/or zoology; and at least one course in microbiology and biochemistry. An undergraduate major in biochemistry, physical or chemical science, engineering, or general biology may be an acceptable alternative to a degree in microbiology or cell science. Receipt of an advanced degree requires detailed knowledge in microbiology, biochemistry, and chemistry; undergraduate deficiencies may necessitate additional course work prior to entry into the graduate program.

In addition, the Microbiology and Cell Science Department also offers a combined B.S./M.S. program that allows qualified students to earn both the Bachelor's and Master's degrees with 12 credit hours of jointly counted course work. This program is considered a "4/1" because students may be awarded both degrees within a five-year period. For further information on this program, follow this link: http://microcell.ufl.edu/graduate-program/combined-degree-program/.

Other

Microbiology and Cell Science

College

College of Agricultural and Life Sciences

Department/School

Microbiology and Cell Science Department

Degrees Offered with a Major in Microbiology and Cell Science

Doctor of Philosophy

without a concentration

concentration in Medical Microbiology and Biochemistry
concentration in Toxicology

Master of Science

without a concentration

concentration in Medical Microbiology and Biochemistry

Courses

- MCB 5205: Microbiology of Human Pathogens
- MCB 5252: Microbiology, Immunology, and Immunotherapeutics
- MCB 5305L: Microbial Genetics and Biotechnology Laboratory
- MCB 5408: Anaerobic Microbiology and Biotechnology
- MCB 5458: Energy Transformation in Microorganisms
- MCB 5505: General Virology
- MCB 6317: Molecular Biology of Gene Expression
- MCB 6318: Comparative Microbial Genomics
- MCB 6355: Microbial/Host Defense
  - MCB 6358
- MCB 6409: Microbial Cell Structure and Function
- MCB 6417: Microbial Metabolism and Energetics
- MCB 6457: Metabolic Regulation
- MCB 6465: Microbial Metabolic Engineering
- MCB 6485: Advanced Techniques in Microbiology and Cell Science
- MCB 6772: Advanced Topics in Cell Biology
- MCB 6905: Experimental Microbiology
- MCB 6910: Supervised Research
- MCB 6930: Seminar
- MCB 6937: Special Topics in Microbiology
- MCB 6940: Supervised Teaching
- MCB 6971: Research for Master's Thesis
  - MCB 6980
- MCB 7922: Journal Colloquy
- MCB 7979: Advanced Research
- MCB 7980: Research for Doctoral Dissertation
- PCB 5136L: Techniques in Microbial and Cell Biology
- PCB 5235: Immunology

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Plant Molecular and Cellular Biology Department

Complete faculty listing by department: Follow this link.

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology; within the colleges of Agriculture and Life Sciences, Medicine; and Liberal Arts and Sciences.
Other

Plant Molecular and Cellular Biology

College

College of Agricultural and Life Sciences

Department/School

Plant Molecular and Cellular Biology Department

Plant Molecular and Cellular Biology Program Information

Director: Gloria A. Moore
Graduate Coordinator: Matias Kirst

Plant Molecular and Cellular Biology (PCMB) is an interdisciplinary and interdepartmental graduate degree program that emphasizes understanding the molecular and cellular mechanisms that mediate plant development, adaptation, and evolution. Students can pursue an M.S. or a Ph.D. degree through the PMCB program. All students complete core courses in Advanced Genetics, Plant Molecular Biology and Genomics, Plant Cellular and Developmental Biology, and Plant Biochemistry. In addition to the core classes, students can select from a variety of courses in biochemistry, molecular biology, physiology, breeding, genetics, evolution, microbiology, and plant pathology.

New students are exposed to a variety of faculty and experimental systems while they rotate through several laboratories during their first two semesters before selecting an adviser and dissertation research area. Both M.S. and Ph.D. students take four required courses: PCB 5065 Advanced Genetics, PCB 5530 Plant Molecular Biology and Genomics, PCB 6528 Plant Cell and Developmental Biology and BOT 6935 Plant Biochemistry, as well as journal colloquium classes (PCB 7922 Journal Colloquium). Additional elective courses are taken after approval by the student's supervisory committee. For additional information see http://pmcb.ifas.ufl.edu.

Successful candidates should have a strong interest in plant molecular and cellular mechanisms controlling development, metabolism, adaptation, and evolution. Applicants typically have a B.S. or M.S. in the agricultural, forestry, biological or chemical sciences with advanced undergraduate coursework in genetics, molecular and cellular biology, and biochemistry. However, outstanding students from a broad range of science disciplines are actively considered.

Degrees Offered with a Major in Plant Molecular and Cellular Biology

Doctor of Philosophy

without a concentration

concentration in Toxicology

Master of Science

Plant Molecular and Cellular Biology Courses

- BOT 6935: Special Topics
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6910: Supervised Research
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Plant Pathology Department

Chair: R. Loria  
Graduate Coordinators: J. Jones

Complete faculty listing by department: Follow this link.

The Department of Plant Pathology offers graduate studies leading to the Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees. The Department also participates in the Doctor of Plant Medicine interdisciplinary professional degree.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Plant Pathology

College

Department/School

Plant Pathology Department

Plant Pathology Program Information

A student may pursue studies in one of several basic areas of plant pathology. These areas include fungal plant pathology, plant bacteriology, plant virology, diagnostics, control, and also molecular and biochemical aspects of host-pathogen systems, biological control of pathogens and weeds, epidemiology, etiology, genetics of host-pathogen systems, soil microbiology, and pathogen taxonomy. In Florida, the variety of cultivated plants, coupled with an environment ideal for plant disease development, offers the student opportunities to study diseases of many crops as they develop. First-hand knowledge can be gained of diseases of field, fruit, ornamental, pasture, range, turf, and vegetable crops in temperate, subtropical, and tropical environments. Students who anticipate study in plant pathology at the University of Florida should include in their undergraduate programs training in botany, chemistry (through biochemistry), genetics, and microbiology.

Courses in nematology are offered by the Department of Entomology and Nematology.

Degrees Offered with a Major in Plant Pathology

Doctor of Philosophy
without a concentration

collection in Toxicology

Master of Science

Plant Pathology Departmental Courses

- PLP 5005C: General Plant Pathology
- PLP 5102: Theory and Practice of Plant Disease Control
- PLP 5115C: Citrus Pathology
- PLP 6656C: Fungal Biology
- PLP 6223C: Viral Pathogens of Plants
- PLP 6241C: Bacterial Plant Pathogens
- PLP 6262C: Fungal Plant Pathogens
- PLP 6291: Plant Disease Diagnosis
- PLP 6303: Host-Parasite Interactions II
- PLP 6404: Epidemiology of Plant Disease
- PLP 6502: Host-Parasite Interactions I
- PLP 6621C: Pop Genetics Microbes
- PLP 6905: Problems in Plant Pathology
- PLP 6910: Supervised Research
- PLP 6921: Colloquium in Principles of Plant Pathology
- PLP 6932: Seminar in Plant Pathology
- PLP 6940: Supervised Teaching
- PLP 6942: Professional Internship in Plant Disease Clinic
- PLP 6971: Research for Master's Thesis
- PLP 7946: Plant Pathology Internship
- PLP 7979: Advanced Research
- PLP 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium in Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

School of Forest Resources and Conservation

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Joint program: Students may simultaneously earn a juris doctorate from the College of Law and a graduate degree (M.F.R.C., M.S., or Ph.D.) in Forest Resources and Conservation.

Combined program: The School offers a combined bachelor's/master's degree program, which allows qualified students to earn both a bachelor's degree and a master's degree with a savings of 1 semester. Ph.D. students may pursue a co-major with the Department of Statistics (see below).
Concentration in geomatics: Students completing 15 or more credits with an SUR designation, as part of an SFRC graduate degree, may earn the concentration in geomatics. Geomatics is the collection, analysis, and management of spatial information and includes such fields as surveying, mapping, land tenure, cadastral systems, geographic information systems, and remote sensing.

Concentration in ecological restoration: This concentration is available to M.S. non-thesis students. To earn this concentration a student must complete Ecosystem Restoration Principles and Practice and four of the following courses: Ecological Distribution and Management of Invasive Plants, Ecology and Restoration of Invaded Ecosystems, Ecology and Restoration of Longleaf Pine Ecosystem, Watershed Restoration and Management, Natural Resource Policy and Administration, or Agroforestry in the Southeastern US. Ecological restoration seeks to return ecosystems to a close approximation of condition before a disturbance.

Statistics co-major: Ph.D. students with the School may elect the co-major offered jointly with the Department of Statistics. Students focusing on forest genetics, tree improvement, and other statistics-intensive aspects of natural resource management are potential candidates for this option.

Certificates: The School administers the Graduate Certificate in Agroforestry, and SFRC students regularly earn certificates in Geographic Information Systems and in Environmental Education and Communication. Requirements are described under Interdisciplinary Graduate Certificates and Concentrations in this catalog.

For additional information, please visit the School's web page at http://sfrc.ufl.edu.

For details on what terms courses will be offered, please visit http://sfrc.ufl.edu/gradcourses.html.

Other

Fisheries and Aquatic Sciences

College

College of Agricultural and Life Sciences

Department/School

School of Forest Resources and Conservation

Fisheries and Aquatic Sciences Program

Director: T. L. White
Graduate Coordinator: William J. Lindberg

Complete faculty listing by department: Follow this link.

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasis the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas.

The School's program in Fisheries and Aquatic Sciences leads to the Master of Science, Master of Fisheries and Aquatic Sciences (nonthesis), and Doctor of Philosophy degrees with a program in Fisheries and Aquatic Sciences. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Fisheries and Aquatic Sciences program also offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

The School of Forest Resources and Conservation's program in Fisheries and Aquatic Sciences conducts research, teaching, and extension programs in four broad areas:

- Sustainable fisheries
- Aquaculture
- Aquatic animal health
- Conservation and management of aquatic environments

Faculty encompass both freshwater and marine environments, as well as managed aquaculture systems. Collaborators include the UF College of Veterinary Medicine, National Biological Survey, National Marine Fisheries Service, Harbor Branch Oceanographic Institute, Mote Marine Laboratory, the US Geologic Survey, the Florida Fish and Wildlife Conservation Commission, and others. Academic programs are structured to emphasis direct engagement of students with faculty. Further information, including specific degree options, faculty biographies, and information on the admissions process, is available at: http://sfrc.ufl.edu.

Degrees Offered with a Major in Fisheries and Aquatic Sciences

Doctor of Philosophy

without a concentration
concentration in Geographic Information Systems

concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

Master of Fisheries and Aquatic Sciences

without a concentration

concentration in Geographic Information Systems

concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mapping
- SUR 5385: Remote Sensing Applications
- SUR 5386: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5276C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5601: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Phycology
- FAS 6265: Fish and Aquatic Invertebrate Histology
- FAS 6272: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6932: Special Topics in Fisheries and Aquatic Sciences
- FAS 6933: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
- FAS 6940: Supervised Teaching
- FAS 6971: Research for Master's Thesis
- FAS 7979: Advanced Research
- FAS 7980: Research for Doctoral Dissertation

Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6564: Ecohydrology
- FOR 5157: Ecosystem Restoration Principles and Practice
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6628: Community Forest Management
- FOR 6665: Landscape Planning for Ecotourism
- FOR 6905: Research Problems in Forest Resources and Conservation
- FOR 6910: Supervised Research
- FOR 6933: Seminar
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 6940: Supervised Teaching
- FOR 6971: Research for Master's Thesis
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6555: Introduction to Quantitative Genetics

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
Forest Resources and Conservation

College

College of Agricultural and Life Sciences

Department/School

School of Forest Resources and Conservation

Forest Resources and Conservation Program Information

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas.

The SFRC offers graduate programs leading to the Master of Forest Resources and Conservation (professional, non-thesis), Master of Science (thesis and non-thesis), and Doctor of Philosophy degrees in Forest Resources and Conservation. The Master of Science non-thesis degree may be taken entirely online. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Forest Resources and Conservation program prepares students to work with the ecological, economic, and social aspects of natural resources, including the management of spatial information gathered through traditional surveying as well as remote sensing. Faculty have a wide variety of specializations, including fire ecology, land tenure, tree genetics, recreation management, environmental education, geographic information systems, silviculture, forest economics, and environmental policy. Further information, including specific degree options, faculty biographies, and information on the admissions process, is available at: [http://sfrc.ufl.edu](http://sfrc.ufl.edu).

Degrees Offered with a Major in Forest Resources and Conservation

Doctor of Philosophy

without a concentration

concentration in Agroforestry

concentration in Geographic Information Systems

concentration in Geomatics

concentration in Hydrologic Sciences
concentration in Natural Resource Policy and Administration

concentration in Tropical Conservation and Development

concentration in Toxicology

concentration in Wetland Sciences

Master of Forest Resources and Conservation

without a concentration

concentration in Agroforestry

concentration in Geographic Information Systems

concentration in Geomatics

concentration in Natural Resource Policy and Administration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Agroforestry
concentration in Ecological Restoration

concentration in Geographic Information Systems

concentration in Geomatics

concentration in Hydrologic Sciences

concentration in Natural Resource Policy and Administration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mapping
- SUR 5385: Remote Sensing Applications
- SUR 5386: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
- SUR 5425: Cadastral Information Systems
- SUR 5525: Least Squares Adjustment Computations
- SUR 6375: Terrain Analysis and Mapping
- SUR 6395: Topics in Geographic Information Systems
- SUR 6427: Land Tenure and Administration
- SUR 6535: GPS-INS Integration
- SUR 6905: Special Problems in Geomatics
- SUR 6934: Topics in Geomatics

Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5276C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5901: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Phycology
- FAS 6256: Fish and Aquatic Invertebrate Histology
- FAS 6272: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6932: Special Topics in Fisheries and Aquatic Sciences
- FAS 6933: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6654: Ecohydrology
- FOR 5157: Ecosystem Restoration Principles and Practice
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6566: Community Forest Management
- FOR 6665: Landscape Planning for Ecolotourism
- FOR 6905: Research Problems in Forest Resources and Conservation
- FOR 6910: Supervised Research
- FOR 6933: Seminar
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 6940: Supervised Teaching
- FOR 6971: Research for Master's Thesis
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6555: Introduction to Quantitative Genetics
- PCB 6555: Introduction to Quantitative Genetics

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

School of Natural Resources and Environment

Graduate coordinator: T. Frazer

Complete faculty listing by department: Follow this link.

The University of Florida School of Natural Resources and Environment offers interdisciplinary coursework in the basic and applied science of ecology, the related social sciences, and sustainability, leading to M.S. and Ph.D. degrees. Choose from about 450 courses, 280 faculty advisors, and 44 participating departments. Research areas of ecology graduate students range across natural resource ecology, environmental policy and management, and sustainable development.

Environmental problems are fundamentally human problems and should be understood in terms of human motivations and actions in a biophysical context. Their solution requires holistic thinking about dynamic ecological systems and the social, economic, and political forces driving human action. To this end, the goal of the Interdisciplinary Ecology graduate program is to provide advanced training in ecology thinking and the main theories and methodologies of the biophysical and social sciences to foster integrative approaches to complex real-world problems. Interdisciplinary Ecology students are intensely interested in the sustainability problem, and they welcome the challenge of addressing it through more than one traditional discipline.

Other
Interdisciplinary Ecology

College

College of Agricultural and Life Sciences

Department/School

School of Natural Resources and Environment

Interdisciplinary Ecology Program

Director of Academic Programs and Graduate Coordinator: T. Frazer

Graduate students are advised by one of the 280 members of the School's affiliate faculty and have a supervisory committee with interdisciplinary composition. For the list of Graduate Faculty, see [http://sfrc.ufl.edu/fish/people/](http://sfrc.ufl.edu/fish/people/). Graduate students are hosted in one of 44 participating academic units.

The School offers a program of study leading to the Master of Science (thesis and non-thesis options), and Doctor of Philosophy degrees in interdisciplinary ecology. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog. The course work requirements and curriculum are described in more detail at [http://www.snre.ufl.edu/](http://www.snre.ufl.edu/). Choices among 450 courses are custom-tailored by the student and the supervisory committee to meet the student's specific needs and interests.

The Interdisciplinary Ecology program views the social-ecological system as the proper framework for addressing the full scope of complex, adaptive systems comprising humans in the natural world. The degree program challenges students to understand both natural and human dynamics to obtain a holistic view and to foster integration of human activities with natural resources and the environment. The learning outcomes of the program are to develop a thorough understanding of the components, processes, and interactions of the social-ecological system, competence in scientific research methodologies, and experience in professional interaction with peers.

The degree programs combine 1) course work in the science of ecology and additional natural and social sciences; and 2) competence in a recognized discipline in one of these fields of study. The former is achieved with a core-course and distribution requirement and the latter by extra course work for the master's and a concentration for the doctoral degree. A thesis or dissertation provides first-hand experience creating scientific knowledge. The non-thesis master's option provides rapid, advanced preparation for the job market in 3 to 4 semesters, without research experience. Course requirements are 36 semester hours for the thesis option, 38 hours for the non-thesis option, and 60 hours beyond the master's degree for the doctoral degree.

Degrees Offered with a Major in Interdisciplinary Ecology

Doctor of Philosophy

without a concentration

concentration in Agricultural and Biological Engineering

concentration in Agricultural Education and Communication

concentration in Agronomy

concentration in Anthropology

concentration in Architecture
concentration in Biochemistry and Molecular Biology

concentration in Botany

concentration in Business Administration

concentration in Chemistry

concentration in Civil Engineering

concentration in Climate Science

concentration in Coastal and Oceanographic Engineering

concentration in Economics

concentration in English

concentration in Entomology and Nematology

concentration in Environmental Engineering Sciences

concentration in Family, Youth and Community Sciences

concentration in Farming Systems

concentration in Fisheries and Aquatic Sciences

concentration in Food and Resource Economics
concentration in Food Science

concentration in Forest Resources and Conservation

concentration in Foundations of Education

concentration in Geographic Information Systems

concentration in Geography

concentration in Geology

concentration in Health and Human Performance

concentration in Horticultural Sciences

concentration in Hydrologic Sciences

concentration in Landscape Architecture

concentration in Mathematics

concentration in Microbiology and Cell Science

concentration in Nuclear and Radiological Engineering

concentration in Philosophy
concentration in Political Science

concentration in Religion

concentration in Sociology

concentration in Soil and Water Science

concentration in Statistics

concentration in Tropical Conservation and Development

concentration in Urban and Regional Planning

concentration in Veterinary Medical Sciences

concentration in Wetland Sciences

concentration in Wildlife Ecology And Conservation

concentration in Women's/Gender Studies

concentration in Zoology

Master of Science

without a concentration

concentration in Agricultural and Biological Engineering
concentration in Agricultural Education and Communication

concentration in Agronomy

concentration in Anthropology

concentration in Architecture

concentration in Biochemistry and Molecular Biology

concentration in Botany

concentration in Business Administration

concentration in Chemistry

concentration in Civil Engineering

concentration in Climate Science

concentration in Coastal and Oceanographic Engineering

concentration in Economics

concentration in English

concentration in Entomology and Nematology

concentration in Environmental Engineering Sciences
concentration in Family, Youth and Community Sciences

concentration in Farming Systems

concentration in Fisheries and Aquatic Sciences

concentration in Food and Resource Economics

concentration in Food Science

concentration in Forest Resources and Conservation

concentration in Foundations of Education

concentration in Geographic Information Systems

concentration in Geography

concentration in Geology

concentration in Health and Human Performance

concentration in Horticultural Sciences

concentration in Hydrologic Sciences

concentration in Landscape Architecture
concentration in Mathematics

concentration in Microbiology and Cell Science

concentration in Nuclear and Radiological Engineering

concentration in Philosophy

concentration in Political Science

concentration in Religion

concentration in Sociology

concentration in Soil and Water Science

concentration in Statistics

concentration in Tropical Conservation and Development

concentration in Urban and Regional Planning

concentration in Veterinary Medical Sciences

concentration in Wetland Sciences

concentration in Wildlife Ecology And Conservation

concentration in Women's/Gender Studies
concentration in Zoology

Courses

- www.snre.ufl.edu/graduate/curriculum.htm
- EVR 5322: Scientific Processes in Conservation and Development
- EVR 5705: Natural Resources and Innovation Systems
- EVR 6320: Sustainable Natural Resource Management
- EVR 6933: Seminar
- EVR 6934: Internship
- EVR 6979: Nonthesis Master's Project
- PCB 6971: Research for Master's Thesis
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Soil and Water Science Department

Chair: K. Ramesh Reddy
Graduate Coordinator: Max Teplitski

Complete faculty listing by department: Follow this link.

The Soil and Water Science Department offers Master of Science (thesis or professional non-thesis option) and Doctor of Philosophy degrees in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The Department also offers Master of Science (thesis or professional option) specialization in environmental science via distance education for place bound students (http://soils.ifas.ufl.edu/distance). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Soil and Water are vital resources in urban, agricultural, and natural ecosystems. The Soil and Water Science Department (SWSD) provides highly visible leadership in teaching, research, and extension/outreach programs as related to improving the productivity of agriculture with environmentally sound management practices, improving water quality, and protection and conservation of natural resources. Our department is one of the few in the nation that offers a comprehensive research and educational programs (molecular to landscape level) involving terrestrial, wetlands and aquatic ecosystems of the landscape. In addition to traditional on-campus educational programs, we use innovative e-technologies to offer educational programs to place-bound students. Our graduates and postdoctoral fellows are well placed at universities, state and federal agencies, and private industry.

The SWSD programs are designed to meet the changing needs of our clientele at state, national and international levels. To meet new challenges and explore new opportunities, the SWSD's research, teaching, and extension programs are focused in five areas, with broader implication to water quality, carbon sequestration, greenhouse gases, and climate change:

- Nutrient, Pesticide, and Waste Management
- Soil, Water, and Aquifer Remediation
- Carbon Dynamics and Ecosystem Services
- Landscape Analysis and Modeling
- Wetlands and Aquatic Ecosystems

The Department offers graduate level certificates in Biodegradation and Remediation, Sustainable Land Resource and Nutrient Management, Soil Ecosystem Services, and Wetland and Water Resource Management for both on-campus students and via distance education for place bound students (http://soils.ifas.ufl.edu/academics/degree-certificates.shtml).

An additional option offered by the Department is a combined bachelor's/master's degree program that permits a B.S in Soil and Water Science or Interdisciplinary Studies – Environmental Management in Agriculture and Natural Resources and M.S. Degree to be completed in five years. Contact the graduate coordinator for more information.

For more information, please see the program page below and our website: http://soils.ifas.ufl.edu.

Other

Soil and Water Science
College

College of Agricultural and Life Sciences

Department/School

Soil and Water Science Department

Soil and Water Science Program Information

The Soil and Water Science Department offers Master of Science (thesis or professional non-thesis option) and Doctor of Philosophy degrees in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The department also offers Master of Science (thesis or professional option) specialization in environmental science via distance education for place bound students ([http://soils.ifas.ufl.edu/distance](http://soils.ifas.ufl.edu/distance)). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Students can also develop specializations in several interdisciplinary areas including biogeochemistry, ecology, geographic information systems, hydrologic science, tropical agriculture, turfgrass management, and wetland science. The Department emphasizes (but is not limited to) the following research areas:

- Nutrient, Pesticide, and Waste Management
- Soil, Water, and Aquifer Remediation
- Carbon Dynamics and Ecosystem Services
- Landscape Analysis and Modeling
- Wetlands and Aquatic Ecosystems

Interests of the student and faculty, the facilities, and funding available will determine the student's research area. A specific program of study is prepared by an appointed supervisory committee for each student. Students will present a thesis or dissertation in their major field (M.S. thesis option and Ph.D.). In addition, Ph.D. candidates must pass a qualifying examination covering several areas of soil and water science and related fields.

Prerequisites: Students who expect to do graduate work in the Soil and Water Science Department should hold a bachelor's degree from an accredited college or university with a major in soil and water science or the equivalent background in another field of science. Graduate students should have backgrounds in biology, chemistry, physics, and mathematics and knowledge of basic soil and water science.

For more information, please see our website: [http://soils.ifas.ufl.edu](http://soils.ifas.ufl.edu).

Degrees Offered with a Major in Soil and Water Science

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science
without a concentration

concentration in Agroecology

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Soil and Water Science Departmental Courses

- ALS 5027: Reusable Learning Objects
- ALS 5155: Global Agroecosystems
- CWR 6537: Contaminant Subsurface Hydrology
- SWS 5050: Soils for Environmental Professionals
- SWS 5050L: Soils for Environmental Professionals Laboratory
- SWS 5115: Environmental Nutrient Management
- SWS 5132: Tropical Soil Management
- SWS 5182: Earth System Analysis
- SWS 5208: Sustainable Agricultural and Urban Land Management
- SWS 5234: Environmental Soil, Water, and Land Use
- SWS 5235: South Florida Ecosystems
- SWS 5224: Environmental Biogeochemistry
- SWS 5246: Water Resource Sustainability
- SWS 5247: Hydric Soils
- SWS 5248: Wetlands and Water Quality
- SWS 5305C: Soil Microbial Ecology
- SWS 5308: Ecology of Waterborne Pathogens
- SWS 5406: Soil and Water Chemistry
- SWS 5424C: Soil Chemical Analysis
- SWS 5551: Soils, Water, and Public Health
- SWS 5605C: Environmental Soil Physics
- SWS 5716C: Environmental Pedology
- SWS 5721C: GIS in Land Resource Management
- SWS 5805: Environmental Soil and Water Monitoring Techniques
- SWS 6134: Soil Quality
- SWS 6136: Soil Fertility
- SWS 6161: Bioavailability of Soil Nutrients
- SWS 6262: Soil Contamination and Remediation
- SWS 6323: Advanced Microbial Ecology
- SWS 6325: Rhizosphere Biochemistry
- SWS 6366: Biodegradation and Bioremediation
- SWS 6448: Biogeochemistry of Wetlands and Aquatic Systems
- SWS 6454: Advanced Soil and Water Chemistry
- SWS 6456: Advanced Biogeochemistry
- SWS 6464C: Soil Mineralogy
- SWS 6622: Vadose Zone Hydrology
- SWS 6722: Soil-Landscape Modeling
- SWS 6905: Special Problems
- SWS 6910: Supervised Research
- SWS 6931: Seminar
- SWS 6932: Topics in Soils
College of Agricultural and Life Sciences Courses

- SWS 6940: Supervised Teaching
- SWS 6971: Research for Master's Thesis
- SWS 7979: Advanced Research
- SWS 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences

ALS 5106: Food and the Environment
ALS 5364C: Molecular Techniques Laboratory
ALS 5905: Individual Study
ALS 5932: Special Topics
ALS 6046: Grant Writing
ALS 6921: Colloquium on Plant Pests of Regulatory Significance
ALS 6925: Integrated Plant Medicine
ALS 6930: Graduate Seminar
ALS 6931: Plant Medicine Program Seminar
ALS 6942: Principles of Plant Pest Risk Assessment and Management
ALS 6943: Internship in Plant Pest Risk Assessment and Management
BCH 5045: Graduate Survey of Biochemistry

Wildlife Ecology and Conservation Department

College of Agricultural and Life Sciences

Chair: Eric C. Hellgren
Graduate Coordinator: Kathryn E. Sieving

Complete faculty listing by department: Follow this link

The Department of Wildlife Ecology and Conservation offers Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees in wildlife ecology and conservation. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Program emphasizes include wildlife biology, ecology, and management; landscape ecology and restoration; human dimensions; tropical and international conservation; and conservation education. Graduate students should have appropriate undergraduate training in the biological, social, and physical sciences including physics, chemistry, and mathematics. Students with inadequate backgrounds may be required to take (without credit at the graduate level) remedial undergraduate courses pertinent to their fields of interest.

For more information, please see our website: http://www.wec.ufl.edu.

Other

Wildlife Ecology and Conservation

College

College of Agricultural and Life Sciences

Department/School

Wildlife Ecology and Conservation Department

Wildlife Ecology and Conservation Program

The Department of Wildlife Ecology and Conservation offers a breadth of graduate programs that are designed to prepare students for professional employment in conservation of natural resources in a changing world. WEC faculty teach, conduct research, and provide service and extension in the following areas: avian ecology, behavioral ecology, community ecology, conservation biology, conservation education, conservation genetics, ecosystem management, environmental interpretation, habitat restoration, herpetofaunal ecology, human dimensions of wildlife management, international conservation, introduced species, landscape ecology, mammalian behavior, marine mammal ecology, plant ecology, population biology, range ecology, systems ecology, tropical conservation, urban wildlife relations, wetlands ecology, wildlife diseases, and wildlife management.

The Doctor of Philosophy (PhD) program in Wildlife Ecology and Conservation serves graduate students conducting advanced, original studies of fundamental ecological and social sciences (e.g., ecosystem, community, landscape ecology, human dimensions), usually with applications to further society's understanding of wildlife ecology and to improve conservation of wildlife resources.

The Master of Science (MS) thesis program in Wildlife Ecology and Conservation: (a) prepares graduate students for entry-level professional positions in areas of wildlife biology and ecology, natural resource management, conservation, and (b) provides a solid scientific foundation for further graduate work leading to the PhD degree.

The Master of Science, non-thesis (MS) program in Wildlife Ecology and Conservation provides advanced training for students in technical and professional aspects of wildlife management, conservation, and public education, emphasizing written and oral communication of scientific information.

For more information, please see our website: http://www.wec.ufl.edu.
Degrees Offered with a Major in Wildlife Ecology and Conservation

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- WIS 5323C: Impact of Diseases on Wildlife Population
  - WIS 5376
- WIS 5496: Research Design in Wildlife Ecology
- WIS 5521: Plant-Animal Interactions
- WIS 5555C: Conservation Biology
- WIS 6444: Advanced Wetlands Ecology
- WIS 6455: Wildlife Population Ecology
- WIS 6466: Wildlife Population Modeling
- WIS 6468C: Pattern and Process in Landscape Ecology
- WIS 6525: Environmental Interpretation
- WIS 6544: Administration in Natural Resources
- WIS 6575: Mammalian Carnivores: Conservation and Management Issues
- WIS 6578: Human Dimensions of Biological Conservation
The College of Dentistry offers the Master of Science degree in dental sciences with concentrations in endodontics, orthodontics, periodontics, and prosthodontics. These concentrations include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include:

- Satisfactory completion of all course work
- Meeting the requirements for clinical certification in the respective dental specialty
- Thesis or project based on research.

Prerequisites for admission, in addition to those of the Graduate School, include:

- D.D.S. or D.M.D. degree
- Completion of Parts I and II of the American Dental Association's National Board of Dental Examinations.

The application deadline for Endodontics, Periodontics, and Prosthodontics is August 1.

The application deadline for Orthodontics is September 2.

Send applications to:

Master of Science Program,
College of Dentistry,
P.O. Box 100402,
Health Science Center,
University of Florida,
Gainesville, FL 32610-0402
Requirements for the M.S. degree are provided in the Graduate Degrees section of this catalog. For further information, see the Dental Science program link below.

Other

Dental Sciences

College

College of Dentistry

Department/School

Dental Sciences Department

Dental Sciences Program Information

The College of Dentistry offers the Master of Science degree in dental sciences with concentrations in endodontics, orthodontics, periodontics, and prosthodontics. These concentrations include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include:

- Satisfactory completion of all course work
- Meeting the requirements for clinical certification in the respective dental specialty
- Thesis or project based on research.

Prerequisites for admission, in addition to those of the Graduate School, include:

- D.D.S. or D.M.D. degree
- Completion of Parts I and II of the American Dental Association's National Board of Dental Examinations.

The application deadline for Endodontics, Periodontics, and Prosthodontics is August 1.
The application deadline of Orthodontics is September 2.

Send applications to:

Master of Science Program,
College of Dentistry,
P.O. Box 100402,
Health Science Center,
University of Florida,
Gainesville, FL 32610-0402.

Those not in Dentistry are given in-department graduate credit. Registration in the courses listed below is restricted to students currently admitted to a program in the College of Dentistry.

Degrees Offered with a Major in Dental Sciences

Master of Science

- without a concentration
- concentration in Endodontics
- concentration in Orthodontics
concentration in Periodontics

concentration in Prosthodontics

General Courses

- DEN 6937
- DEN 6674: Advanced Oral Pathology
- DEN 6675: Craniofacial Pain
- DEN 6678: Advanced Oral Medicine and Drug Interactions in Dentistry
- DEN 6679: Advanced Radiology and Interpretation
- DEN 6905: Individual Study
- DEN 6910: Supervised Research
- DEN 6934: Special Topics in Dentistry
- DEN 6935: Special Topics in Dentistry
- DEN 6936: Practice Management
- DEN 6940: Supervised Teaching
- DEN 6941: Clinical Teaching in Dentistry
- DEN 6942: Grand Rounds
- DEN 6971: Research for Master's Thesis
- DEN 6973: Project in Lieu of Thesis

Endodontics Courses

- DEN 6642: Introduction to Advanced Endodontics
- DEN 6643: Treatment Planning/Cases Presentation
- DEN 6644: Nonsurgical Endodontic Care I
- DEN 6645: Nonsurgical Endodontic Care II
- DEN 6646: Surgical Endodontics I
- DEN 6647: Surgical Endodontics II

Orthodontics Courses

- DEN 6602: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 1: Class I Treatment
- DEN 6603: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 2: Class II Treatment
- DEN 6604: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 3: Class II Treatment and Overbite Treatments
- DEN 6605: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 4: Class II Treatment and Overbite Treatments
- DEN 6606: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 5: Class III and Crossbite Treatments and Soft Tissue Considerations
- DEN 6608: Analysis, Diagnosis, and Treatment Planning: Part I
- DEN 6609: Analysis, Diagnosis, and Treatment Planning: Part II
- DEN 6610: Biology of Tooth Movement: Part I
- DEN 6612: Orthodontic Biomechanics: Part I
- DEN 6613: Orthodontic Biomechanics: Part II
- DEN 6614: Ortho-Perio Relationships: Part I
- DEN 6615: Ortho-Perio Relationships: Part II
- DEN 6616: Orthognathic Surgery Part I
- DEN 6617: Orthognathic Surgery: Part II
- DEN 6618: Postnatal Growth and Development
- DEN 6670: Craniofacial Anomalies
- DEN 6671: Prenatal Growth and Development
- DEN 6672: Materials in Orthodontics

Periodontics Courses

- DEN 6652: Review of Periodontics Literature I
- DEN 6653: Review of Periodontics Literature II
- DEN 6654: Review of Periodontics Literature III
- DEN 6655: Review of Periodontics Literature IV
- DEN 6656: Introduction to Advanced Periodontology
Prosthodontics Courses

- DEN 6622: Principles of Occlusion
- DEN 6623: Maxillofacial Prosthetics
- DEN 6624: Dental Implant Restoration
- DEN 6625: Fixed Prosthodontic Ceramics
- DEN 6626: Advanced Removable Partial Dentures
- DEN 6627: Treatment Planning Seminar

Departments and Programs within the College of Design, Construction, and Planning

College of Design, Construction, and Planning

Dear: C. Silver

Complete faculty listings: Follow this link.

DCP is home to five independent professional disciplines: architecture, construction management, interior design, landscape architecture, and urban and regional planning. The college also is home to an interdisciplinary program in historic preservation, which allows graduate students to gain expertise in research and application of historic preservation in the United States and abroad.

Accreditation and Degrees

The academic programs in the college have an accreditation process from the professional organizations of each discipline.

- Architecture – National Architectural Accrediting Board
- Construction Management – American Council for Construction Education
- Interior Design – Foundation for Interior Design Education Research
- Landscape Architecture – American Society of Landscape Architects
- Urban and Regional Planning – Planning Accreditation Board

DCP offers both undergraduate and graduate degrees and programs. Through its academic units, the college offers doctoral, master's, and bachelor's degrees, as well as distance education programs, combined degrees, joint degrees, certificate programs, and academic minors.

College Institutes, Centers and Programs

Research and service projects conducted through the research centers and institutes often entail multidisciplinary, cross-campus student input and effort. Each division of the college is involved in on-going projects that advance both scholarly study and professional practice. The college contributes to community, state, regional and national efforts to conserve and improve the quality of the natural and built environments through its research centers. The college's teaching and research programs have national and international prominence.

For more information, please see our website: http://www.dcp.ufl.edu

Department and Programs within the College of Design, Construction, and Planning

College of Design, Construction, and Planning Courses

Other

Design, Construction, and Planning (Ph.D.)

College

College of Design, Construction, and Planning

Degrees Offered with a Major in Design, Construction, and Planning

Doctor of Philosophy
without a concentration

concentration in Construction Management

  optional second concentration in Geographic Information Systems

concentration in Geographic Information Systems

concentration in Historic Preservation

  optional second concentration in Geographic Information Systems

concentration in Interior Design

  optional second concentration in Geographic Information Systems

concentration in Landscape Architecture

  optional second concentration in Geographic Information Systems

concentration in Urban and Regional Planning

  optional second concentration in Geographic Information Systems

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6357: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Connections
- ARC 6399: Advanced Topics in Urban Design
- ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
- ARC 6576: Architectural Structures
- ARC 6611: Advanced Topics in Architectural Technology
- ARC 6621: Graduate Environmental Technology 2
- ARC 6642: Architectural Acoustic Design Laboratory
- ARC 6643: Architectural Acoustics
- ARC 6670: Lighting Design Seminar
- ARC 6685: Life Safety, Sanitation, and Plumbing Systems
- ARC 6705: Graduate Architectural History 3
- ARC 6711: Architecture of the Ancient World
- ARC 6750: Architectural History: America
- ARC 6773: Strains of Modernism
- ARC 6793: Advanced Topics in Regional Architecture
- ARC 6805: Architectural Conservation
- ARC 6821: Preservation Problems and Processes
- ARC 6822: Preservation Programming and Design
- ARC 6851: Technology of Preservation: Materials and Methods I
- ARC 6852: Technology of Preservation: Materials and Methods II
- ARC 6883: Vernacular Architecture & Sustainability
- ARC 6911: Architectural Research
- ARC 6912: Architectural Research II
- ARC 6913: Architectural Research III
- ARC 6932: Advanced Topics in Architectural Methods
- ARC 6933: Sustainable Site Design
• ARC 6934: European Approach to Sustainable Design
• ARC 6935: Seminar in Sustainable Design
• ARC 6940: Supervised Teaching
• ARC 6971: Research for Master's Thesis
• ARC 6979: Master's Research Project

Construction Management Departmental Courses

• BCN 5470: Construction Methods Improvements
• BCN 5618C: Comprehensive Estimating
• BCN 5625: Construction Cost Analysis
• BCN 5705C: Project Management for Construction
• BCN 5715: Advanced Construction Labor Problems
• BCN 5722: Advanced Construction Planning and Control
• BCN 5729: Design-Build Delivery Methods
• BCN 5737: Advanced Issues in Construction Safety and Health
• BCN 5754C: Site Development
• BCN 5776: International Construction Business Management
• BCN 5777: Facilities Operation and Maintenance
• BCN 5789C: Construction Project Delivery
• BCN 5874: Equipment and Methods for Heavy Construction
• BCN 5885: Methods and Management for Heavy Construction
• BCN 5905: Special Studies in Construction
• BCN 5949: Graduate Construction Management Internship
• BCN 5957: Advanced International Studies in Construction
• BCN 6036: Research Methods in Construction
• BCN 6583: High-Performance Green Building Delivery Systems
• BCN 6585: Sustainable Construction
• BCN 6596: Construction Ecology and Metabolism
• BCN 6621: Bidding Strategy
• BCN 6641: Construction Value Engineering
• BCN 6748: Construction Law
• BCN 6755: Construction Financial Management
• BCN 6756: Housing Economics and Policy
• BCN 6777: Construction Management Processes
• BCN 6785: Construction Information Systems
• BCN 6905: Directed Independent Study in Construction
• BCN 6910: Supervised Research
• BCN 6933: Advanced Construction Management
• BCN 6934: Construction Research
• BCN 6940: Supervised Teaching
• BCN 6971: Research for Master's Thesis
• FES 6705: Communications in Emergency Management
• FES 6724: Fire and Emergency Services Response Planning
• FES 6726: Hazard Mitigation and Preparedness
• FES 6735: International Emergency/Disaster Management
• FES 6736: Homeland Security and Emergency Management
• FES 6766: Research Methods in FES
• FES 6806: Disaster Response and Recovery
• FES 6826: Emergency Services - Disaster Planning
• FES 6827: Business Continuity and Disaster Planning
• FES 6836: Impacts of Natural and Man-made Disasters on Buildings
• FES 6916: Research for Master's Report
• FES 6940: Practicum in FES
• ICM 5905: Special Studies
• ICM 6420: Commercial Management and Cost Control
• ICM 6440: Construction Value Management
• ICM 6680: Principles of International Sustainable Construction
• ICM 6682: Construction Ecology and Metabolism
• ICM 6684: High-Performance Green Building Delivery Systems
• ICM 6710: Construction Human Resource Management
• ICM 6750: Managing Construction Information Technology
• ICM 6751: International Construction Management
• ICM 6752: Construction Finance and Investment
• ICM 6761: Advanced Planning, Scheduling, and Logistics
• ICM 6762: Construction Risk Management
• ICM 6770: Advanced Project Safety Management
• ICM 6772: International Strategic Management
• ICM 6905: Directed Independent Study in International Construction
• ICM 6910: Supervised Research
• ICM 6930: Construction Communication and Research
• ICM 6934: International Construction Research

Interior Design Departmental Courses

• IND 5023: Introduction to Architectural Interiors
• IND 5106: History of Interior Design I
• IND 5136: History of Interior Design II
• IND 5212C: Architectural Interiors I
IND 5213C: Introduction to Architectural Interiors Lab
IND 5227C: Advanced Architectural Interiors I
IND 5231C: Architectural Interiors II
IND 5232C: Advanced Architectural Interiors II
IND 5317C: Interior Design Communication Systems
IND 5427C: Interior Design Construction Documents
IND 5428: Materials for Interior Design
IND 5434C: Interior Lighting
IND 5445C: Furniture Design
IND 5454C: Advanced Interior Design Detailing and Construction Documents
IND 5464C: Computer Applications in Three-Dimensional Design
IND 5466: Interior Environmental Technology
IND 5508: Business and Professional Practices for Interior Designers
IND 5638: Design Environments and Human Interaction
IND 5937: Current Topics in Interior Design
IND 6239: Advanced Topics in Interior Design Studio
IND 6638: Methods of Interior Design Research
IND 6906: Independent Studies and Readings
IND 6940: Supervised Teaching
IND 6941: Interior Design Internship
IND 6971: Research for Master's Thesis

Landscape Architecture Departmental Courses

LAA 5331: Site Design Methodologies
LAA 5366: Principles of Landscape Architecture
LAA 6231: Landscape Architecture Theory
LAA 6322: Project Management for Landscape Architects
LAA 6342: Landscape Architecture Criticism
LAA 6349C: Design Communications for Landscape Architects
LAA 6382: Ecological and Environmental Policy
LAA 6525L: Advanced Landscape Construction Design
LAA 6536: Landscape Management
LAA 6656C: Advanced Landscape Architectural Design
LAA 6713: Cultural Landscapes
LAA 6716: History of Landscape Architecture
LAA 6905: Directed Study
LAA 6931: Water Conservation through Site Design and Green Roofs
LAA 6981C: Special Topics
LAA 6993: Topics in European Design: Paris, France
LAA 6995: Gardens of the World
LAA 6941: Supervised Internship
LAA 6952C: European Landscape Architecture Studio
LAA 6971: Research for Master's Thesis
LAA 6976: Terminal Project

Urban and Regional Planning Departmental Courses

URP 6042: Urban Economy
URP 6061: Planning Administration and Ethics
URP 6100: Planning Theory and History
URP 6122: Alternative Conflict Management
URP 6131: Growth Management Powers I
URP 6132: Growth Management Seminar
URP 6203: Planning Research Design
URP 6231: Quantitative Data Analysis for Planners
URP 6270: Survey of Planning Information Systems
URP 6271: Planning Information Systems
URP 6272: Advanced Planning Information Systems
URP 6274: GPS for Planners: Introduction to Global Positioning System
URP 6275: Spatial Database Design and Development
URP 6312: Land Development Planning and Evaluation
URP 6341: Urban Planning Project
URP 6421: Environmental Impact Statements
URP 6424: Sustainable Urbanism in the Americas
URP 6428: Advanced Environmental Planning
URP 6429: Natural Resources Planning and Management
URP 6445: Planning for Climate Change
URP 6526: Health and the Built Environment
URP 6541: Economic Development Planning
URP 6542: Urban Land Economics
URP 6543: Seminar in Capital Improvement Finance
URP 6547: Local Public Finance for Urban Planners
URP 6601: State Planning
URP 6603: Development Review
URP 6610: International Development Planning
URP 6716: Transportation Policy and Planning
URP 6718: Bikeways Planning and Design
URP 6745: Housing, Public Policy, and Planning
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Historic Preservation

College

College of Design, Construction, and Planning

Degrees Offered with a Major in Historic Preservation

Master of Historic Preservation

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5518C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5985: Special Studies in Construction
- BCN 5994: Graduate Construction Management Internship
- BCN 5997: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6993: Advanced Construction Management
- BCN 6994: Construction Research
- BCN 6995: Supervised Teaching
- BCN 6997: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
**FES 6940: Practicum in FES**
**ICM 5905: Special Studies**
**ICM 6420: Commercial Management and Cost Control**
**ICM 6440: Construction Value Management**
**ICM 6680: Principles of International Sustainable Construction**
**ICM 6682: Construction Ecology and Metabolism**
**ICM 6684: High-Performance Green Building Delivery Systems**
**ICM 6710: Construction Human Resource Management**
**ICM 6750: Managing Construction Information Technology**
**ICM 6751: International Construction Management**
**ICM 6752: Construction Finance and Investment**
**ICM 6761: Advanced Planning, Scheduling, and Logistics**
**ICM 6762: Construction Risk Management**
**ICM 6770: Advanced Project Safety Management**
**ICM 6772: International Strategic Management**
**ICM 6905: Directed Independent Study in International Construction**
**ICM 6910: Supervised Research**
**ICM 6930: Construction Communication and Research**
**ICM 6934: International Construction Research**

**Interior Design Departmental Courses**

- **IND 5023: Introduction to Architectural Interiors**
- **IND 5106: History of Interior Design I**
- **IND 5136: History of Interior Design II**
- **IND 5212C: Architectural Interiors I**
- **IND 5213C: Introduction to Architectural Interiors Lab**
- **IND 5227C: Advanced Architectural Interiors I**
- **IND 5231C: Architectural Interiors II**
- **IND 5232C: Advanced Architectural Interiors II**
- **IND 5317C: Interior Design Communication Systems**
- **IND 5427C: Interior Design Construction Documents**
- **IND 5428: Materials for Interior Design**
- **IND 5434C: Interior Lighting**
- **IND 5445C: Furniture Design**
- **IND 5454C: Advanced Interior Design Detailing and Construction Documents**
- **IND 5464C: Computer Applications in Three-Dimensional Design**
- **IND 5468: Interior Environmental Technology**
- **IND 5508: Business and Professional Practices for Interior Designers**
- **IND 5638: Design Environments and Human Interaction**
- **IND 5937: Current Topics in Interior Design**
- **IND 6239: Advanced Topics in Interior Design Studio**
- **IND 6639: Methods of Interior Design Research**
- **IND 6906: Independent Studies and Readings**
- **IND 6940: Supervised Teaching**
- **IND 6941: Interior Design Internship**
- **IND 6971: Research for Master's Thesis**

**Landscape Architecture Departmental Courses**

- **LAA 5331: Site Design Methodologies**
- **LAA 5366: Principles of Landscape Architecture**
- **LAA 6231: Landscape Architecture Theory**
- **LAA 6322: Project Management for Landscape Architects**
- **LAA 6342: Landscape Architecture Criticism**
- **LAA 6349C: Design Communications for Landscape Architects**
- **LAA 6382: Ecological and Environmental Policy**
- **LAA 6525L: Advanced Landscape Construction Design**
- **LAA 6536: Landscape Management**
- **LAA 6656C: Advanced Landscape Architectural Design**
- **LAA 6713: Cultural Landscapes**
- **LAA 6716: History of Landscape Architecture**
- **LAA 6905: Directed Study**
- **LAA 6931: Water Conservation through Site Design and Green Roofs**
- **LAA 6931C: Special Topics**
- **LAA 6933: Topics in European Design: Paris, France**
- **LAA 6935: Gardens of the World**
- **LAA 6941: Supervised Internship**
- **LAA 6962C: European Landscape Architecture Studio**
- **LAA 6971: Research for Master's Thesis**
- **LAA 6979: Terminal Project**

**Urban and Regional Planning Departmental Courses**

- **URP 6042: Urban Economy**
- **URP 6061: Planning Administration and Ethics**
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

School of Architecture

Director: M. Gold.
Graduate Coordinator: N. M. Clark.

Complete faculty listing Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization in this
program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, Box 115701.

Master of Architecture: The School of Architecture offers graduate work leading to the first professional degree, Master of Architecture. During graduate studies, each student has the opportunity to focus on one or more areas, including design, history and theory, urban design, preservation, structures, and technology. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design. The student's overall college experience, both undergraduate and graduate programs, is intended to be a complete unit of professional education leading to practice in architecture or related fields.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Florida School of Architecture offers the following NAAB-accredited degree programs:

Master of Architecture (pre-professional degree + 52 graduate credits) Master of Architecture (professional degree + 30 graduate credits) Master of Architecture (non-pre-professional degree + 54 graduate credits + 52 graduate credits)

Master of Architecture (pre-professional degree + 52 graduate credits): For those students who have a 4-year baccalaureate degree from an accredited architectural program, 2 years in residence (52 credits) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or master's project. Course sequences in history and theory, technology, structures, and practice must also be completed.

Master of Architecture (professional degree + 30 graduate credits): For students who have a baccalaureate degree with an architecture or related major (interior design, landscape architecture) and who have completed 4 or 6 architecture or design studies courses, three years of residence (63 credits, approximately) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 4071, ARC 4072, ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or master's project. (Undergraduate courses 3000 and 4000 level in the major do not count toward the minimum requirements for the graduate degree.) Course sequences in history and theory, materials and methods, technology, structures, and practice must be completed.

Master of Architecture (non-pre-professional degree + 54 graduate credits + 52 graduate credits): For students with a baccalaureate degree in a nonrelated academic area and have completed fewer than 4 design studies courses, 4 years of residence (112 credits, approximately) are normally required to complete the Master of Architecture degree; notification of program length is part of the letter of acceptance and is determined by portfolio and transcript review. ARC 4071, ARC 4072, ARC 4073, ARC 4074, ARC 6241, ARC 6355, and ARC 6356 are required of all graduate students in this track and are prerequisites for the required thesis or project. Undergraduate courses 3000 and 4000 level in the major do not count toward the 52-hour minimum requirements for the graduate degree. Course sequences in history and theory, materials and methods, technology, structures, and practice must be completed.

Accredited 5-year professional base: For students with a baccalaureate degree in architecture from an accredited 5-year professional degree program, a 1-year degree program is available. In these cases, a specialized curriculum is developed that compliments the needs of the applicant. Minimum registration is 30 credits; however, the minimum may increase if transcript reviews show that further course work is needed to meet registration and curriculum requirements. ARC 6356 is a prerequisite for the thesis or master's project.

Most states require individuals intending to become architects to hold an accredited degree. The National Architectural Accrediting Board acknowledges two types of degrees: the Bachelor of Architecture (minimum 5 years of study) and the Master of Architecture (minimum 3 years of study after an unrelated bachelor's degree, or 2 years after a related pre-professional bachelor's degree). These professional degrees educate those who aspire to registration and licensure to practice as architects.

Student work: The College may retain student work for the purpose of record, exhibition, or instruction.

Master of Science in Architectural Studies: The M.S.A.S. is a nonprofessional degree for advanced investigations in specialized areas of architectural history, architectural pedagogy, theory, technology, design, preservation, or practice. Students with a bachelor's degree in any discipline from an accredited university are eligible to apply to this program; the proposed area of focus should be precisely defined in the application. This is a 3- to 4-semester program (52 hours minimum) that includes a thesis. (No more than 6 hours of ARC 6971 may be counted in the minimum credit hours for the degree.) Interdisciplinary study is encouraged. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design.

The School sponsors special curricula in architecture to enhance the academic program. Preservation Institute: Caribbean, Preservation Institute: Nantucket, and Vicenza Institute of Architecture (Italy) accepts students from the University of Florida, and also from academic circles throughout the United States and the world for year-round study. Any student in a graduate architecture program at the University of Florida may apply for one or more of these programs.

Requirements for the M.Arch., M.S.A.S., and Ph.D. degrees are described in the General Information section of this catalog.

The School also participates in a program granting an Interdisciplinary Concentration and Certificate in Sustainable Architecture. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

Applications: All applications for fall term graduate admission (including official transcripts, GRE scores, and TOEFL scores, if necessary) must be received by the Office of the Registrar by January 15. In addition to satisfying University requirements for admission, applicants are required to submit to the Graduate Program Assistant, School of Architecture, 231 ARCH, Box 115702, the following: a portfolio of their creative work; a scholarly statement of intent and objectives; and three letters of recommendation. This material must be received by January 15 to be considered for admission in the next fall term. Students may apply after the January 15 deadline but will only be considered if spaces become available. (Updates of portfolios are accepted after January 15; however, applications will not be considered until they are complete.)

The School reserves the right to retain student work for purposes of record, exhibition, or instruction. Field trips are required of all students; students should plan to have adequate funds available. It may be necessary to assess studio fees to defray costs of base maps and other generally used materials.

Other

Architecture

College

College of Design, Construction, and Planning

Department/School
School of Architecture

Degrees Offered with a Major in Architecture

Master of Science in Architectural Studies

without a concentration

concentration in Historic Preservation

concentration in Sustainable Architecture

concentration in Sustainable Design

Master of Architecture

without a concentration

concentration in Historic Preservation

concentration in Sustainable Architecture

concentration in Sustainable Design

Courses

- ARC 6512: Structural Modeling
- ARC 6116: Drawing toward Architecture
- ARC 6311C: Building Information Modeling
- ARC 6383: St. Augustine Interdisciplinary Design Studio
- DCP 6710: History and Theory of Historic Preservation
- DCP 6715: Preservation Building Technology
- DCP 6971: Research for Master's Thesis
- URP 6272: Advanced Planning Information Systems
Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6357: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Connections
- ARC 6399: Advanced Topics in Urban Design
- ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
- ARC 6576: Architectural Structures
- ARC 6611: Advanced Topics in Architectural Technology
- ARC 6621: Graduate Environmental Technology I
- ARC 6642: Architectural Acoustic Design Laboratory
- ARC 6643: Architectural Acoustics
- ARC 6670: Lighting Design Seminar
- ARC 6685: Life Safety, Sanitation, and Plumbing Systems
- ARC 6705: Graduate Architectural History I
- ARC 6711: Architecture of the Ancient World
- ARC 6750: Architectural History: America
- ARC 6773: Strains of Modernism
- ARC 6793: Advanced Topics in Regional Architecture
- ARC 6805: Architectural Conservation
- ARC 6821: Preservation Problems and Processes
- ARC 6822: Preservation Programming and Design
- ARC 6851: Technology of Preservation: Materials and Methods I
- ARC 6852: Technology of Preservation: Materials and Methods II
- ARC 6883: Vernacular Architecture & Sustainability
- ARC 6911: Architectural Research
- ARC 6912: Architectural Research II
- ARC 6913: Architectural Research III
- ARC 6932: Advanced Topics in Architectural Methods
- ARC 6933: Sustainable Site Design
- ARC 6934: European Approach to Sustainable Design
- ARC 6935: Seminar in Sustainable Design
- ARC 6940: Supervised Teaching
- ARC 6971: Research for Master's Thesis
- ARC 6979: Master's Research Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

M.E. Rinker, Sr., School of Construction Management
Director: Robert Ries
Director of Master's Programs: Robert E. Minchin

Complete faculty listing: Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary doctoral program in design, construction, and planning. Areas of specialization in the program include architecture, construction management, interior design, landscape architecture, and urban and regional planning. Within the area of construction management, specialization options include sustainable construction, information systems, construction safety, affordable housing, productivity, and human resource management. These specializations prepare students to assume college-level faculty positions and industry research positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning, College of Design, Construction, and Planning, 331 Arch, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115703.

The M.E. Rinker Sr. School offers courses leading to the degrees of Master of Science in Construction Management (thesis), Master of Construction Management (nonthesis), and Master of International Construction Management (nonthesis distance education program for experienced professionals). An individual plan of study is prepared for each student to insure that the student's goals are achieved within the broad policy guidelines of the Rinker School. Specialization may be in such areas as construction management, sustainable construction, information systems, construction safety, and construction law. Requirements for the M.B.C., M.S.B.C., M.I.C.M., and Ph.D. degrees are given in the General Information section of this catalog.

Master of Construction Management (M.C.M.) or Master of Science in Construction Management (M.S.C.M.): To be eligible for admission to the M.C.M. or M.S.C.M. programs, a student must hold a 4-year undergraduate degree in building construction or its equivalent in related fields. "Equivalent in related fields" should include studies in construction materials and methods, structures, and management. Students with deficiencies in these related fields may need longer residence for the master's degree, as they will be required to take specified basic courses to provide a foundation for advanced courses. There is no foreign language requirement.

No more than 3 credits of ICM 6971 may be used to satisfy the credit requirements for the M.S.C.M. degree without written permission of the Director of Master's Programs.

Master of International Construction Management (M.I.C.M.): This program prepares students to assume upper-level management responsibilities in a multinational company. To be eligible for admission to the M.I.C.M. program, a student must have

- A 4-year undergraduate degree
- At least 5 years of meaningful, supervisory-level construction management experience
- Acceptable GRE scores (verbal and quantitative)
- A grade point average of 3.0 on a 4.0 scale
- Employer sponsorship
- International students must submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

No more than 3 credits of ICM 6934 may be used to satisfy the credit requirements for the M.I.C.M. without written permission of the Director. All candidates are required to take ICM 6930. In addition to these 6 research-oriented graduate credit hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses and special electives. All candidates are required to pass a comprehensive oral and/or written examination at the completion of the course work and their master's research report/project.

The M.E. Rinker Sr. School reserves the right to retain student work for purposes of record, exhibition, or instruction.

Research facilities: The Shimberg Center for Housing Studies, operating within the School, researches the problems and possible solutions associated with developing and producing affordable housing. The Powell Center for Construction and the Environment conducts research on implementing sustainability in creating, operating, and constructing a built environment. The Floor Program for Construction Safety researches and disseminates information on matters related to construction safety and health. The Center for Advanced Construction Information Modeling educates members of the AECO industry about new and emerging technologies in virtual design and construction.

Combined program: The School offers a combined bachelor's/master's degree program. Contact the Director of Master's Programs for information.

For more information, please see our website: http://www.bcnc.ufl.edu.

Other

Construction Management

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker Sr., School of Construction Management

Degrees Offered with a Major in Construction Management

Master of Construction Management

without a concentration

concentration in Historic Preservation

concentration in Sustainable Construction
concentration in Sustainable Design

Master of Science in Construction Management

without a concentration

concentration in Historic Preservation

concentration in Sustainable Construction

concentration in Sustainable Design

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
- ICM 5905: Special Studies
- ICM 6420: Commercial Management and Cost Control
- ICM 6440: Construction Value Management
- ICM 6680: Principles of International Sustainable Construction
- ICM 6682: Construction Ecology and Metabolism
- ICM 6684: High-Performance Green Building Delivery Systems
- ICM 6710: Construction Human Resource Management
- ICM 6750: Managing Construction Information Technology
- ICM 6751: International Construction Management
- ICM 6752: Construction Finance and Investment
- ICM 6761: Advanced Planning, Scheduling, and Logistics
- ICM 6762: Construction Risk Management
- ICM 6770: Advanced Project Safety Management
- ICM 6772: International Strategic Management
- ICM 6905: Directed Independent Study in International Construction
- ICM 6910: Supervised Research
- ICM 6930: Construction Communication and Research
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Fire and Emergency Services

College

Fire and Emergency Services Program Information

The Master of Fire and Emergency Services degree program focuses on Emergency Services/Disaster Management (ES/DM) and is designed for individuals who are seeking knowledge in emergency planning, hazard mitigation and preparedness, disaster response and recovery, and homeland security. The goal is to create broad experience that includes the many elements of current cases in ES/DM and emphasizes both the critical thinking and leadership skills necessary to advance in the field.

The M.F.E.S. degree provides post-professional advancement for the critical technical issues beyond the initial fire science practices and administrative studies. Major research topics include interdisciplinary studies in material sciences, suppression systems, advanced planning and geographic systems, pre- and post-disaster mitigation planning, computer applications, and technological innovations.

The M.F.E.S. is an online distance education program. All courses are conveniently delivered utilizing a web-based e-Learning system.

For more information, please see our website: http://www.bcn.ufl.edu/academics/masters/mfesodsm

Degrees Offered with a Major in Fire and Emergency Services

Master of Fire and Emergency Services

without a concentration

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
International Construction Management

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr., School of Construction Management

Degrees Offered with a Major in International Construction Management

Master of International Construction Management

without a concentration

concentration in Historic Preservation

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
- FES 6806: Disaster Response and Recovery
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Sustainable Construction

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr. School of Construction Management

Degrees Offered with a Major in Sustainable Construction

Master of Science in Construction Management

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
BCN 5705C: Project Management for Construction
BCN 5715: Advanced Construction Labor Problems
BCN 5722: Advanced Construction Planning and Control
BCN 5729: Design-Build Delivery Methods
BCN 5737: Advanced Issues in Construction Safety and Health
BCN 5754C: Site Development
BCN 5776: International Construction Business Management
BCN 5778: Facilities Operation and Maintenance
BCN 5796C: Construction Project Delivery
BCN 5874: Equipment and Methods for Heavy Construction
BCN 5885: Methods and Management for Heavy Construction
BCN 5905: Special Studies in Construction
BCN 5949: Graduate Construction Management Internship
BCN 5967: Advanced International Studies in Construction
BCN 6036: Research Methods in Construction
BCN 6580: High-Performance Green Building Delivery Systems
BCN 6585: Sustainable Construction
BCN 6586: Construction Ecology and Metabolism
BCN 6621: Bidding Strategy
BCN 6641: Construction Value Engineering
BCN 6748: Construction Law
BCN 6755: Construction Financial Management
BCN 6756: Housing Economics and Policy
BCN 6777: Construction Management Processes
BCN 6785: Construction Information Systems
BCN 6905: Directed Independent Study in Construction
BCN 6910: Supervised Research
BCN 6933: Advanced Construction Management
BCN 6934: Construction Research
BCN 6940: Supervised Teaching
BCN 6971: Research for Master's Thesis
FES 6705: Communications in Emergency Management
FES 6724: Fire and Emergency Services Response Planning
FES 6726: Hazard Mitigation and Preparedness
FES 6735: International Emergency/Disaster Management
FES 6736: Homeland Security and Emergency Management
FES 6786: Research Methods in FES
FES 6806: Disaster Response and Recovery
FES 6826: Emergency Services - Disaster Planning
FES 6827: Business Continuity and Disaster Planning
FES 6836: Impacts of Natural and Man-made Disasters on Buildings
FES 6916: Research for Master's Report
FES 6940: Practicum in FES
ICM 5905: Special Studies
ICM 6420: Commercial Management and Cost Control
ICM 6440: Construction Value Management
ICM 6680: Principles of International Sustainable Construction
ICM 6682: Construction Ecology and Metabolism
ICM 6684: High-Performance Green Building Delivery Systems
ICM 6710: Construction Human Resource Management
ICM 6750: Managing Construction Information Technology
ICM 6751: International Construction Management
ICM 6752: Construction Finance and Investment
ICM 6761: Advanced Planning, Scheduling, and Logistics
ICM 6762: Construction Risk Management
ICM 6770: Advanced Project Safety Management
ICM 6772: International Strategic Management
ICM 6905: Directed Independent Study in International Construction
ICM 6910: Supervised Research
ICM 6930: Construction Communication and Research
ICM 6934: International Construction Research

College of Design, Construction, and Planning Courses

DCP 6205: Ecological Issues in Sustainability and the Built Environment
DCP 6211: Preservation Topics, Issues, and Practice
DCP 6710: History and Theory of Historic Preservation
DCP 6711: History of the Built Environment for Preservation Practice
DCP 6712: Preservation Technology: Conserving Modern Buildings
DCP 6713: Historic Preservation: Principles, Practice, and Engineering
DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
DCP 6715: Preservation Building Technology
DCP 6716: Cultural Resource Management
DCP 6730: Preservation Policy
DCP 6905: Independent Study
DCP 6931: Special Topics in Design, Construction, and Planning
DCP 6943: Practicum in Historic Preservation
DCP 6971: Research for Master's Thesis
DCP 7790: Doctoral Core I
DCP 7792: Doctoral Core II
DCP 7794: Doctoral Seminar
Interior Design Department

Chair: M. Portillo.
Graduate Coordinator: N. Park

Complete faculty listing by department: Follow this link.

Doctor of Philosophy:
The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning, 331 ARCH, P.O. Box 115701.

Master of Interior Design:
The Master of Interior Design (M.I.D.) provides opportunities for students to direct their attention toward a variety of topics, including

- Design pedagogy and processes
- Sustainable, safe, and secure environments
- Creative performance and innovation
- Built heritage conservation.

Regardless of the study emphasis selected by the student, the M.I.D. program has a central focus with three categories of course work:

- Design studio
- Seminars in current interior design topics
- Theories and methods of research.

All M.I.D. students must complete an approved research topic with a written thesis. Requirements for the M.I.D. and Ph.D. degrees are given in the General Information section of this catalog.

Applications:
All applications must include acceptable GRE scores, transcripts for all previous academic work, and if the applicant's native language is not English, a satisfactory score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute. This information must be received in the Office of the Registrar by February 2. In addition to satisfying University requirements for admission, the applicants are required to submit to the Graduate Program Assistant, Department of Interior Design, 336 Architecture, P.O. Box 115705, University of Florida, Gainesville, FL 32611-5705, the following:

- A portfolio of your design work (if applicable). The portfolio must be accompanied by a self-addressed, stamped envelope.
- A written essay on your goals and aspirations related to graduate studies
- Three letters of recommendation.
- A personal interview is not required, but many applicants choose to visit the campus and Department as a part of the application process.

Students enrolled in the Bachelor of Interior Design program at the University of Florida may apply to the M.I.D. program during their junior year (see below).

The Department reserves the right to retain student course work for the purposes of record, exhibition, or instruction. Field trips are required for all students; students should plan to have adequate funds available. Students are required to purchase a computer for course work. It may be necessary to assess studio fees to defray costs of base maps, plans, and other generally used materials.

Admission: Applications are processed through February 2 for fall term and all applicants are encouraged to apply as soon as possible. Admission decisions are made between February and the end of April. All new students begin their studies in the fall to coincide with curriculum sequencing.

Graduate course requirements according to background: After assessment of previous design work, leveling courses may be required to prepare the student for the M.I.D. 36 hours of graduate course work. Therefore, each student entering the Master of Interior Design program works with the graduate coordinator to evaluate the student's unique background to determine the specific courses needed to facilitate interest and experience. Estimated credit hours and length of study time vary according to each student's individual baccalaureate degree and experience.

There are four options.

- For students enrolled in the Bachelor of Design program at the University of Florida, 12 hours of graduate-level course work in the senior year can be counted for both the undergraduate and the M.I.D. degrees. An additional 24 graduate credit hours are required. Expect at least 1 additional year to complete the M.I.D.
- For students who graduated from a Council of Interior Design Accreditation (CIDA) accredited first professional degree program within an architectural framework, the course of study is estimated to be 36 graduate credit hours. Expect 2 years to complete the M.I.D.
- For students who graduated from a design-related (architecture or interior design) baccalaureate degree program, the course of study is estimated to be a minimum of 59 graduate credit hours (includes the 36-hour M.I.D.). Expect 3 years to complete leveling courses and the master's degree.
- For students with a bachelors degree in a field other than design, the course of study is estimated to be 86 undergraduate and graduate credit hours. Expect 3 to 4 years to complete leveling courses and the M.I.D.

Estimates of the number of credit hours and length of study time may be adjusted based on the individual student's previous preparation including experience as a practicing designer, architect, or other professional.

Program requirements: After leveling courses are completed and with approval by the graduate coordinator and supervisory committee chair, a student completes 24 hours of departmentally approved graduate work in the Department of Interior Design. In addition, with the graduate coordinator's approval, the student is required to take 3 hours of course work in graduate statistics and 9 hours of multidisciplinary graduate electives that reinforce and extend the research.

Courses from such academic units as Psychology, Anthropology, Sociology, Engineering, Education, and Business Administration provide possible electives. The College of Design, Construction and Planning offers the Certificate in Historic Preservation. If the focus of a student is the renovation and preservation of built environments, then historic preservation courses leading to a certificate would strengthen the research and design effort. Likewise, existing appropriate courses in Architecture, Landscape Architecture, Urban and Regional Planning, and Building Construction offer both collaborative study and research opportunities for M.I.D. students.

Each student must select a two-member supervisory committee to guide course selection and to guide thesis selection, study, and production.

Other
Interior Design

College

College of Design, Construction, and Planning

Department/School

Interior Design Department

Degrees Offered with a Major in Interior Design

Master of Interior Design

without a concentration

concentration in Historic Preservation

concentration in Sustainable Design

Courses

- IND 5326: Color Theory Planning and Practice

Interior Design Departmental Courses

- IND 5023: Introduction to Architectural Interiors
- IND 5106: History of Interior Design I
- IND 5138: History of Interior Design II
- IND 5212C: Architectural Interiors I
- IND 5213C: Introduction to Architectural Interiors Lab
- IND 5227C: Advanced Architectural Interiors I
- IND 5231C: Architectural Interiors II
- IND 5232C: Advanced Architectural Interiors II
- IND 5317C: Interior Design Communication Systems
- IND 5427C: Interior Design Construction Documents
- IND 5428: Materials for Interior Design
- IND 5434C: Interior Lighting
- IND 5445C: Furniture Design
- IND 5454C: Advanced Interior Design Detailing and Construction Documents
- IND 5464C: Computer Applications in Three-Dimensional Design
- IND 5466: Interior Environmental Technology
- IND 5508: Business and Professional Practices for Interior Designers
- IND 5638: Design Environments and Human Interaction
- IND 5997: Current Topics in Interior Design
- IND 6236: Advanced Topics in Interior Design Studio
- IND 6639: Methods of Interior Design Research
- IND 6906: Independent Studies and Readings
- IND 6940: Supervised Teaching
- IND 6941: Interior Design Internship
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Landscape Architecture Department

College of Design, Construction, and Planning

Chair: Gina Gurucharri
Graduate Coordinator: Kevin Thompson

Complete faculty listing by department: [Follow this link](http://www.dcp.ufl.edu/landscape)

The mission of the Department of Landscape Architecture is to advance the ethical, creative, and skillful application of the art and the science of planning and designing urban, rural and natural environments. The Master of Landscape Architecture seeks excellence through professional practice and service, and through research and scholarly pursuit.

Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio's selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

The Graduate program in Landscape Architecture offers flexibility in meeting the needs of applicants with varied backgrounds. Students entering the graduate program in landscape architecture follow one of the four following tracks:

**Pre MLA Program**
Graduate students who do not possess an LAAB accredited professional degree in landscape architecture are invited to enroll in the Pre MLA program. The Pre MLA Program aids the development of basic analytical, design and graphic skills. Upon successful completion of the Pre MLA Summer term, students advance into a two-semester sequence of articulation courses that provide a foundation of applied landscape design and planning theory as well as competencies in landscape construction.

**MLA Advanced Graduate Studies Program**
Graduate students having completed the Pre MLA program or entering the MLA program with an LAAB accredited professional baccalaureate degree in Landscape Architecture commence a two year program of advanced graduate coursework towards the completion of the MLA degree.

**MLA Program + Construction**
Graduate students with a non-accredited or non-LAAB accredited degree in Landscape Architecture may apply directly to the MLA program but may be required to take additional coursework to develop core competencies required for advanced graduate study.

**MLA Research Degree**
Graduate students with an LAAB accredited professional degree in Landscape Architecture and a significant history of achievement in professional practice may tailor a program of advanced study to meet their specific needs. Proposals for the MLA Research Degree option are reviewed by the Graduate Coordinator and an approved course of study is determined through consultation with the Graduate Committee.

The Graduate program in Landscape Architecture offers flexibility in meeting the needs of applicants with varied backgrounds. Students entering the graduate program in landscape architecture follow one of the four following tracks:

- Design studios: Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio's selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

- Thesis or terminal project: The Department recognizes that students have different professional goals and personal strengths and interests. A thesis is appropriate for students interested in further research or teaching, or in pursuing advanced degrees. A project (with a significant research component) is appropriate for students interested in design or project-oriented aspects of landscape architecture, or if their specific areas of interest suggest a nontraditional approach.

- Programs, centers, and institutes: The College of Design, Construction, and Planning has several research centers and institutes. The course work and summer sessions afforded by these programs offer both required and elective course work for graduate students in landscape architecture.
use while providing learning opportunities for students.

**The Center for International Design and Planning:** The Center for International Design and Planning conducts interdisciplinary research with a focus on emerging design and planning trends in an era of globalization with a focus on resilient development systems and adaptive design and planning strategies.

**The Preservation Institute:** Nantucket gives students an opportunity to receive specialized educational experience in a broad range of preservation topics using Nantucket as a resource for case-study projects.

**The Preservation Institute:** Caribbean gives students an opportunity to conduct and apply research regarding the conservation of the rich cultural traditions of the Greater Caribbean basin.

**The GEOPLAN Center** is dedicated to the development of geographic and spatial information systems. Graduate students receive instruction in geographic information systems and are involved in a multidisciplinary studio that applies the tools and systems understanding afforded by GIS.

**Graduate advisement:** Students are initially advised by the Graduate Coordinator. He or she has guided the student’s application through the acceptance process and is familiar with the student’s background and needs. A plan of study is developed that includes required and optional courses. By the end of the second semester of study, each student is required to form a supervisory committee composed of two faculty members. The primary purpose of the graduate committee is to advise the student on educational objectives and the thesis or terminal project course work.

**Application Procedure**
Details of application procedure are found on the Department of Landscape Architecture’s website. Applicants are encouraged to familiarize themselves with the details of the application procedures and the application requirements. Applications will ONLY be considered for the track for which they have been submitted. Make certain you are applying to the correct track based on your background and credentials and the criteria detailed above.

**Application Dates**
Applications are to be completed and submitted prior to the deadline noted on the Department’s website. Unless otherwise noted, international applications must be received by November 1st. Applications from within the US are to be received no later than February 1st. Early applications are encouraged.

**Application materials to be submitted online and/or to the Office of the Registrar**
Application materials include the online application form accompanied by official transcripts, Letters of Recommendation, GRE scores, and TOEFL scores (applicants with English as a second language) to Office of the Registrar: Admissions Section, Criser Hall, University of Florida, Gainesville, Florida 32611.

**Application Materials to be submitted directly to the Department**
In addition to the materials submitted to the registrar’s office, applicants must also submit a letter of intention to the Department of Landscape Architecture (Graduate Program Assistant).

**Application Portfolio**
All applicants are encouraged to submit a portfolio of creative works.

Post professional degree applicants applying for either the Pre MLA Fall Start or MLA Advanced Graduate Study program are required to submit a portfolio that both exhibits creative work experience and shows evidence of acquired technical proficiencies in the practice of landscape architecture.

All portfolio must be digital. PDF is preferred.

**Application Status**
Applications will be processed once all material has been received and must be complete prior to the application deadline. Applicants will be contacted by the Program Assistant if their application is incomplete. Please respond quickly if you have been contacted to increase the chances of your application being considered in the current review period. Only completed applications will be processed for review.

Once the application has been processed for review, applicants will receive written notification of their application status, generally sometime in the middle of March. Please do not contact the department with inquiries of your application status prior to the end of March.

Preparatory courses (see Undergraduate Catalog): LAA 2330, LAA 2350, LAA 2360, LAA 2370, LAA 3420, LAA 3350, LAA 3352, LAA 3421, LAA 3550, LAA 6716, and ORH 3513.

**Other**

**Landscape Architecture**

**College**

**College of Design, Construction, and Planning**

**Department/School**

**Landscape Architecture Department**

**Landscape Architecture Program**

The Department of Landscape Architecture offers graduate programs leading to the Master of Landscape Architecture (M.L.A.) degree in Landscape Architecture. A Ph.D. degree with a concentration in Landscape Architecture is also offered through the College of Design, Construction and Planning. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Master of Landscape Architecture: The MLA is a Landscape Architecture Accreditation Board (LAAB) accredited professional Master's degree in Landscape Architecture. Graduation from an accredited program is an essential first step toward licensing in Florida and other states that regulate the practice of landscape architecture.

For more information, please see our website: [http://www.dcp.ufl.edu/landscape](http://www.dcp.ufl.edu/landscape)
Degrees Offered with a Major in Landscape Architecture

Master of Landscape Architecture

- without a concentration

- concentration in Geographic Information Systems

- concentration in Historic Preservation

- concentration in Sustainable Design

- concentration in Wetland Sciences

Landscape Architecture Departmental Courses

- LAA 5331: Site Design Methodologies
- LAA 5366: Principles of Landscape Architecture
- LAA 6231: Landscape Architecture Theory
- LAA 6322: Project Management for Landscape Architects
- LAA 6342: Landscape Architecture Criticism
- LAA 6349C: Design Communications for Landscape Architects
- LAA 6382: Ecological and Environmental Policy
- LAA 6525L: Advanced Landscape Construction Design
- LAA 6536: Landscape Management
- LAA 6666C: Advanced Landscape Architectural Design
- LAA 6713: Cultural Landscapes
- LAA 6716: History of Landscape Architecture
- LAA 6905: Directed Study
- LAA 6931: Water Conservation through Site Design and Green Roofs
- LAA 6931C: Special Topics
- LAA 6933: Topics in European Design: Paris, France
- LAA 6935: Gardens of the World
- LAA 6941: Supervised Internship
- LAA 6971: Research for Master's Thesis
- LAA 6979: Terminal Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
Urban and Regional Planning Department

**Director of School of Landscape Architecture and Planning:** Kristin Larsen

**Chair:** Joseli Macedo

**Graduate Coordinator:** Stanley Latimer

**Graduate Coordinator of Online Degree Program:** Ferdinand Lewis

Complete faculty listing by department: [Follow this link.](#)

**Doctor of Philosophy:** The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in Design, Construction, and Planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

**Master of Arts in Urban and Regional Planning:** The Department of Urban and Regional Planning offers graduate work leading to the degree of Master of Arts in Urban and Regional Planning (M.A.U.R.P.). Students are encouraged to enter the program in the fall semester. The program is usually completed in two academic years. The student entering with an undergraduate degree and no graduate study must complete 52 hours of credit for the M.A.U.R.P. degree. Students who have a master's degree in a related field may transfer up to 18 graduate semester hours toward the 52 hour requirement. Such a transfer of credit requires the approval of the Department. The Department encourages students with any undergraduate degree who are interested in the field of planning to apply for admission.

Complete descriptions of the requirements for the M.A.U.R.P. and Ph.D. degrees are provided in the General Information section of this catalog.

The urban and regional planning curriculum is designed to provide a set of core studies and contextual projects which prepare the graduate for the practice of planning in public or private agencies at both national and international levels. The core studies include history and theory of planning, planning methods, growth management at local, regional, and state levels, and related studies in community and regional social, natural, and economic systems. Contextual projects include, among many subject areas, urban design, transportation, regional planning, community redevelopment and preservation, housing, real estate, and economic development. The program emphasizes planning, policies, and design for the physical environment. Current specializations include growth management and transportation, urban design, housing, community and economic development, information technologies for planning, and environmental planning. Students are also encouraged to take advantage of the extensive faculty, course offerings, and other resources available in the College of Design, Construction, and Planning and throughout the University.

The Department has two research centers: The Geo-facilities Planning and Information Center (GeoPlan), the Center for Building Better Communities (CBBC), and the Center for Health and the Built Environment (CHBE).

The curriculum is supported by an extensive GIS laboratory, and a visual aid library. Variation from the core studies may be approved by the Department if the student can demonstrate education and experience to the faculty that would support such an alternative. The M.A.U.R.P. degree is accredited by the Planning Accreditation Board, a joint undertaking of the American Institute of Certified Planners and the Association of Collegiate Schools of Planning, for having achieved the highest applicable standards for graduate education in the field of planning. Graduates of the Department are prepared to practice urban and regional planning.

The Department of Urban and Regional Planning and the College of Law offer a joint degree program (see Requirements for Master's Degrees in the General Information section of this catalog). Areas of concentration with other programs in the Graduate School may be developed to meet the individual needs of students. In addition to course work the student is required to complete an internship with a public or private planning office and the student must complete a thesis.

The Department reserves the right to retain student work for purposes of record, exhibition, or instruction.

**Other**

**Urban and Regional Planning**

**College**

*College of Design, Construction, and Planning*

**Department/School**

*Urban and Regional Planning Department*

**Degrees Offered with a Major in Urban and Regional Planning**

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1013 / 2433
Master of Arts in Urban and Regional Planning

without a concentration

concentration in Geographic Information Systems

concentration in Historic Preservation

concentration in Sustainable Design

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- URP 6276: Internet Geographic Information Systems
- URP 6277: Land Use Visioning and Analysis
- URP 6610: International Development Planning
- URP 6711: Transportation and Land Use Coordination
- URP 6743: Affordable Housing Law
- URP 6855: Urban Form in Cities throughout the Americas
- URP 6887: Advanced Defensible Space in Urban Design

Urban and Regional Planning Departmental Courses

- URP 6042: Urban Economy
- URP 6061: Planning Administration and Ethics
- URP 6100: Planning Theory and History
- URP 6122: Alternative Conflict Management
- URP 6131: Growth Management Powers I
- URP 6132: Growth Management Seminar
- URP 6203: Planning Research Design
- URP 6231: Quantitative Data Analysis for Planners
- URP 6270: Survey of Planning Information Systems
- URP 6271: Planning Information Systems
- URP 6272: Advanced Planning Information Systems
- URP 6274: GPS for Planners: Introduction to Global Positioning System
- URP 6275: Spatial Database Design and Development
- URP 6312: Land Development Planning and Evaluation
- URP 6341: Urban Planning Project
- URP 6421: Environmental Impact Statements
- URP 6424: Sustainable Urbanism in the Americas
- URP 6428: Advanced Environmental Planning
- URP 6429: Natural Resources Planning and Management
- URP 6445: Planning for Climate Change
- URP 6526: Health and the Built Environment
- URP 6541: Economic Development Planning
- URP 6542: Urban Land Economics
- URP 6543: Seminar in Capital Improvement Finance
- URP 6547: Local Public Finance for Urban Planners
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Departments and Programs within the College of Education

College of Education

Dear: G. Good.

Complete faculty listings: Follow this link.

Graduate study in education, allows individuals with bachelor's degrees in agriculture, business, education, engineering, mathematics, sciences, humanities, foreign languages, preprofessional studies and other fields to prepare for rewarding professional careers in education and related fields.

The College of Education offers 19 master's or specialist programs, 12 doctoral programs, and a J.D./Ph.D. program with the College of Law through its three schools: Human Development and Organizational Studies in Education; Special Education, School Psychology and Early Childhood Studies; and School of Teaching and Learning.

Follow these links for more information about UF's College of Education graduate programs:
http://education.ufl.edu/graduate-studies
http://education.ufl.edu/programs

Departments and Programs within the College of Education

College of Education Courses

Human Development and Organizational Studies in Education Department

Director: Linda B. Eldridge
Graduate Coordinator: Patricia Ashton
Complete faculty listing by department: [Follow this link](#).

Programs leading to the Master of Arts in Education (M.A.E.), Master of Education (M.Ed.), Education Specialist (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees are offered through this school with programs in Counseling and Counselor Education, Educational Leadership, Higher Education Administration, Marriage and Family Counseling, Mental Health Counseling, Research and Evaluation Methodology, School Counseling and Guidance, and Student Personnel in Higher Education.

Requirements for these degrees are given in the [Graduate Degrees](#) section of this catalog.

More information can be found at our website: [http://education.ufl.edu/hdose](http://education.ufl.edu/hdose)

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### Other

#### Counseling and Counselor Education

**College**

College of Education

**Department/School**

[Human Development and Organizational Studies in Education Department](#)

**Counseling and Counselor Education Program**

The doctoral program in Counseling and Counselor Education prepares students for careers in academia and advanced clinical and administrative positions. Our program aligns with the University of Florida mission to prepare the next generation of scholars and professional leaders. Thus, our doctoral program is a good fit for individuals who want to fulfill the roles of counselor educators – research, writing, teaching, service, securing external funding to support scholarship, assuming professional leadership positions, etc. The doctoral program is ideally suited for individuals with previously earned masters and at least two years of clinical experience. Doctoral students complete coursework, a doctoral clinical internship, participate in teaching and supervision, and conduct research leading to the completion of a dissertation. Students average 3 to 5 years to complete the doctorate, many of whom balance work and school commitments.

**Degrees Offered with a Major in Counseling and Counselor Education**

**Doctor of Education**

- without a concentration

  concentration in Marriage and Family Counseling

  concentration in Mental Health Counseling

  concentration in School Counseling and Guidance

**Doctor of Philosophy**
without a concentration

concentration in Marriage and Family Counseling

concentration in Mental Health Counseling

concentration in School Counseling and Guidance

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EGD 6250: The School Curriculum
- EGD 6295: Evaluation in the School Program
- EGD 6356: Teaching, Learning and Assessment
- EGD 6905: Individual Work
- EGD 6910: Supervised Research
- EGD 6931: Special Topics
- EGD 6940: Supervised Teaching
- EGD 6971: Research for Master's Thesis
- EGD 6973: Project in Lieu of Thesis
- EGD 7222: Curriculum: Theory and Research
- EGD 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EGD 7665: Bases of Curriculum and Instruction Theory
- EGD 7941: Field Experience in Curriculum and Instruction
- EGD 7979: Advanced Research
- EGD 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7505: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDS 6140: Supervision of Instruction
MHS 5005: Introduction to Counseling
MHS 6000: Assessment and Treatment of Family Violence
MHS 6020: Counseling in Community Settings
MHS 6061: Spiritual Issues in Multicultural Counseling
MHS 6071: Diagnosis and Treatment of Mental Disorders
MHS 6200: Assessment in Counseling
MHS 6340: Career Development
MHS 6401: Counseling Theories and Applications
MHS 6421: Play Counseling and Play Process with Children
MHS 6428: Multicultural Counseling
MHS 6430: Introduction to Family Counseling
MHS 6440: Marriage Counseling
MHS 6450: Substance Abuse Counseling
MHS 6464: Introduction to Disaster Mental Health Counseling
MHS 6466: Trauma and Crisis Intervention: Theory and Practice
MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
MHS 6468: Multicultural issues in disaster mental health counseling
MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
MHS 6471: Sexuality and Mental Health
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MHS 6905: Individual Work
MHS 6910: Supervised Research
MHS 6940: Supervised Teaching
MHS 6971: Research for Master's Thesis
MHS 7402: Brief Therapy
MHS 7407: Advanced Counseling Theories
MHS 7431: Advanced Family Counseling
MHS 7600: Consultation Procedures
MHS 7610: Practicum in Counseling Supervision
MHS 7730: Seminar in Counseling Research
MHS 7740: Research in Counseling
MHS 7800: Practicum in Counseling
MHS 7804: Group Supervision in Agency Counseling
MHS 7805: Practicum in Agency Counseling
MHS 7806: Practicum in Marriage and Family Counseling
MHS 7807: Group Supervision in Marriage and Family Counseling
MHS 7830: Internship in Counseling and Development-600 Hours
MHS 7840: Internship in Counselor Education
MHS 7946: Internship in Agency Program Management
MHS 7979: Advanced Research
MHS 7980: Research for Doctoral Dissertation
SDS 6401: Counseling Skills for Non-Counselors
SDS 6411: Counseling with Children
SDS 6413: Counseling Adolescents
SDS 6436: Family-School Intervention
SDS 6520: Family, Student Development and Role of Teacher as Adviser
SDS 6620: Organization and Administration of School Counseling Programs
SDS 6831: Supervision for a Split Internship
SDS 6905: Individual Work
SDS 6936: Seminar in Counselor Education
SDS 6938: Special Topics
SDS 7800: Practicum in School Counseling
SDS 7820: Group Supervision in School Counseling
SDS 7830: Internship in Counseling and Development-600 Hours

Educational Leadership

College

College of Education
Human Development and Organizational Studies in Education Department

Educational Leadership Program Information

Programs in Educational Leadership provide opportunities for professional educators and those who would like to be professional educators to receive quality coursework, mentorship, and degrees in educational administration, policy, and leadership. The programs provided are ideal for vice principals, principals, district directors and supervisors, assistant superintendents, school business managers, teachers aspiring to acquire administrative roles within the K-12 system and educational leaders of other organizations.

Degrees Offered with a Major in Educational Leadership

Doctor of Education

without a concentration

congcentration in Educational Policy

Doctor of Philosophy

without a concentration

congcentration in Educational Policy

Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6061: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EGD 6356: Teaching, Learning and Assessment
- EGD 6905: Individual Work
- EGD 6910: Supervised Research
- EGD 6931: Special Topics
- EGD 6940: Supervised Teaching
- EGD 6971: Research for Master's Thesis
- EGD 6973: Project in Lieu of Thesis
- EGD 7222: Curriculum: Theory and Research
- EGD 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EGD 7665: Bases of Curriculum and Instruction Theory
- EGD 7941: Field Experience in Curriculum and Instruction
- EGD 7979: Advanced Research
- EGD 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
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- EDH 7635: Higher Education Administration
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- MHS 6061: Spiritual Issues in Multicultural Counseling
- MHS 6071: Diagnosis and Treatment of Mental Disorders
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- MHS 6340: Career Development
- MHS 6401: Counseling Theories and Applications
- MHS 6421: Play Counseling and Play Process with Children
- MHS 6428: Multicultural Counseling
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marital Counseling
- MHS 6450: Substance Abuse Counseling
- MHS 6464: Introduction to Disaster Mental Health Counseling
- MHS 6466: Trauma and Crisis Intervention: Theory and Practice
- MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
- MHS 6468: Multicultural issues in disaster mental health counseling
- MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
- MHS 6471: Sexuality and Mental Health
Higher Education Administration

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Higher Education Administration Program Information

The Higher Education Administration program has been established for students aspiring to become community college and university administrators, deans, presidents, and professors. America's community colleges and universities will soon face a critical leadership gap. As the baby boom generation reaches retirement age, many provosts, deans and college presidents are getting ready to add "emeritus" to their titles. As a result, openings in top leadership positions are expected to exceed the number of appropriately-trained individuals for many years to come.

The University of Florida's College of Education is helping fill the gap. Our nationally recognized Higher Education Administration Program prepares future leaders for their roles in administrative positions in higher education. Our faculty and alumni shaped the community and state college system as we know it, and our graduates have gone on to crucial administrative positions at two- and four-year institutions. Join us in shaping the future of higher education.

Degrees Offered with a Major in Higher Education Administration

Doctor of Education
without a concentration

concentration in Educational Policy

Doctor of Philosophy

without a concentration

concentration in Educational Policy

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 6215: Communications in Educational Leadership
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 6973: Project in Lieu of Thesis
- EDA 6975: Supervised Research
- EDA 6931: Special Topics
- EDA 6940: Supervised Teaching
- EDA 6971: Research for Master's Thesis
- EDA 6973: Project in Lieu of Thesis
- EDA 7222: Curriculum: Theory and Research
- EDA 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDA 7665: Bases of Curriculum and Instruction Theory
- EDA 7941: Field Experience in Curriculum and Instruction
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6380: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6638: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
- EDH 7505: The Financing of Higher Education
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7942: Group Supervision in Student Personnel
- EDH 7948: Internship in Student Personnel
- EDS 6140: Supervision of Instruction
- MHS 5005: Introduction to Counseling
- MHS 6000: Assessment and Treatment of Family Violence
- MHS 6020: Counseling in Community Settings
- MHS 6061: Spiritual Issues in Multicultural Counseling
- MHS 6071: Diagnosis and Treatment of Mental Disorders
- MHS 6200: Assessment in Counseling
- MHS 6340: Career Development
- MHS 6401: Counseling Theories and Applications
- MHS 6421: Play Counseling and Play Process with Children
- MHS 6428: Multicultural Counseling
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marriage Counseling
- MHS 6450: Substance Abuse Counseling
- MHS 6464: Introduction to Disaster Mental Health Counseling
- MHS 6466: Trauma and Crisis Intervention: Theory and Practice
- MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
- MHS 6468: Multicultural issues in disaster mental health counseling
- MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
- MHS 6471: Sexuality and Mental Health
- MHS 6480: Developmental Counseling Over the Life Span
- MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
- MHS 6500: Group Counseling: Theories and Procedures
- MHS 6602: Educational Mediation
- MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
- MHS 6720: Professional Identity and Ethics in Counseling
- MHS 6831: Supervision for a Split Internship
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- MHS 7600: Consultation Procedures
- MHS 7610: Practicum in Counseling Supervision
- MHS 7730: Seminar in Counseling Research
- MHS 7740: Research in Counseling
- MHS 7800: Practicum in Counseling
- MHS 7804: Group Supervision in Agency Counseling
- MHS 7805: Practicum in Agency Counseling
- MHS 7806: Practicum in Marriage and Family Counseling
- MHS 7807: Group Supervision in Marriage and Family Counseling
- MHS 7830: Internship in Counseling and Development-600 Hours
- MHS 7840: Internship in Counselor Education
- MHS 7946: Internship in Agency Program Management
- MHS 7979: Advanced Research
- MHS 7980: Research for Doctoral Dissertation
- SDS 6401: Counseling Skills for Non-Counselors
- SDS 6411: Counseling with Children
- SDS 6413: Counseling Adolescents
- SDS 6436: Family-School Intervention
- SDS 6520: Family, Student Development and Role of Teacher as Adviser
- SDS 6620: Organization and Administration of School Counseling Programs
- SDS 6831: Supervision for a Split Internship
- SDS 6905: Individual Work
- SDS 6936: Seminar in Counselor Education
- SDS 6938: Special Topics
- SDS 7800: Practicum in School Counseling
- SDS 7820: Group Supervision in School Counseling
- SDS 7830: Internship in Counseling and Development-600 Hours

Marriage and Family Counseling
College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Marriage and Family Counseling Program Information

The Marriage & Family Counseling/Therapy program specialization emphasizes an eco-systemic approach to understanding human problems and generating solution opportunities: Students learn to moderate solution-oriented conversations among interested parties (i.e., stakeholders) who are invited to seek “double descriptions” of mutual concerns and problems, to listen carefully to each other, to entertain and invent multiple solution possibilities, and to construct new narratives of cooperation and commitment.

Degrees Offered with a Major in Marriage and Family Counseling

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6081: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA6192: Educational Leadership: The Individual
- EDA6193: Educational Leadership: Instruction
- EDA6196: Educational Policy/Development
- EDA6215: Communications in Educational Leadership
- EDA6222: Administration of School Personnel
- EDA6225: Labor Relations in Public Education
- EDA6232: Public School Law
- EDA6242: Public School Finance
- EDA6271: Technology/Leadership for Educational Administrators
- EDA6423: Data-Driven Decision Making in Educational Organizations
- EDA6503: The Principalship
- EDA6905: Individual Work
- EDA6931: Special Topics
- EDA6935: Problems in School Administration and Supervision
- EDA6948: Supervised Practice in School Administration
- EDA6971: Research for Master's Thesis
- EDA7206: Organizational Leadership in Education
- EDA7945: Practicum in Supervision and Administration
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Mental Health Counseling

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Mental Health Counseling Program Information

The M.Ed.Ed.S. and M.A.E.Ed.S. program in Mental Health Counseling is designed to equip students with the pre-professional competencies required for Registered Intern status and, after a minimum number of years of post-degree supervised clinical experience, (a) licensure in the State of Florida as Mental Health Counselors and (b) clinical membership in NBCC's Academy of Certified Clinical Mental Health Counselors. Additionally, some students may choose to continue their studies in a doctoral program. These students often elect the thesis option (M.A.E.) to complete their studies.

Degrees Offered with a Major in Mental Health Counseling

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education
Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6196: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6355: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7222: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7665: Bases of Curriculum and Instruction Theory
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
- EDH 7505: The Financing of Higher Education
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7942: Group Supervision in Student Personnel
- EDH 7948: Internship in Student Personnel
- EDH 8140: Supervision of Instruction
- MHS 5005: Introduction to Counseling
- MHS 6000: Assessment and Treatment of Family Violence
- MHS 6020: Counseling in Community Settings
- MHS 6061: Spiritual Issues in Multicultural Counseling
- MHS 6071: Diagnosis and Treatment of Mental Disorders
- MHS 6200: Assessment in Counseling
- MHS 6340: Career Development
Research and Evaluation Methodology

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Research and Evaluation Methodology Program Information

The mission of the Research and Evaluation Methodology program is to generate, evaluate, apply and disseminate knowledge about educational research methodology, to prepare exemplary educational research methodologists, and to collaborate with others to provide methodology for the advancement of educational research. This mission aligns with College of Education's and University of Florida's missions because it results in research strategies for knowledge discovery to solve critical educational and human problems in a diverse global community.

- Learn to evaluate educational programs, analyze educational data, develop assessment instruments, and conduct research about the efficacy of research methodologies.
- Work as an educational researcher, an educational data analyst, or a psychometrician (an expert in testing and assessment).
- Find jobs in testing companies, research and evaluation companies, research centers; and assessment centers at universities, school districts, and state and federal agencies.
- Complete a master's degree (M.A.E. or M.Ed.) in two years or a Ph.D. in four years with classes focusing on research methodology, statistics applied to education, program evaluation, and psychometrics.
We admit students with some undergraduate research experience. Our students come from a variety of backgrounds, including psychology, sociology, statistics, mathematics, mathematics education, political science, marketing, economics, and engineering.

Degrees Offered with a Major in Research and Evaluation Methodology

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Research and Evaluation Methodology

- EDF 5441: Assessment in General and Exceptional Student Education
- EDF 6113: Educational Psychology: Human Development
- EDF 6211: Educational Psychology: General
- EDF 6215: Educational Psychology: Learning Theory
- EDF 6232: Principles of Learning and Instructional Practice
- EDF 6400: Quantitative Foundations of Education Research Overview
- EDF 6401: Educational Statistics
- EDF 6403: Quantitative Foundations of Educational Research
- EDF 6434: Educational Measurement
- EDF 6436: Theory of Measurement
- EDF 6471: Survey Design and Analysis in Educational Research
- EDF 6475: Qualitative Foundations of Educational Research
- EDF 6481: Quantitative Research Methods in Education
- EDF 6905: Individual Study
- EDF 6910: Supervised Research
- EDF 6938: Special Topics
- EDF 6940: Supervised Teaching
- EDF 6941: Practicum in Educational Research
- EDF 6971: Research for Master's Thesis
- EDF 7117: Affective Development and Education
- EDF 7405: Advanced Quantitative Foundations of Educational Research
- EDF 7412: Structural Equation Models
- EDF 7435: Rating Scale Design and Analysis in Educational Research
- EDF 7439: Item Response Theory
- EDF 7474: Multilevel Models
- EDF 7479: Qualitative Data Analysis: Approaches and Techniques
- EDF 7483: Qualitative Data Collection: Approaches and Techniques
- EDF 7486: Methods of Educational Research
- EDF 7491: Evaluation of Educational Products and Systems
- EDF 7639: Research in Educational Sociology
- EDF 7931: Seminar in Educational Research
- EDF 7932: Multivariate Analysis in Educational Research
- EDF 7979: Advanced Research
- EDF 7980: Research for Doctoral Dissertation
- EDF 8062: Cognitive Psychology Applied to Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
School Counseling and Guidance

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

School Counseling and Guidance Program Information

The M.Ed.Ed.S. and M.AE.Ed.S. program in School Counseling is designed to equip students with the pre-professional competencies required for Florida Department of Education Certification in School Counseling. The 72-credit hour program provides students with the specialized knowledge and skills required for placements as school counselors in public or private elementary, middle, or secondary schools.

Students enrolled in the School Counseling program, a state-approved and NCATE (National Council for the Accreditation of Teacher Education) and CACREP (Council for the Accreditation of Counseling and Related Educational Programs) accredited school counselor preparation program, must provide passing scores for all pertinent sections of the Florida Teacher Certification Examination (FTCE) including the General Knowledge test (math, English language skills, reading comprehension, and essay), the Professional Education examination, and the Subject Area Examination in Guidance and Counseling K-12 prior to graduation from the program. Questions about this requirement or any other certification related questions may be addressed to the College of Education Office of Student Services.

Degrees Offered with a Major in School Counseling and Guidance

Doctor of Education
Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6081: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7222: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7665: Bases of Curriculum and Instruction Theory
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6056: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
• EDH 6503: Resource Development in Higher Education
• EDH 6632: Current Issues in Community College Leadership
• EDH 6637: Crisis Management in Higher Education
• EDH 6935: Seminar in College Student Personnel Administration
• EDH 6945: Practicum in College Teaching I
• EDH 6946: Practicum in College Teaching II
• EDH 6947: Practicum in Student Personnel
• EDH 7225: Seminar: Curriculum in Higher Education
• EDH 7405: The Law and Higher Education
• EDH 7505: The Financing of Higher Education
• EDH 7631: Administration of Instruction in Higher Education
• EDH 7634: Student Affairs Administration in Higher Education
• EDH 7635: Higher Education Administration
• EDH 7916: Contemporary Research on Higher Education
• EDH 7942: Group Supervision in Student Personnel
• EDH 7948: Internship in Student Personnel
• EDS 6140: Supervision of Instruction
• MHS 5005: Introduction to Counseling
• MHS 6000: Assessment and Treatment of Family Violence
• MHS 6020: Counseling in Community Settings
• MHS 6061: Spiritual Issues in Multicultural Counseling
• MHS 6071: Diagnosis and Treatment of Mental Disorders
• MHS 6200: Assessment in Counseling
• MHS 6340: Career Development
• MHS 6401: Counseling Theories and Applications
• MHS 6421: Play Counseling and Play Process with Children
• MHS 6428: Multicultural Counseling
• MHS 6430: Introduction to Family Counseling
• MHS 6440: Marriage Counseling
• MHS 6450: Substance Abuse Counseling
• MHS 6464: Introduction to Disaster Mental Health Counseling
• MHS 6466: Trauma and Crisis Intervention: Theory and Practice
• MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
• MHS 6468: Multicultural issues in disaster mental health counseling
• MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
• MHS 6471: Sexuality and Mental Health
• MHS 6493: Developmental Counseling Over the Life Span
• MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
• MHS 6500: Group Counseling: Theories and Procedures
• MHS 6602: Educational Mediation
• MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
• MHS 6720: Professional Identity and Ethics in Counseling
• MHS 6831: Supervision for a Split Internship
• MHS 6905: Individual Work
• MHS 6910: Supervised Research
• MHS 6940: Supervised Teaching
• MHS 6971: Research for Master's Thesis
• MHS 7402: Brief Therapy
• MHS 7407: Advanced Counseling Theories
• MHS 7431: Advanced Family Counseling
• MHS 7600: Consultation Procedures
• MHS 7610: Practicum in Counseling Supervision
• MHS 7730: Seminar in Counseling Research
• MHS 7740: Research in Counseling
• MHS 7800: Practicum in Counseling
• MHS 7804: Group Supervision in Agency Counseling
• MHS 7805: Practicum in Agency Counseling
• MHS 7806: Practicum in Marriage and Family Counseling
• MHS 7807: Group Supervision in Marriage and Family Counseling
• MHS 7830: Internship in Counseling and Development-600 Hours
• MHS 7840: Internship in Counselor Education
• MHS 7946: Internship in Agency Program Management
• MHS 7970: Advanced Research
• MHS 7980: Research for Doctoral Dissertation
• SDS 6401: Counseling Skills for Non-Counselors
• SDS 6411: Counseling with Children
• SDS 6413: Counseling Adolescents
• SDS 6436: Family-School Intervention
• SDS 6520: Family, Student Development and Role of Teacher as Adviser
• SDS 6620: Organization and Administration of School Counseling Programs
• SDS 6831: Supervision for a Split Internship
• SDS 6905: Individual Work
• SDS 6936: Seminar in Counselor Education
• SDS 6938: Special Topics
• SDS 7800: Practicum in School Counseling
• SDS 7820: Group Supervision in School Counseling
• SDS 7830: Internship in Counseling and Development-600 Hours

Student Personnel in Higher Education

College
College of Education

Department/School

Human Development and Organizational Studies in Education Department

Student Personnel in Higher Education Program Information

The University of Florida Student Personnel in Higher Education program is a master's program designed to prepare students to enter Student Affairs leadership positions in two- and four-year institutions of higher education. The program integrates academic coursework with practitioner-based experience. The SPHE master's degree consists of 36 credit hours of core classes and 10 credit hours of supervised practicum and internship experiences (total = 46 credit hours). Students enter the graduate program in the fall semester as members of a cohort group. The group provides support and builds a sense of community for the students. All students are assigned a faculty advisor at the time of admission.

The student affairs profession is increasingly diverse and is engaged in a variety of activities and programs. The emphasis in UF's master's degree program in SPHE is upon the promotion, design, and assessment of student learning in a variety of campus and community settings.

Degrees Offered with a Major in Student Personnel in Higher Education

Master of Arts in Education

Master of Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6061: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA6192: Educational Leadership: The Individual
- EDA6193: Educational Leadership: Instruction
- EDA6195: Educational Policy Development
- EDA6215: Communications in Educational Leadership
- EDA6222: Administration of School Personnel
- EDA6225: Labor Relations in Public Education
- EDA6232: Public School Law
- EDA6242: Public School Finance
- EDA6271: Technology/Leadership for Educational Administrators
- EDA6423: Data-Driven Decision Making in Educational Organizations
- EDA6503: The Principalship
- EDA6905: Individual Work
- EDA6931: Special Topics
- EDA6935: Problems in School Administration and Supervision
- EDA6948: Supervised Practice in School Administration
- EDA6971: Research for Master's Thesis
- EDA7206: Organizational Leadership in Education
- EDA7216: Educational Leadership in Educational Organizations
- EDA7279: Practicum in Supervision and Administration
- EDA7340: Advanced Research
- EDA7541: Research for Doctoral Dissertation
- EDA7686: Research Design in Educational Administration
- EDF7143: Advanced Topics in Structural Equation Modeling
- EDF7482: Quasi-experimental Design and Analysis in Educational Research
- EDG6250: The School Curriculum
- EDG6255: Evaluation in the School Program
- EDG6356: Teaching, Learning and Assessment
- EDG6905: Individual Work
- EDG6910: Supervised Research
- EDG6931: Special Topics
- EDG6940: Supervised Teaching
- EDG6971: Research for Master's Thesis
- EDG6973: Project in Lieu of Thesis
- EDG7222: Curriculum: Theory and Research
- EDG7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7665: Bases of Curriculum and Instruction Theory
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
- EDH 7505: The Financing of Higher Education
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7942: Group Supervision in Student Personnel
- EDH 7948: Internship in Student Personnel
- EDS 6400: Supervision of Instruction
- EDS 5005: Introduction to Counseling
- MHS 6000: Assessment and Treatment of Family Violence
- MHS 6020: Counseling in Community Settings
- MHS 6061: Spiritual Issues in Multicultural Counseling
- MHS 6077: Diagnosis and Treatment of Mental Disorders
- MHS 6200: Assessment in Counseling
- MHS 6340: Career Development
- MHS 6401: Counseling Theories and Applications
- MHS 6421: Play Counseling and Play Process with Children
- MHS 6428: Multicultural Counseling
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marriage Counseling
- MHS 6450: Substance Abuse Counseling
- MHS 6464: Introduction to Disaster Mental Health Counseling
- MHS 6466: Trauma and Crisis Intervention: Theory and Practice
- MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
- MHS 6468: Multicultural issues in disaster mental health counseling
- MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
- MHS 6471: Sexuality and Mental Health
- MHS 6480: Developmental Counseling Over the Life Span
- MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
- MHS 6500: Group Counseling: Theories and Procedures
- MHS 6602: Educational Mediation
- MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
- MHS 6720: Professional Identity and Ethics in Counseling
- MHS 6931: Supervision for a Split Internship
- MHS 6935: Individual Work
- MHS 6910: Supervised Research
- MHS 6940: Supervised Teaching
- MHS 6971: Research for Master's Thesis
- MHS 7402: Brief Therapy
- MHS 7407: Advanced Counseling Theories
- MHS 7431: Advanced Family Counseling
- MHS 7600: Consultation Procedures
- MHS 7610: Practicum in Counseling Supervision
- MHS 7730: Seminar in Counseling Research
- MHS 7740: Research in Counseling
- MHS 7800: Practicum in Counseling
- MHS 7804: Group Supervision in Agency Counseling
- MHS 7805: Practicum in Agency Counseling
- MHS 7806: Practicum in Marriage and Family Counseling
- MHS 7807: Group Supervision in Marriage and Family Counseling
- MHS 7830: Internship in Counseling and Development—600 Hours
- MHS 7840: Internship in Counselor Education
- MHS 7946: Internship in Agency Program Management
- MHS 7997: Advanced Research
- MHS 7980: Research for Doctoral Dissertation
- SDS 6401: Counseling Skills for Non-Counselors
- SDS 6411: Counseling with Children
- SDS 6413: Counseling Adolescents
- SDS 6436: Family-School Intervention
- SDS 6520: Family, Student Development and Role of Teacher as Adviser
- SDS 6620: Organization and Administration of School Counseling Programs
- SDS 6831: Supervision for a Split Internship
- SDS 6905: Individual Work
- SDS 6936: Seminar in Counselor Education
- SDS 6938: Special Topics
- SDS 7800: Practicum in School Counseling
- SDS 7820: Group Supervision in School Counseling
- SDS 7830: Internship in Counseling and Development-600 Hours

Special Education, School Psychology and Early Childhood Studies Department

Director: Jean Crockett

Complete faculty listing by department: Follow this link.

The School of Special Education, School Psychology, and Early Childhood Studies offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 3 areas of specialization: Special Education; School Psychology; and Early Childhood Studies. Programs are accredited by the Florida Department of Education and approved by the National Council for Accreditation of Teacher Education (NCATE). The School Psychology program is approved by the NCATE and the National Association of School Psychologists (NASP). The Ph.D. program in School Psychology is accredited by the American Psychological Association (APA).

Other

Early Childhood Education

College

College of Education

Department/School

Special Education, School Psychology, and Early Childhood Studies Department

Degrees Offered with a Major in Early Childhood Education

Master of Arts in Education

Master of Education

Early Childhood Education Courses

- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6940: Supervised Teaching
- EEC 7056: Early Childhood Policy and Advocacy
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7666: Theory and Research in Early Childhood Studies
- EEC 7979: Advanced Research
Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7866: Theory and Research in Early Childhood Studies
- EEX 6053: Foundations of Special Education
- EEX 6098: Students with Disabilities in Higher Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
- EEX 6299: Understanding Assessment for Postsecondary Students with Disabilities
- EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
- EEX 6785: Introduction to Education-Healthcare Transition
- EEX 6786: Transdisciplinary and Transition Services in Special Education
- EEX 6788: Methods for Integrating Education-Health Care Transition
- EEX 6789: Legal Aspects and Policy in Education-Healthcare Transition
- EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
- EEX 6841: Practicum in Special Education: Mild Disabilities
- EEX 6863: Supervised Practice in Special Education
- EEX 7709: Social-Emotional Learning & Play in Early Childhood
- SPS 7980: Research for Doctoral Dissertation

School Psychology

College

College of Education

Department/School

Special Education, School Psychology and Early Childhood Studies Department

Degrees Offered with a Major in School Psychology

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education
School Psychology Courses

- SPS 6052: Issues and Problems in School Psychology
- SPS 6191: Psychoeducational Assessment I
- SPS 6192: Psychoeducational Assessment II
- SPS 6193: Academic Assessment & Intervention
- SPS 6195: Developmental Psychopathology
- SPS 6197: Psychoeducational Assessment III
- SPS 6410: Direct Interventions I: Applied Behavior Analysis for School Psychologists
- SPS 6707: Interventions in School Psychology III: Cogntive Behavioral Interventions
- SPS 6708: Interventions in School Psychology III: System Level Interventions for Children and Youth
- SPS 6815: Law and Ethics in Psychology
- SPS 6937: Special Topics in School Psychology
- SPS 6941: Practicum in School Psychology
- SPS 6942: School Psychology Practicum II
- SPS 6945: Advanced Practicum in School Psychology
- SPS 7205: School Psychology Consultation
- SPS 7931: Seminar in School Psychology
- SPS 7949: Internship in School Psychology
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation

Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6815: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7666: Theory and Research in Early Childhood Studies
- EEX 6053: Foundations of Special Education
- EEX 6068: Students with Disabilities in Higher Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
- EEX 6299: Understanding Assessment for Postsecondary Students with Disabilities
- EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
- EEX 6785: Introduction to Education-Healthcare Transition
- EEX 6786: Transdisciplinary and Transition Services in Special Education
- EEX 6788: Methods for Integrating Education-Health Care Transition
- EEX 6789: Legal Aspects and Policy in Education-Healthcare Transition
- EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
- EEX 6841: Practicum in Special Education: Mid Disabilities
- EEX 6863: Supervised Practice in Special Education
- EEX 7709: Social-Emotional Learning & Play in Early Childhood
- SPS 7980: Research for Doctoral Dissertation

Special Education

College

College of Education

Department/School

Special Education, School Psychology and Early Childhood Studies Department

Degrees Offered with a Major in Special Education

Doctor of Education
Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Special Education Courses

- EEX 5940: Supervised Student Teaching in Special Education
- EEX 6053: Foundations of Special Education
- EEX 6072: Accessing Academic and Social Communities for Students with Disabilities
- EEX 6125: Interventions for Language and Learning Disabilities
- EEX 6219: Reading Assessment and Intervention for Students with Disabilities
- EEX 6222: Evaluation in Special Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6234: Assessment, Curriculum, and Instruction for Students with Severe Disabilities
- EEX 6249: Advanced Strategies for Teaching Students with Disabilities
- EEX 6661: Teaching and Managing Behavior for Student Learning
- EEX 6750: Families and Transition for Students with Disabilities
- EEX 6786: Transdisciplinary and Transition Services in Special Education
- EEX 6835: Practicum in Special Education: Severe Disabilities
- EEX 6841: Practicum in Special Education: Mild Disabilities
- EEX 6863: Supervised Practice in Special Education
- EEX 6905: Individual Work
- EEX 6910: Supervised Research
- EEX 6936: Special Topics
- EEX 6940: Supervised Teaching
- EEX 6971: Research for Master's Thesis
- EEX 6973: Project in Lieu of Thesis
- EEX 6996: Differentiated Instruction
- EEX 7303: Inquiry in Special Education: Analysis of the Literature
- EEX 7304: Introduction to Field of Inquiry in Special Education
- EEX 7526: Grant Writing Seminar in Education
- EEX 7787: School Improvement for All Students
- EEX 7865: Internship: Special Education
- EEX 7928: Teacher Education in Special Education
- EEX 7934: Seminar: Trends in Special Education
- EEX 7979: Advanced Research
- EEX 7980: Research for Doctoral Dissertation
- EGI 6051: Education of the Gifted Child
- EGI 6245: Program Development for the Gifted

Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
School of Teaching and Learning

Director: E. Bondy.
Graduate Coordinator: S. G. Terzian.

Complete faculty listing by department: Follow this link.

The School of Teaching and Learning offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis or project in lieu of thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees in curriculum and instruction. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 10 areas of specialization: curriculum, teaching, and teacher education; educational technology; elementary education; mathematics education; language and literacy education (including children's literature, English education, ESOL/bilingual education, language arts, and reading education); science and environmental education; social foundations of education; social studies education; and teacher leadership for school improvement.

The nationally recognized ProTeach graduate program leads to the M.Ed. degree and state certification as a classroom teacher. Unified Elementary ProTeach admits undergraduates who complete the five-year program with a master's degree. Secondary ProTeach (English, Science, Social Studies) prepares teachers who have completed a bachelor's degree in the discipline they will teach. Prospective elementary teachers who already hold a bachelor's degree in a non-education field may want to consider the School's SITE program (Site-based Implementation of Teacher Education), which leads to the M.Ed. degree in curriculum and instruction. Students may apply to the state for alternative certification.

Beyond the Graduate School and College of Education admission requirements, students should have academic preparation and teaching experience appropriate to the program being pursued. Students having deficiencies in their preparation will be required to follow a program to remove such deficiencies. A limited amount of support is available for graduate studies through fellowships, scholarships, research assistantships, and teaching assistantships.

Other

Curriculum and Instruction (CCD)

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Curriculum and Instruction

Doctor of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
EDG 7359: Professional Development and Teacher Learning
EDC 6946: Practicum in Early Childhood Education
EME 6059: Blended Learning Environments
MAE 6916: Inquiry in Mathematics Teaching

General Courses

EDG 6047: Teacher Leadership for Educational Change
EDG 6207: Transforming the Curriculum
EDG 6226: Foundations of Research in Curriculum & Instruction
EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EME 6076: Virtual School Philosophy and Pedagogy
EME 6156: Games and Simulations for Teaching and Learning
EME 6235: Managing Educational Projects
EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

EDE 5940: Integrated Teaching and Learning
EDE 6225: Practices in Childhood Education
EDE 6266: Teaching and Learning in Elementary Classrooms
EDE 6325: Teacher InquiryAction Research
EDE 6905: Individual Work
EDE 6910: Supervised Research
EDE 6932: Special Topics
EDE 6948: Internship in Elementary Schools
EDE 7047: Issues in Teacher Education
EDE 7935: Seminar in Curriculum & Instruction
EDE 6356: Teaching, Learning and Assessment
EDE 7224: Critical Pedagogy
EDE 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDE 7303: Teacher Learning and Socialization in High Poverty Schools
EDE 7326: Differentiated Supervision and Teacher Professional Development
EDE 7982: Practitioner Research: Theory & Practice

Educational Technology

EME 5054: Foundations of Educational Technology
EME 5207: Designing Technology-Rich Curricula
EME 5315: Communicating with Technology
EME 5316: Educational Technology Management Issues
EME 5403: Instructional Computing I
EME 5404: Instructional Computing II
EME 5405: Internet in K-12 Instruction
EME 5431: Integrating Technology in the Mathematics Classroom
EME 5432: Integrating Technology into Social Science Classroom
EME 5433: Integrating Technology into Science Classroom
EME 6066: Issues and Trends in Educational Technology Research
EME 6205: Digital Photography and Visual Literacy
EME 6208: Designing Integrated Media Environments I
EME 6209: Designing Integrated Media Environments II
EME 6405: Educational Technology and Teaching
EME 6458: Distance Teaching and Learning
EME 6505: Educational Television Design and Production
EME 6602: Human-Computer Interactivity and the Learner
EME 6606: Advanced Instructional Design
EME 6609: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education
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Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6338: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7938: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practicum in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6548C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education
SCE 5316: Inquiry-Based Science Teaching
SCE 5355: Foundations of Science Teaching
SCE 5695: Diversity and Equity in Science Teaching
SCE 5765: Data-Driven Science Instruction
SCE 6045: Environmental Education Methods and Materials
SCE 6117: Science Education in the Elementary School
SCE 6246: Science Instruction in Informal Settings
SCE 6338: Secondary Science Methods and Assessment
SCE 6647: Global Studies Methods in Science Education
SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher InquiryAction Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: CulturallyResponsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Curriculum and Instruction (ISC)

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Curriculum and Instruction
Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6859: Blended Learning Environments
- MAE 6816: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7356: Teaching, Learning and Assessment
- EDG 7940: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
• EDG 7326: Differentiated Supervision and Teacher Professional Development
• EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

• EME 5054: Foundations of Educational Technology
• EME 5207: Designing Technology-Rich Curricula
• EME 5315: Communicating with Technology
• EME 5316: Educational Technology Management Issues
• EME 5402: Instructional Computing I
• EME 5404: Instructional Computing II
• EME 5405: Internet in K-12 Instruction
• EME 5431: Integrating Technology in the Mathematics Classroom
• EME 5432: Integrating Technology into Social Science Classroom
• EME 5433: Integrating Technology into Science Classroom
• EME 6966: Issues and Trends in Educational Technology Research
• EME 6205: Digital Photography and Visual Literacy
• EME 6208: Designing Integrated Media Environments I
• EME 6209: Designing Integrated Media Environments II
• EME 6405: Educational Technology and Teaching
• EME 6406: Distance Teaching and Learning
• EME 6505: Educational Television Design and Production
• EME 6602: Human-Computer Interactivity and the Learner
• EME 6606: Advanced Instructional Design
• EME 6609: Instructional Design
• EME 6716: Organization and Administration of Educational Media Centers
• EME 6935: Seminar: Distance Education Issues and Applications
• EME 6945: Practicum in Educational Media and Instructional Design
• EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

• FLE 6165: Bilingual-Bicultural Education
• FLE 6167: Cross-Cultural Communication for Teachers
• FLE 6336: Teaching Foreign Languages in Elementary Schools
• FLE 6357: Methods of Teaching and Assessing Foreign Language in Secondary School
• FLE 6385: Foreign Languages Teaching Methods
• FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
• TSL 5142: ESOL Curriculum, Methods, and Assessment
• TSL 5325: Secondary ESL Teaching Strategies
• TSL 6145: Curriculum and Materials Development for ESOL K-12
• TSL 6171: TESL I: Materials and Techniques
• TSL 6172: TESL II: Materials for Special Purposes
• TSL 6245: Language Principles for ESL Teachers
• TSL 6373: Methods of Teaching ESOL K-12
• TSL 6440: Testing and Evaluation of ESOL
• TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

• LAE 6208: Literacy & Language Instruction
• LAE 6319: Language Arts in the Elementary School
• LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
• LAE 6348: Teaching Multiliteracies
• LAE 6365: Language Arts: Language and Composition
• LAE 6366: Language Arts: Literature
• LAE 6407: Early Childhood Children's Literature
• LAE 6446: Multicultural Literature for Children and Adolescents
• LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
• LAE 6455: International Children's Literature
• LAE 6616: Seminar in Children's Literature
• LAE 6635: Teaching Adolescent Literature in the Secondary School
• LAE 6714: Children's Literature in the Childhood Curriculum
• LAE 6861: Technology and Media Literacy
• LAE 6885: Teaching Media Literacy with the Internet
• LAE 6889: Teaching Digital Storytelling
• LAE 6909: Literacy, Family, and Culture
• LAE 6945: Practicum and Assessment for Teachers of Secondary School English
• LAE 6946: Children's Literature in Educational Settings
• LAE 7006: Language Acquisition and Education
• LAE 7519: Language and Inquiry
• LAE 7715: Research in Children's Literature
• LAE 7934: Seminar in Composition Theory and Practice
• LAE 7936: Seminar in English Language Arts

Mathematics Education
MAE 5327: Middle School Mathematics Methods
MAE 5332: Secondary School Mathematics Methods and Assessment
MAE 5395: Multicultural Mathematics Methods
MAE 5336: Using Formative Assessment to Improve Mathematical Learning
MAE 5347: Teaching K-8 Mathematics for Understanding
MAE 5945: Secondary School Mathematics Practicum
MAE 6313: Problem Solving in School Mathematics
MAE 6615: Individualizing Instruction in Mathematics
MAE 6641: Readings and Research in Mathematics Education
MAE 7899: Mathematics Education Seminar

Reading Education

 RED 5046: Foundations of Reading in Grades PreK-12
 RED 5316: Reading in the Primary Grades
 RED 5337: Reading in the Secondary School
 RED 5355: Reading Instruction in the Intermediate Grades
 RED 5399: Practices in Beginning Reading Instruction
 RED 6346: Seminar in Reading
 RED 6520: Classroom Literacy Assessment and Instruction
 RED 6546C: Diagnosis of Reading Difficulties
 RED 6548C: Remediation of Reading Difficulties
 RED 6647: Trends in Reading
 RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
 RED 7019: Foundations of Literacy
 RED 7817: Understanding Reading Difficulties

Science Education

 SCE 5316: Inquiry-Based Science Teaching
 SCE 5355: Foundations of Science Teaching
 SCE 5695: Diversity and Equity in Science Teaching
 SCE 5765: Data-Driven Science Instruction
 SCE 6045: Environmental Education Methods and Materials
 SCE 6117: Science Education in the Elementary School
 SCE 6246: Science Instruction in Informal Settings
 SCE 6338: Secondary Science Methods and Assessment
 SCE 6647: Global Studies Methods in Science Education
 SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

 EDM 6005: The Emergent Middle School
 EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
 ESE 6215: The Secondary School Curriculum
 ESE 6344: Classroom Practices and Assessment in Secondary Education
 ESE 6345: Effective Teaching and Classroom Management
 ESE 6905: Individual Work
 ESE 6939: Special Topics
 ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

 EDF 5552: Role of School in Democratic Society
 EDF 6520: History of Education
 EDF 6544: Philosophical Foundations of Education
 EDF 6606: Socioeconomic Foundations of Education
 EDF 6616: Education and American Culture
 EDF 6830: Educational Sociology
 EDF 6812: Comparative Education
 EDF 6820: Education in Latin America
 EDF 7555: Values and Ethics in Education
 EDF 7934: Seminar in Educational Foundations

Social Studies Education

 SSE 5320: Middle School Social Studies Methods
 SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
 SSE 6046: Perspectives in Social Studies Education
 SSE 6117: Social Studies Education—Elementary School
 SSE 6133: Secondary School Social Studies Methods and Assessment
 SSE 66478: Global Studies Methods in Social Studies
Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Elementary Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Elementary Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7914: Field Experience in Curriculum and Instruction
- EDG 7977: Critical Pedagogy
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6326: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6809: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6385: Foreign Languages Teaching Methods
- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6368: Language Arts: Literature
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- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5695: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education
- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

English Education

College

Department/School

School of Teaching and Learning

Degrees Offered with a Major in English Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching
General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7391: Field Experience in Curriculum and Instruction
- EDG 7905: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6206: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5645: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
Secondary Education

- EDM6005: The Emergent Middle School
- EDM6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

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- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MTE 6916: Inquiry in Mathematics Teaching

General Courses

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- EDG 6356: Teaching, Learning and Assessment
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- EDG 7224: Critical Pedagogy
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- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
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- EME 5433: Integrating Technology into Science Classroom
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EME 6209: Designing Integrated Media Environments II
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EME 6458: Distance Teaching and Learning
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EME 6609: Instructional Design
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EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

FLE 6165: Bilingual-Bicultural Education
FLE 6167: Cross-Cultural Communication for Teachers
FLE 6336: Teaching Foreign Languages in Elementary Schools
FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
FLE 6385: Foreign Languages Teaching Methods
FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
TSL 5142: ESOL Curriculum, Methods, and Assessment
TSL 5325: Secondary ESOL Teaching Strategies
TSL 6145: Curriculum and Materials Development for ESOL K-12
TSL 6171: TESL I: Materials and Techniques
TSL 6172: TESL II: Materials for Special Purposes
TSL 6245: Language Principles for ESOL Teachers
TSL 6373: Methods of Teaching ESOL K-12
TSL 6440: Testing and Evaluation of ESOL
TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

LAE 6298: Literacy & Language Instruction
LAE 6319: Language Arts in the Elementary School
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LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
LAE 6455: International Children's Literature
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LAE 6714: Children's Literature in the Childhood Curriculum
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LAE 6869: Teaching Digital Storytelling
LAE 6939: Literacy, Family, and Culture
LAE 6945: Practicum and Assessment for Teachers of Secondary School English
LAE 6946: Children's Literature in Educational Settings
LAE 7006: Language Acquisition and Education
LAE 7519: Language and Inquiry
LAE 7715: Research in Children's Literature
LAE 7934: Seminar in Composition Theory and Practice
LAE 7938: Seminar in English Language Arts

Mathematics Education

MAE 5327: Middle School Mathematics Methods
MAE 5332: Secondary School Mathematics Methods and Assessment
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MAE 6313: Problem Solving in School Mathematics
MAE 6615: Individualizing Instruction in Mathematics
MAE 6641: Readings and Research in Mathematics Education
MAE 7899: Mathematics Education Seminar

Reading Education

RED 5046: Foundations of Reading in Grades PreK-12
RED 5316: Reading in the Primary Grades
• RED 5337: Reading in the Secondary School
• RED 5355: Reading Instruction in the Intermediate Grades
• RED 5399: Practices in Beginning Reading Instruction
• RED 6346: Seminar in Reading
• RED 6520: Classroom Literacy Assessment and Instruction
• RED 6546C: Diagnosis of Reading Difficulties
• RED 6548C: Remediation of Reading Difficulties
• RED 6647: Trends in Reading
• RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
• RED 7019: Foundations of Literacy
• RED 7817: Understanding Reading Difficulties

Science Education

• SCE 5316: Inquiry-Based Science Teaching
• SCE 5356: Foundations of Science Teaching
• SCE 5695: Diversity and Equity in Science Teaching
• SCE 5765: Data-Driven Science Instruction
• SCE 6045: Environmental Education Methods and Materials
• SCE 6117: Science Education in the Elementary School
• SCE 6246: Science Instruction in Informal Settings
• SCE 6338: Secondary Science Methods and Assessment
• SCE 6647: Global Studies Methods in Science Education
• SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

• EDM6005: The Emergent Middle School
• EDM6235: Interdisciplinary Planning, Teaching, and Assessment
• ESE 6215: The Secondary School Curriculum
• ESE 6344: Classroom Practices and Assessment in Secondary Education
• ESE 6345: Effective Teaching and Classroom Management
• ESE 6905: Individual Work
• ESE 6939: Special Topics
• ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

• EDF 5552: Role of School in Democratic Society
• EDF 6520: History of Education
• EDF 6544: Philosophical Foundations of Education
• EDF 6606: Socioeconomic Foundations of Education
• EDF 6616: Education and American Culture
• EDF 6630: Educational Sociology
• EDF 6812: Comparative Education
• EDF 6820: Education in Latin America
• EDF 7555: Values and Ethics in Education
• EDF 7934: Seminar in Educational Foundations

Social Studies Education

• SSE 5320: Middle School Social Studies Methods
• SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
• SSE 6046: Perspectives in Social Studies Education
• SSE 6117: Social Studies Education—Elementary School
• SSE 6133: Secondary School Social Studies Methods and Assessment
• SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

• EDE 6325: Teacher InquiryAction Research
• EDG 6047: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6415: Culturally Responsive Classroom Management
• EDG 6953: TLSI Online Portfolio Preparation

Reading Education

College
College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Reading Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6226: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher InquiryAction Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
EDG 6356: Teaching, Learning and Assessment
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7962: Practitioner Research: Theory & Practice

Educational Technology

EME 5054: Foundations of Educational Technology
EME 5207: Designing Technology-Rich Curricula
EME 5315: Communicating with Technology
EME 5316: Educational Technology Management Issues
EME 5403: Instructional Computing I
EME 5404: Instructional Computing II
EME 5405: Internet in K-12 Instruction
EME 5431: Integrating Technology in the Mathematics Classroom
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EME 5433: Integrating Technology into Science Classroom
EME 6066: Issues and Trends in Educational Technology Research
EME 6205: Digital Photography and Visual Literacy
EME 6208: Designing Integrated Media Environments I
EME 6209: Designing Integrated Media Environments II
EME 6405: Educational Technology and Teaching
EME 6458: Distance Teaching and Learning
EME 6505: Educational Television Design and Production
EME 6602: Human-Computer Interactivity and the Learner
EME 6606: Advanced Instructional Design
EME 6609: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

FLE 6165: Bilingual-Bicultural Education
FLE 6167: Cross-Cultural Communication for Teachers
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FLE 6395: Foreign Languages Teaching Methods
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TSL 5142: ESOL Curriculum, Methods, and Assessment
TSL 5325: Secondary ESL Teaching Strategies
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TSL 6373: Methods of Teaching ESOL K-12
TSL 6440: Testing and Evaluation of ESOL
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LAE 6319: Language Arts in the Elementary School
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LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
LAE 6455: International Children's Literature
LAE 6616: Seminar in Children's Literature
LAE 6635: Teaching Adolescent Literature in the Secondary School
LAE 6714: Children's Literature in the Childhood Curriculum
LAE 6861: Technology and Media Literacy
LAE 6865: Teaching Media Literacy with the Internet
LAE 6869: Teaching Digital Storytelling
LAE 6893: Literacy, Family, and Culture
LAE 6945: Practicum and Assessment for Teachers of Secondary School English
LAE 6946: Children's Literature in Educational Settings
LAE 7006: Language Acquisition and Education
LAE 7519: Language and Inquiry
LAE 7715: Research in Children's Literature
LAE 7934: Seminar in Composition Theory and Practice
LAE 7936: Seminar in English Language Arts
Mathematics Education

- MAE 5327: Middle School Mathematics Methods
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- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5665: Diversity and Equity in Science Teaching
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Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
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- ESE 6345: Effective Teaching and Classroom Management
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- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6395: Foreign Languages Teaching Methods
- FLE 6948: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6906: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School
Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7556: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Social Studies Education

College

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Social Studies Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perpectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher InquiryAction Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
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• TSL 6373: Methods of Teaching ESOL K-12
• TSL 6440: Testing and Evaluation of ESOL
• TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

• LAE 6298: Literacy & Language Instruction
• LAE 6319: Language Arts in the Elementary School
• LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
• LAE 6348: Teaching Multiliteracies
• LAE 6365: Language Arts: Language and Composition
• LAE 6366: Language Arts: Literature
• LAE 6407: Early Childhood Children's Literature
• LAE 6446: Multicultural Literature for Children and Adolescents
• LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
• LAE 6455: International Children's Literature
• LAE 6616: Seminar in Children's Literature
• LAE 6635: Teaching Adolescent Literature in the Secondary School
• LAE 6714: Children's Literature in the Childhood Curriculum
• LAE 6861: Technology and Media Literacy
• LAE 6865: Teaching Media Literacy with the Internet
• LAE 6869: Teaching Digital Storytelling
• LAE 6939: Literacy, Family, and Culture
• LAE 6945: Practicum and Assessment for Teachers of Secondary School English
• LAE 6946: Children's Literature in Educational Settings
• LAE 7006: Language Acquisition and Education
• LAE 7519: Language and Inquiry
• LAE 7715: Research in Children's Literature
• LAE 7934: Seminar in Composition Theory and Practice
• LAE 7936: Seminar in English Language Arts

Mathematics Education

• MAE 5327: Middle School Mathematics Methods
• MAE 5332: Secondary School Mathematics Methods and Assessment
• MAE 5395: Multicultural Mathematics Methods
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• MAE 5347: Teaching K-8 Mathematics for Understanding
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• MAE 6615: Individualizing Instruction in Mathematics
• MAE 6641: Readings and Research in Mathematics Education
• MAE 7899: Mathematics Education Seminar

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• RED 6947: Trends in Reading
• RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
• RED 7019: Foundations of Literacy
• RED 7817: Understanding Reading Difficulties

Science Education

• SCE 5316: Inquiry-Based Science Teaching
Departments and Programs within the College of Engineering

College of Engineering

Dear: C. Abernathy

Complete faculty listings: Follow this link.

The College of Engineering is organized into a number of departments focusing on today's most pressing engineering questions. There is an interdisciplinary culture at the core of Gator Engineering, though, and researchers regularly collaborate with colleagues in departments and colleges beyond their own.

For more information, please see our website: http://www.eng.ufl.edu.

Agricultural and Biological Engineering Department
The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

- **Agricultural production** includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

- **Biological engineering** includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

- **Information systems** includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

- **Land and water resources** includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

- **Students** also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

**Other**

**Agricultural and Biological Engineering (Engineering)**

**College**

- College of Agricultural and Life Sciences
- College of Engineering

**Department/School**

Agricultural and Biological Engineering Department

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

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techniques to biological and agricultural systems.

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The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Degrees Offered with a Major in Agricultural and Biological Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences
Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Agricultural and Biological Engineering Courses

- ABE 5015: Empirical Models of Crop Growth and Yield Response
- ABE 5038: Recent Developments and Applications in Biosensors
- ABE 5152: Electro-Hydraulic Circuits and Controls
- ABE 5332: Advanced Agricultural Structures
- ABE 5442: Advanced Agricultural Process Engineering
- ABE 5634C: Biological Systems Modeling
- ABE 5646: Biological and Agricultural Systems Simulation
- ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials
- ABE 5663: Advanced Applied Microbial Biotechnology
- ABE 5707C: Agricultural Waste Management
- ABE 5815C: Food and Bioprocess Engineering Design
- ABE 6005: Applied Control for Automation and Robots
- ABE 6031: Instrumentation in Agricultural Engineering Research
- ABE 6035: Advanced Remote Sensing: Science and Sensors
- ABE 6037C: Remote Sensing in Hydrology
- ABE 6252: Advanced Soil and Water Management Engineering
- ABE 6254: Simulation of Agricultural Watershed Systems
- ABE 6265: Vadose Zone Modeling
- ABE 6615: Advanced Heat and Mass Transfer in Biological Systems
- ABE 6644: Agricultural Decision Systems
- ABE 6616: Food and Bioprocess Sterilization
- ABE 6905: Individual Work in Agricultural and Biological Engineering
- ABE 6910: Supervised Research
- ABE 6931: Seminar
- ABE 6933: Special Topics in Agricultural and Biological Engineering
- ABE 6940: Supervised Teaching
- ABE 6971: Research for Master's Thesis
- ABE 6972: Research for Engineer's Thesis
- ABE 6974: Nonthesis Project
- ABE 6986: Applied Mathematics in Agricultural and Biological Engineering
- ABE 7979: Advanced Research
- ABE 7980: Research for Doctoral Dissertation
- AOM 5334C: Agricultural Chemical Application Technology
- AOM 5431: GIS and Remote Sensing in Agriculture and Natural Resources
- AOM 5435: Advanced Precision Agriculture
- AOM 6905: Individual Work in Agricultural Operations Management
- AOM 6932: Special Topics in Agricultural Operations Management
- CWR 6536: Stochastic Subsurface Hydrology
- PKG 5003: Advanced Distribution and Transport Packaging
- PKG 5005: Advanced Packaging Principles
- PKG 5105: Advanced Consumer Products Packaging
- PKG 5206C: Advanced Package Decoration
- PKG 5256C: Advanced Analytical Packaging Methods
- PKG 6100: Advanced Computer Tools for Packaging
- PKG 6905: Individual Work in Packaging
- PKG 6932: Special Topics in Packaging Sciences
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Biomedical Engineering Department

Chair: C. Schmidt
Graduate Coordinator: D. Hintenlang

Complete faculty listing by department: Follow this link.

The mission of the J. Crayton Pruitt Family Department of Biomedical Engineering (BME) is to educate students with strong engineering and science backgrounds for Master's and/or Ph.D. degrees in biomedical engineering. Graduates in BME typically apply their skills and training directly to engineering solutions to clinical problems in medicine. The BME mission is accomplished through a core program of study that has strong collaborations with faculty in the Colleges of Engineering and Medicine. The Biomedical Engineering Department faculty members work collaboratively with joint, affiliate, and adjunct faculty from many other departments in the College of Engineering, the College of Medicine, and local industry. This diversity ensures students the highest-quality education and varied opportunities for cutting-edge research. The BME Department currently focuses in: neural engineering, biomechanics, nanomedicine, biomedical imaging, and medical physics. A concentration in Medical Physics is available at both the M.S. and Ph.D. level and prepares students for clinical or research careers in medical imaging or radiation therapy. The Medical Physics concentration is fully accredited by CAMPEP. Additional information on admissions requirements, faculty, and research projects is available at: http://www.bme.ufl.edu.

BME graduate students are admitted directly through the BME Department. The BME Graduate Academic Committee reviews and makes all decisions regarding admission. Each student’s research adviser must hold a Graduate Faculty appointment in the BME Department. Supervisory committees for BME students normally include at least one member from the College of Engineering and one from the College of Medicine to emphasize the need for a clinical focus in the research.

Other

Biomedical Engineering

College

- College of Engineering

Department/School

- Biomedical Engineering Department

Biomedical Engineering Program Information

The master's degree (thesis or nonthesis) requires at least 30 semester hours. The Ph.D. degree requires at least 90 semester credit hours beyond the bachelor's degree. No more than 30 hours of a master's degree from another institution will be transferred to the Ph.D. degree. If a student holds a master's degree in a discipline different from the doctoral program, the master’s work will not be counted toward the doctoral degree unless the BME Department successfully petitions the Dean of the Graduate School. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Complete BME program details and courses available are listed in the Biomedical Engineering Graduate Guidelines, on the BME website (which also offers information on available areas of study). Graduate-level courses in either the College of Engineering or the College of Medicine may be applied toward the BME degree programs with the approval of the supervisory committee chair and the graduate coordinator.

Combined program: Biomedical Engineering also offers a combined bachelor's/master's degree program in collaboration with the other departments in the College of Engineering. This program allows qualified students to earn both a bachelor's degree and a master's degree within 5 years for a net savings of 1 year. Contact the BME academic services office for more information or see http://www.bme.ufl.edu/academics/combined.

Degrees Offered with a Major in Biomedical Engineering

Doctor of Philosophy
without a concentration

concentration in Clinical and Translational Science

concentration in Medical Physics

Master of Engineering

Master of Science

without a concentration

concentration in Medical Physics

Courses

- BME 5052L: Biomedical Engineering Laboratory
- BME 5085: Patents, Product Development, and Technology Transfer
- BME 5401: Biomedical Engineering and Physiology I
- BME 5407: Molecular Biomedical Engineering
- BME 5500: Biomedical Instrumentation
- BME 5703: Statistical Methods for Biomedical Engineering
- BME 5704: Advanced Computational Methods for Biomedical Engineering
- BME 5937: Special Topics
- BME 6010: Clinical Preceptorship
- BME 6324: Stem Cell Engineering
- BME 6330: Cell and Tissue Engineering
- BME 6360: Neural Engineering
- BME 6502: Introduction to Medical Imaging
- BME 6505: Advanced Diagnostic Radiological Physics
- BME 6522: Biomedical Multivariate Signal Processing
- BME 6533: Radiologic Anatomy
- BME 6534: Advanced Therapeutic Radiological Physics
- BME 6535: Radiological Physics, Measurements and Dosimetry
- BME 6590: Medical Physics
- BME 6591: Therapeutic Radiological Physics I
- BME 6592: Therapeutic Radiological Physics II
- BME 6593: Therapeutic Radiological Physics III
- BME 6705: Mathematical Modeling of Biological and Physiological Systems
- BME 6905: Individual Work in Biomedical Engineering
- BME 6907: BME Project
- BME 6910: Supervised Research
- BME 6936: Biomedical Engineering Seminar
- BME 6938: Special Topics in Biomedical Engineering
- BME 6940: Supervised Teaching
- BME 6971: Research for Master's Thesis
- BME 7979: Advanced Research
- BME 7980: Research for Doctoral Dissertation
- EEE 6504: Adaptive Signal Processing
- EEE 6512: Image Processing and Computer Vision
- ENU 5615C: Nuclear Radiation Detection and Instrumentation
- ENU 5613L: Nuclear Radiation Detection and Instrumentation Lab
- ENU 5626: Radiation Biology
College of Engineering and College of Medicine Courses

- Click here for information about available College of Engineering courses.

Chemical Engineering Department

Chair: R. Dickinson.
Graduate Coordinator: A. Chauhan.

Complete faculty listing by department: Follow this link.

The Ph.D., M.E., and M.S. degrees in chemical engineering require course work in three core areas:

- The chemical engineering basis area, consisting of three core courses in the mathematical, the molecular, and the continuum bases of chemical engineering
- The chemical engineering science and systems area, consisting of a selection of courses in such areas as transport phenomena, electrochemical engineering, thermodynamics, kinetics, reaction engineering, process control, separation processes, and heat and mass transfer
- The research specialty area, consisting of courses designed to build depth in a field of specialization. Courses may be from other academic units, or may be chemical engineering courses such as colloid science, corrosion, polymer science, advanced materials, and biochemical engineering

Other

Chemical Engineering

College

College of Engineering

Department/School

Chemical Engineering Department

Degrees Offered with a Major in Chemical Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Courses
Civil and Coastal Engineering Department

Chair: K. Hatfield
Graduate Coordinator: A. Drescher
Complete faculty listing by department: Follow this link.

The Department of Civil and Coastal Engineering offers two distinct graduate programs: civil engineering and coastal and oceanographic engineering. All degrees except the Ph.D. are available in a thesis or nonthesis option. The nonthesis option has two formats: report and 30-hour non-report. Students who elect the nonthesis report must successfully complete a document of substantial engineering content for a minimum of two hours credit in CGN 6974 for civil engineering majors, or EOC 6905 for coastal and oceanographic engineering majors.

Civil and Coastal Engineering degree programs include areas of specialization in construction, civil engineering management, geotechnical engineering, water resources and hydrology, public works, structural engineering, civil engineering materials, geosensing systems engineering, coastal engineering, oceanographic engineering and offshore structures, and transportation engineering.

Minor or supporting work is encouraged from a variety of related or allied fields of study. Ph.D. students are required to take a preliminary examination. Requirements for the M.S., M.E., and Ph.D. degrees are given in the Graduate Degrees section of this catalog.
The civil engineering program is offered through the Department of Civil and Coastal Engineering with the following degrees: Master of Engineering, Master of Science, and Doctor of Philosophy. The master's degree in civil engineering is also offered through the Electronic Delivery of Graduate Engineering (EDGE) program, which is a distance learning program delivered either via streaming video or DVD directly to the students. Subject to approval by the supervisory committee, graduate-level courses taken through the Departments of Environmental Engineering Sciences, Geological Sciences, and Mechanical and Aerospace Engineering are considered as major credit.

For courses taken through the Department of Civil and Coastal Engineering, credit hours graded S/U will not count toward graduation except for:

- 6 hours of CGN 6971 or EOC 6971 for thesis students
- 3 hours of CGN 6974 for students working on the M.E. report
- CGN 7979 or EOC 7979
- CGN 7980 or EOC 7980

Degrees Offered with a Major in Civil Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science
without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Courses

- CCE 5035: Construction Planning and Scheduling
- CCE 5405: Construction Equipment and Procedures
- CCE 6037: Civil Engineering Operations I
- CCE 6038: Innovative Construction Techniques
- CCE 6505: Computer Applications in Construction Engineering
- CCE 6507: Computer Applications in Construction Engineering II
- CCE 6516: Topics in Airborne Laser Mapping Technology
- CEG 5105: Geotechnical Engineering
- CEG 5114: Advanced Geotechnical Aspects of Landfill Design
- CEG 5115: Foundation Design
- CEG 5205C: In-situ Measurement of Soil Properties
- CEG 5206: Geosensing I
- CEG 5805: Ground Modification Design
- CEG 6015: Advanced Soil Mechanics
- CEG 6116: Advanced Shallow Foundation Design
- CEG 6117: Advanced Deep Foundation Design
- CEG 6201: Experimental Determination of Soil Properties
- CEG 6207: Geosensing II
- CEG 6405: Seepage in Soils
- CEG 6505: Numerical Methods of Geomechanics
- CEG 6515: Earth Retaining Systems and Slope Stability
- CES 5010: Probabilistic and Stochastic Methods in Civil Engineering
- CES 5116: Finite Elements in Civil Engineering
- CES 5325: Design of Highway Bridges
- CES 5606: Topics in Steel Design
- CES 5607: Behavior of Steel Structures
- CES 5715: Prestressed Concrete
- CES 5726: Design of Concrete Systems
- CES 5801: Design and Construction in Timber
- CES 5835: Design of Reinforced Masonry Structures
- CES 6106: Advanced Structural Analysis
- CES 6108: Structural Dynamics
- CES 6165: Computer Methods in Structural Engineering
- CES 6551: Design of Folded Plates and Shells
- CES 6588: Protective Structures
- CES 6590: Impact Engineering
- CES 6591: Applied Protective Structures
- CES 6592: Retrofit Protective Structures
- CES 6593: Advanced Protective Structures
- CES 6706: Advanced Reinforced Concrete
- CES 6855: Condition Assessment of Structures
- CGN 5606: Public Works Management
- CGN 5715: Experimentation and Instrumentation in Civil Engineering Materials Research
- CGN 6155: Civil Engineering Practice I
- CGN 6156: Construction Engineering II
- CGN 6505: Properties, Design and Control of Concrete
- CGN 6506: Bituminous Materials
- CGN 6525: Sustainable Materials
- CGN 6505: Special Problems in Civil Engineering
- CGN 6910: Supervised Research
- CGN 6936: Civil Engineering Graduate Seminar
- CGN 6940: Supervised Teaching
- CGN 6971: Research for Master's Thesis
- CGN 6972: Research for Engineer's Thesis
- CGN 6974: Master of Engineering or Engineer Degree Report
- CGN 7979: Advanced Research
- CGN 7980: Research for Doctoral Dissertation
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6236: Sediment Transport I
- CWR 6255: Diffusive and Dispersive Transport
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- TTE 5305: Advanced Transportation Systems Analysis
- TTE 5006: Advanced Urban Transportation Planning
- TTE 5256: Traffic Engineering
- TTE 5805: Geometric Design of Transportation Facilities
- TTE 5835: Pavement Design
- TTE 5837: Pavement Management Systems
- TTE 6205: Freeway Operations and Simulation
- TTE 6259: Urban Streets Simulation and Control
- TTE 6267: Traffic Flow Theory
- TTE 6306: Computational Methods in Transportation Engineering
- TTE 6315: Highway Safety Analysis
- TTE 6505: Discrete Choice Analysis
- TTE 6606: Urban Transportation Models

Civil and Coastal Engineering Departmental Courses

- CES 6571: Design of Temporary Structures
- CES 6585: Wind Engineering
- CGN 5125: Legal Aspects of Civil Engineering
- CGN 5315: Civil Engineering Systems
- CGN 5605: Public Works Planning
- CGN 6150: Engineering Project Management
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6240: Mixing and Transport in Turbulent Flow
- TTE 6207: Advanced Highway Capacity Analysis

Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM 5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6441: Water Resources Planning and Management
- ENV 6508: Wetland Hydrology
- ENV 6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Coastal and Oceanographic Engineering

College
The coastal and oceanographic engineering program is offered through the Department of Civil and Coastal Engineering with the following degrees: Master of Engineering, Master of Science, and Doctor of Philosophy degree. Subject to approval by the supervisory committee, graduate-level courses taken through the Departments of Environmental Engineering Sciences, Geological Sciences, and Mechanical and Aerospace Engineering are considered as major credit.

For courses taken through the Department of Civil and Coastal Engineering, credit hours graded S/U will not count toward graduation except for:

- 6 hours of CGN 6971 or EOC 6971 for thesis students
- 3 hours of CGN 6974 for students working on the M.E. report
- CGN 7979 or EOC 7979
- CGN 7980 or EOC 7980

Degrees Offered with a Major in Coastal and Oceanographic Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Coastal and Oceanographic Engineering Courses

- EGM 5816: Intermediate Fluid Dynamics
- EOC 5860: Port and Harbor Engineering
- EOC 6196: Littoral Processes
- EOC 6430: Coastal Structures
- EOC 6850: Numerical Simulation Techniques in Coastal and Ocean Engineering
- EOC 6905: Individual Study in Coastal and Oceanographic Engineering
- EOC 6932: Selected Field and Laboratory Problems
- EOC 6934: Advanced Topics in Coastal and Oceanographic Engineering
- EOC 6939: Graduate Seminar
- EOC 6971: Research for Master's Thesis
- EOC 6972: Research for Engineer's Thesis
- EOC 7979: Advanced Research
- EOC 7980: Research for Doctoral Dissertation
- OCP 5293: Coastal Processes
- OCP 6050: Physical Oceanography
- OCP 6165: Ocean Waves I: Linear Theory
- OCP 6165L: Ocean Waves Laboratory
- OCP 6167: Ocean Waves II: Nonlinear Theory
- OCP 6168: Data Analysis Techniques for Coastal and Ocean Engineers
- OCP 6169: Random Sea Analysis
- OCP 6295: Estuarine and Shelf Hydrodynamics I
- OCP 6297: Coastal and Estuarine Sediment Transport
- OCP 6298: Coastal Sediment Transport Processes

Civil and Coastal Engineering Departmental Courses

- CES 6571: Design of Temporary Structures
- CES 6585: Wind Engineering
Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWR 6125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM 5166: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- ENV 6650: Advanced Pollutant Transport
- ENV 6652: Immiscible Fluids in Porous Media
- ENV 6641: Water Resources Planning and Management
- ENV 6658: Wetland Hydrology
- ENV 6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Computer and Information Science and Engineering Department

Chair: Paul Gader
Graduate Coordinator: Jiheun Park

Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems**: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:
The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

The Department of Computer and Information Science and Engineering offers the Master of Science and the Doctor of Philosophy degrees in Computer Engineering through the College of Engineering. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in Algorithms, Computer Vision, Databases, Graphics and Modeling, Machine Learning, Networks, and Systems, with active labs in Bioinformatics; Computational Science and Intelligence; Vision, Graphics and Medical Imaging; Database Systems Research and Development; Data Science Research; Mobile and Pervasive Computing; Human-Centered Computing and Cybersecurity.

Specific degree requirements and options may be found here: http://cise.ufl.edu/academics/grad

Instructions for application for admission may be found here:
http://cise.ufl.edu/admissions/grad

Degrees Offered with a Major in Computer Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

without a concentration
concentration in Digital Arts and Sciences

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5806: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6685: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6156: High Performance Computer Architecture
- CEN 5035: Software Engineering
- CEN 6070: Software Testing and Verification
- CEN 6075: Software Specification
- CIS 6905: Individual Study
- CIS 6910: Supervised Research
- CIS 6930: Special Topics in CIS
- CIS 6935: Graduate Seminar
- CIS 6940: Supervised Teaching
- CIS 6971: Research for Master's Thesis
- CIS 7979: Advanced Research
- CIS 7980: Research for Doctoral Dissertation
- CNT 5106C: Computer Networks
- CNT 5410: Computer and Network Security
- CNT 5517: Mobile Computing
- CNT 6107: Advanced Computer Networks
- CNT 6885: Distributed Multimedia Systems
- COP 5536: Advanced Data Structures
- COP 5555: Programming Language Principles
- COP 5615: Distributed Operating System Principles
- COP 5618: Concurrent Programming
- COP 5625: Programming Language Translators
- COP 5725: Database Management Systems
- COP 6726: Database System Implementation
- COP 6755: Distributed Database Systems
- COT 5405: Analysis of Algorithms
- COT 5442: Approximation Algorithms
- COT 5519: Sparse Matrix Algorithms
- COT 5520: Computational Geometry
- COT 5615: Mathematics for Intelligent Systems
- COT 6315: Formal Languages and Computation Theory

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6840: Entrepreneurship for Engineers
- EGN 6842: Engineering Innovation
- EGN 6839: Engineering Leadership

Digital Arts and Sciences (Engineering)
Digital Arts and Sciences (Engineering) Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science degree in Digital Arts and Sciences through the College of Engineering. Minimum requirements for this degree are given in the Graduate Degrees section of this catalog.

This specialized program integrates engineering and design and was created for students with an interest in video games, human-computer interaction, 3D modeling and animation, virtual reality, and computer graphics. The curriculum includes core computer science with a special emphasis on human-centered computing and provides students the flexibility to focus on both computer science and design, and to create software that is computationally complex, user friendly and aesthetically pleasing.

Specific degree requirements and options may be found here: http://cise.ufl.edu/academics/grad

Instructions for application for admission may be found here: http://cise.ufl.edu/admissions/grad

Degrees

Master of Science

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5805: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6685: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6156: High Performance Computer Architecture
- CEN 5035: Software Engineering
- CEN 6070: Software Testing and Verification
- CEN 6075: Software Specification
- CIS 6905: Individual Study
- CIS 6910: Supervised Research
- CIS 6930: Special Topics in CIS
- CIS 6935: Graduate Seminar
- CIS 6940: Supervised Teaching
- CIS 6971: Research for Master's Thesis
- CIS 7979: Advanced Research
- CIS 7980: Research for Doctoral Dissertation
- CNT 5106C: Computer Networks
- CNT 5410: Computer and Network Security
- CNT 5517: Mobile Computing
- CNT 6107: Advanced Computer Networks
- CNT 6885: Distributed Multimedia Systems
- COP 5536: Advanced Data Structures
- COP 5555: Programming Language Principles
- COP 5615: Distributed Operating System Principles
- COP 5618: Concurrent Programming
- COP 5625: Programming Language Translators
- COP 5725: Database Management Systems
- COP 6726: Database System Implementation
- COP 6755: Distributed Database Systems
- COT 5405: Analysis of Algorithms
- COT 5442: Approximation Algorithms
- COT 5519: Sparse Matrix Algorithms
Electrical and Computer Engineering Department

Chair: J. Harris.
Graduate Coordinators: G. Bosman, J. McNair

Complete faculty listing Follow this link.

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the Graduate Degrees Section of this catalog. For more information about our program, please visit the link below.

Other

Electrical and Computer Engineering

College

College of Engineering

Department/School

Electrical and Computer Engineering Department

Electrical and Computer Engineering Program Information

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in computer engineering, devices, electromagnetics and energy systems, electronics, and signals and systems.

Graduate students in the Department of Electrical and Computer Engineering have bachelor's degrees from many areas: electrical engineering, other engineering disciplines, chemistry, mathematics, physics, and other technical fields. The Department of Electrical and Computer Engineering offers both thesis and non-thesis options for the master’s degrees.

In the thesis option a student shall complete a minimum of 36 semester credit hours with a maximum of 6 semester credit hours of EEL 6971 (Research for Master's Thesis). While the Graduate School sets the minimum requirements, the supervisory committee determines the appropriate number of thesis hours a student shall be required to take for the thesis. Other course requirements include a minimum of 18 hours at the 5000 or 6000 level in electrical and computer engineering. Excluded from satisfying these course requirements are EEL 5905 and EEL 6905 (Individual Work), EEL 6910 (Supervised Research), 6932 (Graduate Seminar), EEL 6940 (Supervised Teaching), and EEL 6971 (Research for Master's Thesis). No more than 6 hours of Individual Work (EEL 5905 or EEL 6905) may be counted toward the degree.

In the nonthesis option a student shall complete a minimum of 30 semester credit hours with a maximum of 6 semester credit hours of Individual Work (EEL 5905 or EEL 6905). The course requirements include a minimum of 21 semester credit hours at the 5000 or 6000 level in electrical and computer engineering. Excluded from satisfying these course requirements are EEL 5905 and EEL 6905 (Individual Work), EEL 6910 (Supervised Research), 6932 (Graduate Seminar), EEL 6940 (Supervised Teaching), and EEL 6971 (Research for Master's Thesis).

The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both a bachelor's degree and master's degree in one semester. Qualified students may begin their master's programs while seniors, counting up to 12 hours of specified electrical and computer engineering graduate courses for both bachelor's and master's degree requirements. Bachelor's/master's program admission requirements are (1) satisfaction of Graduate School admission requirements for the master’s degree, (2) an upper-division (undergraduate) GPA of at least 3.3, and (3) completion of at least 7 EEL core courses and 2 EEL laboratories. Students with a GPA between 3.3 and 3.59 can double count up to 6 hours, while students with a GPA of 3.6 or higher can double count up to 12 hours.

All prospective doctoral students must take the written part of the Ph.D. qualifying examination within the first year of enrollment. Other requirements for the doctoral degree, as well as requirements for master’s and engineer degrees, are given in the Electrical and Computer Engineering Department’s Graduate Guidelines (see http://www.ece.ufl.edu/content/graduate-academics) and in the front section of this catalog.

The following course listing indicates the major areas of faculty interest. Special topics courses EEL 5934 and EEL 6935 cover a wide variety of subjects for which there are no present courses.
Degrees Offered with a Major in Electrical and Computer Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Courses

- CNT 6805: Network Science and Applications
- EEE 5317C: Introduction to Power Electronics
- EEE 5320: Bipolar Analog IC Design
- EEE 5322: VLSI Circuits and Technology
- EEE 5364: Fundamentals of Data Converters
- EEE 5400: Future of Microelectronics Technology
- EEE 5405: Microelectronic Fabrication Technologies
- EEE 5426: Introduction to Nanodevices
- EEE 6287: Brain Machine Interface Engineering
- EEE 6321: MOS Analog IC Design
- EEE 6323: Advanced VLSI Design
- EEE 6325: Computer Simulation of Integrated Circuits and Devices
- EEE 6328C: Microwave IC Design
- EEE 6374: Radio Frequency (RF) Integrated Circuits and Technologies
- EEE 6382: Semiconductor Physical Electronics
- EEE 6390: VLSI Device Design
- EEE 6397: Semiconductor Device Theory I
- EEE 6402: Nonclassical Si-Based Nanoscale CMOS Devices
- EEE 6428: Computational Nanoelectronics
- EEE 6431: Carbon Nanotubes
- EEE 6460: Advanced Microsystem Technology
- EEE 6465: Design of MEMS Transducers
- EEL 5182: State Variable Methods in Linear Systems
- EEL 5225: Principles of Micro-Electro-Mechanical Transducers
- EEL 5400: Airborne Sensors and Instrumentation
- EEL 5401: Airborne Laser Scanning: Data Processing and Analysis
- EEL 5441: Fundamentals of Photonics
- EEL 5462: Advanced Antenna Systems
- EEL 5490: Lightning
- EEE 5502: Foundations of Digital Signal Processing
- EEE 5544: Noise in Linear Systems
- EEE 5556: Electronic Countermeasures
- EEL 5666C: Intelligent Machines Design Laboratory
- EEL 5718: Computer Communications
- EEL 5721: Reconfigurable Computing
- EEL 5737: Principles of Computer System Design
- EEL 5764: Computer Architecture
- EEL 5940: Elements of Machine Intelligence
- EEL 5905: Individual Work
- EEL 5934: Special Topics in Electrical Engineering
- EEL 6065: Electrical & Computer Engineering Technical Writing
- EEL 6264: Advanced Electric Energy Systems I
- EEL 6265: Advanced Electric Energy Systems II
- EEL 6443: Integrated and Fiber Optics
- EEL 6486: Electromagnetic Field Theory and Applications I
- EEL 6487: Electromagnetic Field Theory and Applications II
- EEE 6504: Adaptive Signal Processing
- EEL 6507: Queueing Theory and Data Communications
- EEL 6509: Wireless Communication
- EEE 6503: Digital Filtering
- EEL 6532: Information Theory
- EEL 6533: Statistical Decision Theory
- EEL 6535: Digital Communications
EEL 6537: Spectral Estimation
EEL 6550: Error Correction Coding
EEE 6528: Digital Communications with Software-defined Radios
EEL 6555: Signal Processing for Active Sensing
EEE 6556: Automatic Speech Processing
EEL 6558: Wireless Ad Hoc Networks
EEL 6591: Wireless Networks
EEL 6614: Modern Control Theory
EEL 6617: Linear Multivariable Control
EEL 6619: Robust Control Systems
EEL 6686: Embedded Systems Seminar
EEL 6706: Fault-Tolerant Computer Architecture
EEL 6763: Parallel Computer Architecture
EEL 6769: Hardware-Software Interactions: Nonnumeric Processing
EEL 6814: Neural Networks for Signal Processing
EEL 6825: Pattern Recognition and Intelligent Systems
EEL 6841: Machine Intelligence and Synthesis
EEL 6871: Autonomic Computing
EEL 6892: Virtual Computers
EEL 6905: Individual Work
EEL 6910: Supervised Research
EEL 6933: Electrical and Computer Engineering Graduate Seminar
EEL 6935: Special Topics in Electrical Engineering
EEL 6940: Supervised Teaching
EEL 6971: Research for Master's Thesis
EEL 6972: Research for Engineer's Thesis
EEL 7979: Advanced Research
EEL 7980: Research for Doctoral Dissertation

College of Engineering Courses

EEE 5354L: Semiconductor Device Fabrication Laboratory
EGN 5010L: NRF Training Lab
EGN 5949: Practicum/Internship/Cooperative Work Experience
EGN 6640: Entrepreneurship for Engineers
EGN 6642: Engineering Innovation
EGN 6039: Engineering Leadership

Environmental Engineering Sciences Department

Director: K. Hatfield
Graduate Coordinator: P. Chadik

Complete faculty listing Follow this link.

The Department of Environmental Engineering Sciences offers graduate study in the following areas: Air Resources; Biogeochemical Systems; Environmental Nanotechnology; Solid and Hazardous Waste Management; Storm Water, Water Supply and Waste Water; Sustainability Science & Engineering Systems Ecology and Ecological Engineering and Water Resources. Students graduated from the program will demonstrate depth in individual focus areas as well as breadth of core knowledge concepts in all areas. Please visit the link below for more information about our program in Environmental Engineering Sciences.

Other

Environmental Engineering Sciences

College

Environmental Engineering Sciences Department

Environmental Engineering Sciences Program Information

Graduate study is offered leading to the degrees Master of Engineering, Master of Science, and Doctor of Philosophy in the field of environmental engineering sciences. Our graduate research and education areas are
Air Resources
- Monitoring of air pollutants: indoor, ambient, industrial, and occupational
- Monitoring methodology and instrumentation development
- Formation and fate of air pollutants
- Air quality modeling
- Air pollution control: system, process and materials
- Sustainability of air quality
- Health effects and environmental impact of air pollutant

Biogeochemical Systems
- Green Engineering
- Microbiology of Natural and Engineered Systems
- Environmental Fate and Transport of Pollutants in Soils and Aquatic Systems
- Biological and Chemical Remediation of Contaminated Systems
- Environmental Toxicology and Nanotoxicology
- Effects of Climate and Land Use Changes on Biogeochemical Cycles
- Aquatic Geochemistry and Water Treatment

Environmental Nanotechnology
- Manufacturing and tailoring of nanomaterials and nanodevices for application in environmental and human health research
- Environmental fate and transport of nanomaterials
- Environmental implications of nanomaterials

Solid and Hazardous Waste Management
- Bioreactor Landfills
- Combustion and Thermal Treatment Residuals
- Contaminated Soil Characterization and Treatment
- Construction and Demolition Debris
- Electronic Waste
- Hazardous Waste
- Landfill Design and Operations
- Landfill Gas and Leachate
- Recycling and Beneficial Use of Wastes
- Treated Wood
- Waste Characterization and Leaching
- Solid Waste Management in Developing Countries

Stormwater, Water Supply and Wastewater
- Fundamental characterization of aqueous and particulate phase contaminants including emerging contaminants: representative ambient monitoring, methodology and load quantification.
- Sourcing and generation of aqueous and particulate phase contaminants, physics and chemistry of contaminant transport and fate.
- Water contaminant control: systems, unit operation and processes, and materials development, in particular innovative mass transfer materials and low impact development materials.
- Water reuse as part of the urban water cycle: volumetric and contaminant load impacts
- Unit operation and process modeling: scalable physical models and computational fluid dynamics (CFD).
- Integrated physical, chemical, biological and thermal treatment phenomena for water cycle components.
- Coupling fundamental monitoring and material balance testing with urban water modeling.
- Fundamental and applied studies of physical-chemical water treatment processes, such as adsorption, coagulation, ion exchange, and oxidation, for a wide range of water qualities including surface water, groundwater, membrane concentrate, landfill leachate, and human urine.
- Innovative applications of ion exchange for water treatment.
- Fundamental studies in aquatic chemistry with a focus on the role of natural organic matter.
- Fundamental and applied studies of adsorption and photocatalysis, including surface optimization
- Bottom up integrated urban water system simulation and optimization

Sustainability Science & Engineering
- Rational design of nanomaterial through acute and full-life-cycle toxicity assessment
- Life cycle assessment calculations and comparisons of alternative energy and materials options
- Industrial ecology
- Corporate water resources sustainability
- Campus green building codes
- Green laboratory techniques
- Operation of buildings to meet green energy requirements

Systems Ecology and Ecological Engineering
- Ecological Engineering
- Emergy Analysis
- Wetlands ecosystem research
- Ecological Modeling
- Estuarine Systems

Water Resources
- Contaminant transport and fate
- Decision support systems
- Ecotrophology and hydrologic restoration
- Hydrology
- Stormwater control
- Water resources planning and management
- Water conservation
- Urban water infrastructure

Graduate students can also combine one or more of the above areas with specialties in other departments at the University of Florida.

The department participates in the hydrologic sciences interdisciplinary concentration that is offered through 9 departments in 3 colleges. This concentration is described under Interdisciplinary Graduate Studies.

Direct admission into the Master of Science and Doctor of Philosophy programs requires a bachelor’s degree in engineering or in a basic science such as chemistry, geology, physics, biology, or mathematics. Persons with a degree in a nontechnical field may also be admitted into this program after completing appropriate technical courses. Direct admission into the Master of Engineering program requires a bachelor’s degree in engineering.
Requirements for a master’s degree normally take 12 to 24 months to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, and may be completed in 3 years, but often takes longer, depending on prior academic experience.

**Concurrent program**: The department offers a combined bachelor’s/master’s degree program. This program allows qualified students to earn both a bachelor’s degree and a master’s degree, with a savings of 12 credits.

**Joint program**: The Environmental Engineering Sciences Department, in partnership with the Levin College of Law, offers a joint program leading to the M.S. or M.E. degree in environmental engineering sciences and the Juris Doctor degree. Twelve credits of appropriate course work are counted toward both degrees.

Degrees Offered with a Major in Environmental Engineering Sciences

**Doctor of Philosophy**

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

**Master of Engineering**

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

**Master of Science**

without a concentration
concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Courses

- CEG 5206: Geosensing I
- CWR 6115: Surface Hydrology
- CWR 6116: Advanced Surface Hydrology
- CWR 6252: Environmental Biochemistry of Trace Metals
- CWR 6536: Stochastic Subsurface Hydrology
- CWR 6537: Contaminant Subsurface Hydrology
- EES 5105: Advanced Wastewater Microbiology
- EES 5107: Ecological and Biological Systems
- EES 5207: Environmental Chemistry
- EES 5245: Water Quality Analysis
- EES 5306C: Ecological and General Systems
- EES 5306: Energy Analysis
- EES 5307: Ecological Engineering
- EES 5315: Ecology and the Environment
- EES 5415: Environmental Health
- EES 6007: Advanced Energy and Environment
- EES 6009: Ecological Economics
- EES 6028C: Environmental Systems Dynamics
- EES 6028: Spatial Modeling Using Geographic Information Systems
- EES 6051: Advanced Environmental Planning and Design
- EES 6135: Aquatic Microbiology
- EES 6136: Aquatic Autotrophs
- EES 6137: Aquatic Heterotrophs
- EES 6140: Biology of Exotic Species
- EES 6371: Environmental Meteorology and Oceanography
- EES 6208: Principles of Water Chemistry I
- EES 6209: Principles of Water Chemistry II
- EES 6225: Atmospheric Chemistry
- EES 6246: Advanced Water Analysis
- EES 6301: Comparative Approaches in Systems Ecology
- EES 6308C: Wetland Ecology
- EES 6309: Wetland Treatment Systems
- EES 6318: Principles of Industrial Ecology
- EES 6335: Springs Ecosystems
- EES 6356: Estuarine Systems
- EES 6405: Environmental Toxicology
- ENV/6439: Activated Carbon: Environmental Design and Application
- ENV/5072: Pollution Control and Prevention
- ENV/5075: Environmental Policy
- ENV/5105: Foundations of Air Pollution
- ENV/5305: Advanced Solid Waste Treatment Design
- ENV/5306: Municipal Refuse Disposal
- ENV/5518: Field Methods in Environmental Hydrology
- ENV/5520: Fluid Flow in Environmental Systems
- ENV/5556: Wastewater Treatment
- ENV/5565: Hydraulic Systems Design
- ENV/6050: Advanced Pollutant Transport
- ENV/6052: Immiscible Fluids in Porous Media
- ENV/6116: Air Pollution Sampling and Analysis
- ENV/6126: Air Pollution Control Design
- ENV/6130: Aerosol Mechanics
- ENV/6146: Atmospheric Dispersion Modeling
- ENV/6215: Health Physics
- ENV/6216: Radioactive Wastes
- ENV/6301: Advanced Solid Waste Containment Design
- ENV/6435: Advanced Water Treatment Process Design
- ENV/6435C: Advanced Water Treatment Process Design
Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6128: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM 5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6441: Water Resources Planning and Management
- ENV 6508: Wetland Hydrology
- ENV 6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6039: Engineering Leadership
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6644: Engineering Innovation
- EGN 6039: Engineering Leadership

Industrial and Systems Engineering Department

Chair: J. Geunes.
Graduate Coordinator: J. C. Smith and P. Momcilovic.

Complete faculty listing by department: Follow this link.

The Department of Industrial and Systems Engineering offers the Master of Engineering and the Master of Science degrees, each with a thesis or nonthesis option, with specialization in engineering management, manufacturing and logistics systems engineering, operations research, quality engineering, and special interest options such as health systems. In addition, the Department offers the Engineer degree and the Doctor of Philosophy degree with specialization in linear, combinatorial, nonlinear, and global optimization; supply chain management and e-commerce; financial engineering; manufacturing management; facilities location and layout; quality engineering; and stochastic processes.

Complete descriptions of the requirements for the M.E., M.S., Engineer, and Ph.D. degrees are provided in the General Information section of this catalog.

A degree in one of the engineering disciplines or in mathematics, statistics, physics, computer sciences, quantitative management, or similar fields is prerequisite. Where the student’s background is deficient, an articulation program of foundation courses will be required.

The Department offers a combined bachelor's/master's degree program of B.S.I.S.E./Master of Science (Management), B.S.I.S.E./Master of Engineering or Master of Science, and a B.S. from disciplines within the College of Engineering/Master of Science or Master of Engineering. Contact the graduate coordinator for information.

Other

Industrial and Systems Engineering
Degrees Offered with a Major in Industrial and Systems Engineering

Doctor of Philosophy

without a concentration

concentration in Quantitative Finance

Master of Engineering

Master of Science

Industrial and Systems Engineering Courses

- EIN 6227: Advanced Quality Management and Engineering for Business Processes
- EIN 6336: Advanced Production and Inventory Control
- EIN 6357: Advanced Engineering Economy
- EIN 6367: Facilities Layout and Location
- EIN 6392: Manufacturing Management
- EIN 6905: Special Problems
- EIN 6910: Supervised Research
- EIN 6918: Graduate Seminar
- EIN 6940: Supervised Teaching
- EIN 6971: Research for Master's Thesis
- EIN 6972: Research for Engineer's Thesis
- EIN 7903: Special Problems
- EIN 7979: Advanced Research
- EIN 7980: Research for Doctoral Dissertation
- ESI 5236: Reliability Engineering
- ESI 6162C: Advanced Industrial Applications of Microprocessors
- ESI 6314: Deterministic Methods in Operations Research
- ESI 6323: Models for Supply Chain Management
- ESI 6341: Intro to Stochastic Optimization
- ESI 6355: Decision Support Systems for Industrial and Systems Engineers
- ESI 6417: Linear Programming and Network Optimization
- ESI 6418: Linear Programming Extensions and Applications
- ESI 6420: Fundamentals of Mathematical Programming
- ESI 6429: Introduction to Nonlinear Optimization
- ESI 6448: Discrete Optimization Theory
The Department of Materials Science and Engineering offers the Master of Science and Doctor of Philosophy degrees in Materials Science & Engineering (MSE) and Nuclear Engineering (NE). Requirements for these degrees are described in the General Information section of this catalog.

Degrees in MSE include specific areas of research and study in biomaterials, ceramics, composites, computational materials science, electronic materials, metals, polymers, nanomaterials, and nuclear materials. Degrees in NE include specific areas of research and study in advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security.

Nontraditional Degree Programs: The Department offers combined bachelor/master’s degree programs: MSE BS/MS, NE BS/MS, and students may also combine the MSE BS with the MS awarded through the Dept. of Biomedical Engineering (BME). The combined bachelor/master’s program allows qualified students to earn both degrees in materials science and engineering with savings of a tangible number of credit hours. Qualified students are allowed to begin master’s course work in their junior years and double count specific graduate courses for both degrees. The master’s degree may be completed within 2 to 3 semesters after completing the bachelor’s degree. Program admission requirements are (1) satisfaction of Graduate School admission requirements prior to the beginning of the senior year, (2) an upper division GPA of at least 3.5 in MSE and 3.4 in NE, (3) for MSE, completion of a minimum of 18 credit hours of courses, (4) admission by the Department’s Graduate Admission Committee and approval by the College of Engineering and the Graduate School. For more information, contact the Department.

The J.D./M.S. in MSE (thesis/nonthesis) is a joint degree program culminating in both the Juris Doctor degree, awarded by the College of Law, and the Master of Science (thesis/nonthesis), awarded by the College of Engineering. Under this program, a student can earn both degrees in approximately 1 year less than it would take to attain both degrees if pursued consecutively. Concurrent M.D./Ph.D. degrees are offered through a collaborative program between the College of Medicine and Materials Science and Engineering. For more information, please contact the Department.

To be eligible for regular admission to the graduate program within the Department, the student must hold a B.S. in an appropriate major. Because of the breadth of MSE graduate programs, students with degrees in materials, ceramics, metallurgy, other engineering, mathematics, or science areas (such as biology, chemistry, or physics) have found ample opportunities to pursue their research and training areas of interest.

The faculties of the Department of Materials Science and Engineering (MSE) of the University of Florida (UF) and the University of Roma Tor Vergata (URTV) have approved a cooperative degree program in Materials Science and Engineering culminating in a Doctor of Philosophy degree, awarded by both universities. Contact the Department for details.

Other

Materials Science and Engineering

College

College of Engineering

Department/School

Materials Science and Engineering Department

Degrees Offered with a Major in Materials Science and Engineering
Doctor of Philosophy

without a concentration

in concentration in Clinical and Translational Science

Master of Engineering

Master of Science

Courses

- EMA 5008: Particle Science and Technology Theory and Practice
- EMA 5005: Critical Analysis of Research in Materials Science & Engineering
- EMA 5108: Vacuum Science and Technology
- EMA 5365: Biomimetic Synthesis
- EMA 6005: Thin and Thick Films
- EMA 6105: Fundamentals and Applications of Surface Science
- EMA 6106: Advanced Phase Diagrams
- EMA 6107: High Temperature Materials
- EMA 6109: Physical Chemistry of High Temperature Materials
- EMA 6110: Electron Theory of Solids for Materials Scientists I
- EMA 6111: Electron Theory of Solids for Materials Scientists II
- EMA 6114: Advanced Materials Principles 2
- EMA 6128: Materials Microstructures
- EMA 6136: Diffusion, Kinetics, and Transport Phenomena
- EMA 6165: Polymer Physical Science
- EMA 6166: Polymer Composites
- EMA 6226: Synthesis and Properties of Metallic Nanostructures
- EMA 6227: Advanced Mechanical Metallurgy II
- EMA 6265: Mechanical Properties of Polymers
- EMA 6313: Advanced Materials Principles I
- EMA 6315: Colloidal Hydrodynamics
- EMA 6316: Materials Thermodynamics
- EMA 6319: Applied Colloid and Interfacial Chemistry for Engineers
- EMA 6412: Synthesis and Characterization of Electronic Materials
- EMA 6416: Organic Electronics
- EMA 6445: Electroceramics
- EMA 6446: Solid State Ionics
- EMA 6448: Ceramic Processing
- EMA 6461: Polymer Characterization
- EMA 6507: Scanning Electron Microscopy and Microanalysis
  - EMA 6507C
- EMA 6507L: Scanning Electron Microscopy and Microanalysis Lab
- EMA 6510: Survey of Materials Analysis Techniques
- EMA 6512C: X-ray Scattering for Thin Film Analysis
- EMA 6518: Transmission Electron Microscopy
- EMA 6518L: Transmission Electron Microscopy Laboratory
- EMA 6519L: Specialized Research Techniques in Materials Science
- EMA 6540: Fundamentals of Crystallography
- EMA 6541: Applied Crystallography and Powder Diffraction
- EMA 6580: Science of Biomaterials I
- EMA 6581C: Polymeric Biomaterials
- EMA 6589: Mechanical Behavior of Biomaterials
- EMA 6590: Advances in Biomaterials and Tissue Engineering for Healthcare
- EMA 6591: Clinical Applications of Biomaterials and Tissue Engineering
The Department of Mechanical and Aerospace Engineering offers the degrees of Master of Science (thesis or nonthesis), Master of Engineering (thesis or nonthesis), Engineer, and Doctor of Philosophy in aerospace engineering and mechanical engineering. Minimum requirements for these degrees are given in the General Information section of this catalog. Additional information can be found at [http://www.mae.ufl.edu/graduate](http://www.mae.ufl.edu/graduate). Prospective students are expected to have strong backgrounds in engineering. For the first year of study, each student is generally required to take a minimum of three regular courses each semester. There are three areas of specialization available for graduate studies: dynamics, systems, and control; solid mechanics, design, and manufacturing; thermal science and fluid dynamics. Within a specialization there are unique opportunities to conduct analytical, experimental, and/or numerical study in a wide variety of challenging problems. The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

### Other

### Aerospace Engineering

#### College

### Department/School

**Mechanical and Aerospace Engineering Department**

**Degrees Offered with a Major in Aerospace Engineering**

**Doctor of Philosophy**
Master of Engineering

Master of Science

Mechanical and Aerospace Engineering Departmental Courses

- BME 5580: Introduction to Microfluidics and BioMEMS
- EAS 5938: Special Topics in Aerospace Engineering
- EAS 6135: Molecular Theory of Fluid Flows
- EAS 6138: Gasdynamics
- EAS 6242: Advanced Structural Composites
- EAS 6415: Guidance and Control of Aerospace Vehicles
- EAS 6905: Aerospace Research
- EAS 6910: Supervised Research
- EAS 6935: Graduate Seminar
- EAS 6939: Special Topics in Aerospace Engineering
- EAS 6971: Research for Master's Thesis
- EAS 7979: Advanced Research
- EAS 7980: Research for Doctoral Dissertation
- EGM 5005: Laser Principles and Applications
- EGM 5111L: Experimental Stress Analysis
- EGM 5121C: Data Measurement and Analysis
- EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
- EGM 5584: Biomechanics of Soft Tissue
- EGM 5616: Intermediate Fluid Dynamics
- EGM 5933: Special Topics in Engineering Science and Mechanics
- EGM 6006: Laser-Based Diagnostics
- EGM 6321: Principles of Engineering Analysis I
- EGM 6322: Principles of Engineering Analysis II
- EGM 6323: Principles of Engineering Analysis III
- EGM 6341: Numerical Methods of Engineering Analysis I
- EGM 6342: Fundamentals of Computational Fluid Dynamics
- EGM 6352: Advanced Finite Element Methods
- EGM 6365: Structural Optimization
- EGM 6870: Principles of Fracture Mechanics
- EGM 6611: Continuum Mechanics
- EGM 6671: Inelastic Materials
- EGM 6812: Fluid Mechanics I
- EGM 6813: Fluid Mechanics II
- EGM 6855: Bio-Fluid Mechanics and Bio-Heat Transfer
- EGM 6905: Individual Study
- EGM 6910: Supervised Research
- EGM 6934: Special Topics in Engineering Mechanics
- EGM 6936: Graduate Seminar
- EGM 6971: Research for Master's Thesis
- EGM 7819: Computational Fluid Dynamics
- EGM 7845: Turbulent Fluid Flow
- EGM 7979: Advanced Research
- EGM 7980: Research for Doctoral Dissertation
- EML 5045: Computational Methods for Design and Manufacturing
- EML 5104: Classical and Statistical Thermodynamics
- EML 5124: Two-Phase Flow and Boiling Heat Transfer
- EML 5131: Combustion
- EML 5215: Analytical Dynamics I
- EML 5222: Structural Dynamics
- EML 5224: Acoustics
- EML 5233: Failure of Materials in Mechanical Design
- EML 5311: Control System Theory
- EML 5318: Computer Control of Machines and Processes
- EML 5455: Clean Combustion Technology
- EML 5465: Energy Management for Mechanical Engineers
- EML 5515: Gas Turbines and Jet Engines
- EML 5516: Design of Thermal Systems
- EML 5526: Finite Element Analysis and Application
- EML 5536: Mechanics of the Human Locomotor System
- EML 5598: Orthopedic Biomechanics
- EML 5605: Advanced Refrigeration
- EML 5714: Introduction to Compressible Flow
- EML 6146: Microscale Heat Transfer
- EML 6154: Conduction Heat Transfer
- EML 6155: Convection Heat Transfer I
- EML 6156: Multiphase Convection Heat Transfer
- EML 6157: Radiation Heat Transfer
- EML 6216: Analytical Dynamics II
- EML 6229: Introduction to Random Dynamical Systems
- EML 6267: Structural Dynamics of Production Machinery
- EML 6278: Advanced Rotor Dynamics
- EML 6281: Geometry of Mechanisms and Robots I
- EML 6282: Geometry of Mechanisms and Robots II
- EML 6323: Nontraditional Manufacturing
- EML 6324: Fundamentals of Production Engineering
- EML 6350: Introduction to Nonlinear Control
- EML 6351: Nonlinear Control II: Adaptive Control
- EML 6352: Optimal Estimation
- EML 6353: Robust Control Synthesis
- EML 6417: Solar Energy Utilization
- EML 6451: Energy Conversion
- EML 6606: Advanced Air Conditioning
- EML 6905: Individual Projects in Mechanical Engineering
- EML 6934: Special Topics in Mechanical Engineering
- EML 6936: Nonthesis Project
- EML 6971: Research for Master's Thesis
- EML 7979: Advanced Research
- EML 7980: Research for Doctoral Dissertation

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Mechanical Engineering

College

College of Engineering

Department/School

Mechanical and Aerospace Engineering Department

Degrees Offered with a Major in Mechanical Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Mechanical and Aerospace Engineering Departmental Courses

- BME 5580: Introduction to Microfluidics and BioMEMS
- EAS 5938: Special Topics in Aerospace Engineering
- EAS 6135: Molecular Theory of Fluid Flows
- EAS 6138: Gasdynamics
- EAS 6242: Advanced Structural Composites
- EAS 6415: Guidance and Control of Aerospace Vehicles
- EAS 6905: Aerospace Research
- EAS 6910: Supervised Research
- EAS 6935: Graduate Seminar
- EAS 6939: Special Topics in Aerospace Engineering
- EAS 6971: Research for Master's Thesis
- EAS 7979: Advanced Research
- EAS 7980: Research for Doctoral Dissertation
- EGM 5005: Laser Principles and Applications
- EGM 5111L: Experimental Stress Analysis
- EGM 5121C: Data Measurement and Analysis
- EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
- EGM 5584: Biomechanics of Soft Tissue
- EGM 5816: Intermediate Fluid Dynamics
- EGM 5933: Special Topics in Engineering Science and Mechanics
- EGM 6006: Laser-Based Diagnostics
- EGM 6321: Principles of Engineering Analysis I
- EGM 6322: Principles of Engineering Analysis II
- EGM 6323: Principles of Engineering Analysis III
- EGM 6341: Numerical Methods of Engineering Analysis I
- EGM 6342: Fundamentals of Computational Fluid Dynamics
- EGM 6352: Advanced Finite Element Methods
- EGM 6365: Structural Optimization
- EGM 6570: Principles of Fracture Mechanics
- EGM 6611: Continuum Mechanics
- EGM 6671: Inelastic Materials
- EGM 6812: Fluid Mechanics I
- EGM 6813: Fluid Mechanics II
- EGM 6855: Bio-Fluid Mechanics and Bio-Heat Transfer
- EGM 6905: Individual Study
- EGM 6910: Supervised Research
- EGM 6934: Special Topics in Engineering Mechanics
- EGM 6936: Graduate Seminar
- EGM 6971: Research for Master's Thesis
- EGM 7819: Computational Fluid Dynamics
- EGM 7845: Turbulent Fluid Flow
- EGM 7979: Advanced Research
- EGM 7980: Research for Doctoral Dissertation
- EML 5045: Computational Methods for Design and Manufacturing
- EML 5104: Classical and Statistical Thermodynamics
- EML 5124: Two-Phase Flow and Boiling Heat Transfer
- EML 5131: Combustion
- EML 5215: Analytical Dynamics I
- EML 5223: Structural Dynamics
- EML 5224: Acoustics
- EML 5233: Failure of Materials in Mechanical Design
- EML 5311: Control System Theory
- EML 5318: Computer Control of Machines and Processes
- EML 5455: Clean Combustion Technology
- EML 5465: Energy Management for Mechanical Engineers
- EML 5515: Gas Turbines and Jet Engines
- EML 5516: Design of Thermal Systems
- EML 5526: Finite Element Analysis and Application
- EML 5595: Mechanics of the Human Locomotor System
- EML 5598: Orthopedic Biomechanics
- EML 5605: Advanced Refrigeration
- EML 5714: Introduction to Compressible Flow
- EML 6146: Microscale Heat Transfer
- EML 6154: Conduction Heat Transfer
- EML 6155: Convective Heat Transfer I
- EML 6156: Multiphase Convection Heat Transfer
- EML 6157: Radiation Heat Transfer
- EML 6216: Analytical Dynamics II
- EML 6229: Introduction to Random Dynamical Systems
- EML 6267: Structural Dynamics of Production Machinery
- EML 6278: Advanced Rotor Dynamics
- EML 6281: Geometry of Mechanisms and Robots I
- EML 6282: Geometry of Mechanisms and Robots II
- EML 6323: Nontraditional Manufacturing
- EML 6324: Fundamentals of Production Engineering
- EML 6350: Introduction to Nonlinear Control
- EML 6351: Nonlinear Control II: Adaptive Control
- EML 6352: Optimal Estimation
- EML 6365: Robust Control Synthesis
- EML 6417: Solar Energy Utilization
- EML 6451: Energy Conversion
- EML 6606: Advanced Air Conditioning
- EML 6905: Individual Projects in Mechanical Engineering
- EML 6934: Special Topics in Mechanical Engineering
- EML 6936: Nonthesis Project
- EML 6971: Research for Master's Thesis
- EML 7979: Advanced Research
- EML 7980: Research for Doctoral Dissertation
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Nuclear and Radiological Engineering Department

Chair: D. Hintenlang
Graduate Coordinator: W. Bolch

Complete faculty listing [Follow this link](#).

The Department offers the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy in nuclear engineering sciences with emphases in nuclear power engineering, medical physics, and health physics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The medical physics and health physics options are offered through interdepartmental programs in cooperation with the College of Medicine (see the Health Physics and Medical Physics description under Interdisciplinary Graduate Studies).

**Combined Program** — The Department also offers a B.S.N.E./M.S. degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of one semester. Qualified students may begin their master's program while seniors counting 12 hours of specified nuclear engineering sciences graduate courses for both the bachelor's and master's degree requirements. Seniors admitted to the combined program are eligible for teaching and research assistantships. Program admission requirements are (1) satisfaction of Graduate School admission requirements for a master's degree, (2) an upper-division (undergraduate) GPA of at least 3.6, and (3) completion of specified bachelor's degree requirements.

The graduate program has two major programs, Nuclear Engineering and Medical Physics. Specific areas of research and study in Nuclear Engineering include advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security. The Medical Physics program is a CAMPEP accredited program designed to meet the professional requirements for a career in clinical service or research and development. Areas of Medical Physics study and research include diagnostic medical imaging, radiation therapy, nuclear medicine imaging, and radiation dosimetry.

The requirement for admission to the graduate program in nuclear engineering sciences is a bachelor's degree in an approved program in engineering or in the sciences. Students applying to the Medical Physics program should have completed the equivalent of at least a minor in physics. If the student's background is considered deficient for the planned course of study, an articulation program of background courses will be required.

Depending on professional objectives, the student may select a non-thesis option for the MS degree and substitute 8 credits of graduate-level course work, of which at least 6 credits are in nuclear engineering sciences, including a 4-credit (minimum) special project, ENU 6936. Completion of 32 credits will meet the minimum requirements for the non-thesis MS degree.

Normally, the requirements for a master's degree can be completed in 12 months. Students in the medical physics option usually take 21 to 24 months to complete the master's degree, which requires 40-42 credit hours. For a master’s degree in health physics, a student must complete 42 hours of credit. If articulation work is required, it may take longer, depending upon the extent of the student's deficiency.

Other

Nuclear Engineering Sciences

College

[College of Engineering](#)

Department/School

[Nuclear and Radiological Engineering Department](#)

Degrees Offered with a Major in Nuclear Engineering Sciences

Doctor of Philosophy

without a concentration
concentration in Imaging Science and Technology

Master of Engineering

Master of Science

Courses

- ENU 5142: Reliability and Risk Analysis for Nuclear Facilities
- ENU 5176L: Principles of Nuclear Reactor Operations Laboratory
- ENU 5186: Nuclear Fuel Cycles
- ENU 5196: Nuclear Engineering Laboratory II
- ENU 5615C: Nuclear Radiation Detection and Instrumentation
- ENU 5615L: Nuclear Radiation Detection and Instrumentation Lab
- ENU 5626: Radiation Biology
- ENU 5658: Imaging System Analysis with Medical Physics Applications
- ENU 5705: Advanced Concepts for Nuclear Energy
- ENU 6051: Radiation Interaction Basics and Applications I
- ENU 6052: Radiation Transport Basics and Applications
- ENU 6053: Radiation Interaction Basics and Applications II
- ENU 6061: Surveys of Medical Radiological Physics
- ENU 6106: Nuclear Reactor Analysis I
- ENU 6107: Nuclear Reactor Analysis II
- ENU 6126: Fundamentals of Reactor Kinetics
- ENU 6135: Nuclear Thermal Hydraulics
- ENU 6623: Radiation Dosimetry
- ENU 6627: Therapeutic Radiological Physics
- ENU 6636: Medical Radiation Shielding & Protection
- ENU 6651: Clinical Rotation in Radiation Therapy
- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6655: Advanced Diagnostic Radiological Physics
- ENU 6657: Diagnostic Radiological Physics
- ENU 6659: Nuclear Medicine Instrumentation and Procedure
- ENU 6935: Nuclear Fuels
- ENU 6905: Individual Work
- ENU 6910: Supervised Research
- ENU 6935: Nuclear and Radiological Engineering Seminar
- ENU 6936: Special Projects in Nuclear and Radiological Engineering Sciences
- ENU 6937: Special Topics in Nuclear and Radiological Engineering Sciences
- ENU 6971: Research for Master's Thesis
- ENU 6972: Research for Engineer's Thesis
- ENU 7979: Advanced Research
- ENU 7980: Research for Doctoral Dissertation

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6639: Engineering Leadership

Departments and Programs within the College of Health and Human Performance

College of Health and Human Performance

Dean: M. Reid

Complete faculty listings: Follow this link.
Research and teaching in HHP has an impact on almost every aspect of the human condition. The college’s four centers – the Florida Center for Health Promotion, Center for Exercise Science, and the Eric Friedheim Tourism Institute – as well as its three primary departments – Applied Physiology and Kinesiology, Health Education and Behavior, and Tourism, Recreation, and Sport Management Department – place the college firmly in a position to influence and improve an array of societal problems and challenges.

For more information about the College of Health and Human Performance, please see our website: http://hhp.ufl.edu

Departments and Programs within the College of Health and Human Performance

College of Health and Human Performance Courses

Other

Health and Human Performance

College

College of Health and Human Performance

Health and Human Performance Program Information

The Ph.D. in Health and Human Performance is a single college-wide Ph.D. program with 6 concentrations that are housed and administered by the three departments, according to the following organizational structure:

- **Applied Physiology and Kinesiology (APK)**: Ph.D. students in APK study the immediate and lasting effects of exercise and its use in disease prevention and rehabilitation. APK Ph.D. concentrations include Exercise Physiology and Biobehavioral Science, with further specializations in biomechanics, motor control and learning, exercise and performance psychology, and sports medicine / athletic training.

- **Health Education & Behavior (HEB)**: Ph.D. students in HEB systematically investigate health promotion strategies aimed at modifying behaviors which will improve individual, family, workplace, and community health and well-being. The HEB Ph.D. concentration is in Health Behavior.

- **Tourism, Recreation, and Sport Management (TRSM)**: TRSM Ph.D. students study the impact of tourism, recreation activities, professional and amateur sports, ecotourism, parks and beaches on the personal, social, economic, environmental and resource infrastructures of society. Ph.D. concentrations in TRSM include Natural Resource Recreation, Sport Management, and Tourism.

Students are expected to be involved in research throughout their Ph.D. program, which requires approximately three to five years of full-time study for completion. Graduates of the program are trained to assume positions as post-doctoral research scientists, or entry level professorships at colleges and universities throughout the country. The program of study is developed by the student and the supervisory committee based on the student’s background, interests, and career goals, as well as faculty expertise. By design, the program is multidisciplinary and flexible, permitting students to tailor their scholarly experience to the development of research skills in their areas of concentration.

For more information, please see our website: http://gradprograms.hhp.ufl.edu/index.php/doctoral-program

Degrees Offered with a Major in Health and Human Performance

Doctor of Philosophy

without a concentration

concentration in Applied Physiology and Kinesiology

  *optional second concentration in Clinical and Translational Science*

concentration in Biobehavioral Science

concentration in Clinical and Translational Science

concentration in Exercise Physiology
concentration in Health Behavior

  optional second concentration in Clinical and Translational Science

concentration in Historic Preservation

concentration in Recreation, Parks, and Tourism

concentration in Sport Management

Applied Physiology and Kinesiology Departmental Courses

- APK 5127: Assessment in Exercise Science
- APK 5404: Sport Psychology
- APK 6111L: Practicum in Exercise Physiology
- APK 6116C: Physiological Bases of Exercise and Sport Sciences
- APK 6118: Neuromuscular Adaptation to Exercise
- APK 6126: Cardiopulmonary Pathologies
- APK 6128: EKG Interpretation
- APK 6205C: Nature and Bases of Motor Performance
- APK 6206: Planning Motor Actions
- APK 6210: Controlling Motor Actions
- APK 6225: Biomechanical Instrumentation
- APK 6225C: Biomechanics of Human Motion
- APK 6406: Exercise Psychology
- APK 6408: Performance Enhancement
- APK 6410: Seminar in Exercise Psychology
- APK 6415: Seminar in Sport Psychology: Current Topics
- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- APK 7107: Cardiovascular Exercise Physiology
- APK 7108: Environmental Stress Exercise Physiology
- APK 7117: Exercise Metabolism
- APK 7124: Free Radicals in Aging, Exercise and Disease
- APK 7129: Pulmonary Function during Exercise
- ATR 6124: Clinical Anatomy for the Exercise Sciences
- ATR 6145: Human Pathophysiology for the Exercise Sciences
- ATR 6215: Evidence-Based Orthopedic Exam I: Upper-Extremity
- ATR 6216: Evidence-Based Orthopedic Exam II: Lower-Extremity
- ATR 6304: Rehabilitation and Modalities of Athletic Injuries
- ATR 6624: Athletic Training Research and Technology I
- ATR 6625: Athletic Training Research and Technology II
- ATR 6934: Seminar in Athletic Training
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 6935: Variable International Topics
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- PET 6936: Special Topics/Seminars
- PET 6910: Supervised Research
- PET 6940: Supervised Teaching
- PET 6947: Graduate Internship in Exercise and Sport Sciences
- PET 6971: Research for Master's Thesis

Health Education and Behavior Departmental Courses

- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6536: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 6935: Variable International Topics
Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMG 6076: Introduction to Hospitality and Tourism
- HMG 6608: Hospitality Law and Risk Management
- HMG 6747: Marketing in Hospitality/Tourism
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- LEI 5121: Outdoor Recreation and Park Management
- LEI 6108: Contemporary Theories of Recreation and Leisure
- LEI 6325: Ecotourism
- LEI 6326: Sport Tourism
- LEI 6336: Tourism Planning and Development
- LEI 6351: Heritage Tourism
- LEI 6439: Campus Recreation Administration and Programming
- LEI 6513: Administrative Procedures in Leisure Services
- LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
- LEI 6557: Recreation Management/Development in the Coastal Zone
- LEI 6562: Advanced Marketing for Recreation, Parks, and Tourism
- LEI 6895: Tourism Theory and Concepts
- LEI 6903: Readings in Recreation, Parks, and Tourism
- LEI 6905: Directed Independent Study
- LEI 6910: Supervised Research
- LEI 6931: Special Topics in Recreation, Parks, and Tourism
Applied Physiology and Kinesiology Department

Chair: S. Dodd  
Graduate Coordinator: E. Christou

Complete faculty listing by department: Follow this link.

The Ph.D. program is offered with concentrations in biobehavioral science and exercise physiology. Students in the biobehavioral science concentration specialize in one of four areas: biomechanics, exercise/performance psychology, motor control/learning, or sports medicine. These interdisciplinary concentrations focus on preparing students as researchers with a blend of course work and research training.

A program leading to the Master of Science degree in applied physiology and kinesiology (thesis and non-thesis options) is also offered. Areas of concentration for the master's program include athletic training/sports medicine, biobehavioral science, clinical exercise physiology, exercise physiology, and human performance. The thesis option gives the student an opportunity to study, conduct research, and prepare a thesis in an area of special interest. The non-thesis option offers the student a specialization in a selected area of study, with additional work in other areas. A comprehensive written examination is required for this option, as is a capstone internship experience. Requirements for these degrees are given in the General Information section of this catalog.

Athletic training/sports medicine: This concentration provides comprehensive academic preparation, research, and clinical experience in the areas of injury prevention, assessment, treatment, rehabilitation, and therapeutic modalities.

Biobehavioral Science: This thesis mandatory concentration is multidisciplinary and flexible, permitting students to tailor their scholarly experience to the development of research skills in one of several related disciplines: biomechanics, motor control and learning, and exercise and performance psychology. Each area of specialization is briefly described below.

- **Biomechanics**: The specialization in biomechanics draws from the fields of neuroscience, engineering, and medicine. The course work and training include kinematics and kinetics of movement. Course work also includes anatomy/kinesthesiology, biomechanics, engineering, neuroscience, medicine, psychology, physical therapy, and statistics.
- **Motor learning/control**: This interdisciplinary specialization draws on experiences and a knowledge base in the movement and sport sciences, cognitive sciences, and physical therapy. Students are prepared to conduct research and provide expertise in traditional motor performance and learning settings.
- **Exercise/performance psychology**: This area of specialization provides the basis for understanding and influencing the underlying thought processes and attitudes that will ultimately determine the performance of individuals involved in sport, exercise, and other achievement oriented activities. The primary emphasis is to develop the scientific background and skills necessary for doctoral training and research.

Clinical exercise physiology: The purpose of this non-thesis program is to give students the opportunity to develop advanced knowledge and competencies in Exercise Physiology. Clinical Exercise Physiologists typically practice in hospitals, clinics and wellness centers as part of a health care team that administers tests and develops programs of exercise, counseling, and education for patients with cardiopulmonary, metabolic, and musculoskeletal diseases.

Exercise physiology: This thesis mandatory area of concentration is concerned with the scientific study of how the various physiological systems of the human body respond to physical activity. It is a multidisciplinary field with strong ties to the basic life sciences and medicine, and application to clinical, normal, and athletic populations.

Human performance: This non-thesis master's concentration merges a range of specializations within the Department into a curriculum that provides educational experiences to graduate students interested in studying the factors that determine human performance in both athletic and nonathletic domains. This flexible approach allows students to focus on specific applications that best meet their individual interests. Human performance incorporates components such as nutrition, psychology, motor behavior, and physiology that are applicable to athletic and clinical populations.

Other

Applied Physiology and Kinesiology

College of Health and Human Performance
Department/School

Applied Physiology and Kinesiology Department

Applied Physiology and Kinesiology Program Information

Graduate study in Applied Physiology and Kinesiology (APK) is focused on research in concentration areas including athletic training biomechanics; motor control and learning exercise physiology; and exercise and performance psychology. Graduate students are exposed to and directly involved in research covering the full multidisciplinary spectrum of human potential from young to old, fit to unfit, healthy to diseased, able-bodied to disabled, and from the casual recreational participant to the high-level athlete. In addition to human performance issues, APK faculty and students study the immediate and lasting effects of exercise and its use in disease prevention and rehabilitation.

For more information, please see our website: [http://apk.hhp.ufl.edu/index.php/current-students/prospective-students](http://apk.hhp.ufl.edu/index.php/current-students/prospective-students).

Degrees Offered with a Major in Applied Physiology and Kinesiology

Master of Science

- without a concentration
- concentration in Athletic Training/Sports Medicine
- concentration in Biobehavioral Science
- concentration in Clinical Exercise Physiology
- concentration in Exercise Physiology
- concentration in Human Performance

Applied Physiology and Kinesiology Departmental Courses

- APK 5127: Assessment in Exercise Science
- APK 5404: Sport Psychology
- APK 6111L: Practicum in Exercise Physiology
- APK 6116C: Physiological Bases of Exercise and Sport Sciences
- APK 6118: Neuromuscular Adaptation to Exercise
- APK 6126: Cardiopulmonary Pathologies
- APK 6128: EKG Interpretation
- APK 6205C: Nature and Bases of Motor Performance
- APK 6206: Planning Motor Actions
- APK 6210: Controlling Motor Actions
- APK 6225: Biomechanical Instrumentation
- APK 6226C: Biomechanics of Human Motion
- APK 6406: Exercise Psychology
Sample position titles for individuals with this degree include:

- Health promotion coordinator or health promotion consultant
- Public health adviser or public health analyst
- Health promotion specialist
- Health education specialist

This degree prepares the health promotion specialists and health behavior scientists to work in:

- Promoting policies and programs aimed at improving the health and well-being of individuals, families, and communities.
- Writing scholarly and professional articles
- Using a variety of teaching-learning strategies appropriate to the target audience and setting
- Serving as a resource person for health information and referrals
- Researching and developing social media and new media-based health promotion applications
- Advocating for health promotion policies and programs in schools, communities, health care facilities, and worksites
- Developing social marketing and health communication messages and campaigns
- Administering and managing health promotion programs
- Conducting needs and capacity assessments to identify health priorities
- Planning, implementing, and evaluating health promotion policies and programs
- Conducting research on questions associated with health problems and their determinants and health promotion policies and programs
- Administering and managing health promotion programs
- Serving as a resource person for health information and referrals
- Using a variety of teaching-learning strategies appropriate to the target audience and setting
- Writing scholarly and professional articles
- Working collaboratively with public and private agencies, nongovernmental organizations (NGOs) and the private sector.

The Health promotion coordination or health promotion consultant prepares students to work in local, state, and federal health, education and social agencies, schools and universities, nongovernmental health organizations, local, state, and federal health agencies, and the private sector.

This degree prepares the health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector. Full-time students can complete this M.S. option in one year. This degree may also give students unique and distinguishing training experiences when applying to professional schools such as law, medicine, physician assistant, dentistry, chiropractic, osteopathy, nursing, occupational therapy, and physical therapy.

The Ph.D. degree program trains health behavior researchers for academic positions in federal health agencies such as the Centers for Disease Control and Prevention and the National Institutes of Health for postdoctoral research fellowships and for the private sector.

The 30-credit hour, non-thesis M.S. degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector. Full-time students can complete this M.S. option in one year. This degree may also give students unique and distinguishing training experiences when applying to professional schools such as law, medicine, physician assistant, dentistry, chiropractic, osteopathy, nursing, occupational therapy, and physical therapy.

The 36-credit hour project in lieu of thesis, and the 36-credit hour thesis options are designed for students interested in developing research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically can complete these options in about 4 semesters.

The Department of Health Education & Behavior offers a Doctor of Philosophy (Ph.D.) in Health and Human Performance with a concentration in Health Behavior, a non-thesis 30-credit hour Master of Science and a 36-credit Master of Science (M.S.) in Health Education and Behavior. Requirements for the Ph.D. and M.S. degrees are given in the General Information section of this catalog.

The Ph.D. degree program trains health behavior researchers for academic positions in federal health agencies such as the Centers for Disease Control and Prevention and the National Institutes of Health for postdoctoral research fellowships and for the private sector.

The 30-credit hour, non-thesis M.S. degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector. Full-time students can complete this M.S. option in one year. This degree may also give students unique and distinguishing training experiences when applying to professional schools such as law, medicine, physician assistant, dentistry, chiropractic, osteopathy, nursing, occupational therapy, and physical therapy.

The 36-credit hour project in lieu of thesis, and the 36-credit hour thesis options are designed for students interested in developing research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically can complete these options in about 4 semesters.

The Department also offers an accelerated B.S./M.S. program in health education and behavior to enable students to receive both B.S. and M.S. degrees with a reduction of 12 credits (about one semester of course work).

Students who complete a graduate degree program in the Department of Health Education & Behavior acquire a range of skills required to research, plan, implement, and evaluate health promotion policies and programs aimed at improving the health and well-being of individuals, families, and communities. Specific skills include:

- Conducting needs and capacity assessments to identify health priorities
- Planning, implementing, and evaluating health promotion policies and programs
- Conducting research on questions associated with health problems and their determinants and health promotion policies and programs
- Administering and managing health promotion programs
- Advocating for health promotion policies and programs in schools, communities, health care facilities, and worksites
- Developing social marketing and health communication messages and campaigns
- Developing and developing social media and new media-based health promotion applications
- Serving as a resource person for health information and referrals
- Using a variety of teaching-learning strategies appropriate to the target audience and setting
- Writing scholarly and professional articles
- Working collaboratively with public and private agencies, nongovernmental organizations (NGOs) and the private sector to achieve the goal of a healthier population.

This degree prepares the health promotion specialists and health behavior scientists to work in:

- Local, state, and federal health, education and social agencies
- Nongovernmental health organizations
- Schools and universities
- Healthcare settings
- Private sector

Simple position titles for individuals with this degree include:

- Health education specialist
- Health promotion specialist
- Public health adviser or public health analyst
- Health promotion coordinator or health promotion consultant
Other

Health Education and Behavior

College

College of Health and Human Performance

Department/School

Department of Health Education & Behavior

Health Education and Behavior Program Information

The 30-credit hour, non-thesis in the Master of Science in Health Education and Behavior degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector.

The 30-credit, non-thesis Pre-Professional Health Science Track is designed for students seeking a career in health care. This option allows you to choose a minimum of 12 credits of basic science elective coursework which are prerequisites for dental, medical, nursing, occupational therapy, physician assistant, physical therapy, and other health professional programs including 6 credits of undergraduate science courses (3000-4999). This degree track prepares students who are interested in graduate studies in the health sciences and or pursuing health professional training. Full-time students can complete the 30-credit hour M.S. options in one year.

The 36-credit Thesis Option, and the 36-credit Project In Lieu Of Thesis Option, in the Master of Science in Health Education and Behavior degree programs are designed for students interested in improving their research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically complete these options in about 4 semesters.

For more information, please see our website: http://heb.hhp.ufl.edu/index.php/academia/graduate-programs/masters-programs.

Degrees Offered with a Major in Health Education and Behavior

Master of Science

Health Education and Behavior Departmental Courses

- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 6935: Variable International Topics
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- HSC 5135: Emotional Health Education
- HSC 5138: Human Sexuality
- HSC 5142: Drug Education
- HSC 5215C: Teaching Health in Elementary Schools
- HSC 5536C: Medical Terminology for the Health Professions
- HSC 5576: Nutrition Education for Special Populations
- HSC 5606: Spirituality and Health
- HSC 5618: Advanced Exercise Therapy, Adapted Physical Activity, & Health
- HSC 5626: Minority/Health Issues
- HSC 5657: Health and End-of-Life Issues
- HSC 5925: Seminar in Health Education
Tourism, Recreation, and Sport Management Department

**College of Health and Human Performance**

**Chair:** Michael Sagas.

**Graduate Coordinator:** Stephen Holland.

**Complete faculty listing:** [Follow this link](#).

The degree Master of Science is offered by the Department of Tourism, Recreation, and Sport Management with programs in sport management and in recreation, parks, and tourism. Both programs offer thesis and non-thesis formats. The Department participates in the Ph.D. program in Health and Human Performance. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Master’s program provides advanced preparation of tourism, recreation, and parks and sport management professionals for positions of leadership in planning, developing, administering, and marketing of programs in a variety of employment settings; public and private. Concentrations of study may be developed in a number of areas, such as:

- Natural resource recreation management
- Tourism and commercial recreation
- Campus recreation
- Recreation administration and supervision
- Sport management

The Doctoral program is offered through the College of Health and Human Performance with concentrations in tourism, natural resource recreation and sport management. These interdisciplinary specializations blend course work and research. The curriculum is individualized, and applicants with degrees from unrelated fields can be accepted into the program. However, their previous work will be evaluated and their programs planned according to their individual needs, interests, and career objectives.

**Combined program:** The Department offers a combined bachelor’s/master’s degree program. This program allows qualified students to earn both a bachelor’s degree and a master’s degree with a savings of approximately one semester. Up to 12 approved graduate credit hours can be utilized toward both degrees.

**MS/MSM Concurrent Degree Program:** This joint degree program is offered through the College of Business Administration (Master of Science in Business Management [MSM]) and the College of Health and Human Performance’s, Department of Tourism, Recreation and Sport Management (Master of Science in Sport Management [MS]). Applicants must apply to both programs and be admitted to both to participate. The MS/MSM is a non-thesis degree. The MS/MSM is designed for students who seek a graduate business degree and who lack the work experience necessary for admission to the MBA program. The MS/MSM curriculum is similar to the first year of the MBA program, giving students a good foundation in business principles. Concurrent degree students can share up to 9 credit hours of the same coursework towards both degree programs. They do not have to graduate during the same semester. Students admitted into the concurrent program must work closely with both departments to verify all requirements are being met during their course of study.

**MS/JD joint program:** This 98-credit-hour joint degree program culminates in the Master of Science and the Juris Doctor degrees. Applicants must meet the entrance requirements for the Department of Tourism, Recreation, and Sport Management and the College of Law. Admission to the second degree program is required no later than the end of the fourth consecutive semester after beginning one of the degree programs. The student's supervisory committee comprises faculty members from both the Department of Tourism, Recreation, and Sport Management and the College of Law. Students admitted into the joint program are permitted to share up to 12 credit hours of the same coursework towards both degree programs. Students must graduate during the same semester from both programs.

**Other**
Recreation, Parks, and Tourism

College

College of Health and Human Performance

Department/School

Tourism, Recreation, and Sport Management Department

Recreation, Parks, and Tourism Program Information

The Master of Science in Recreation, Parks and Tourism offers the following four areas of concentration:

1. Tourism and Commercial Recreation
   - Travel activities to and staying outside one's usual environment; hospitality, transportation
   - Recreation activities covered by fees, charges or other non-tax revenues; theme/amusement/water parks, movie theaters, sport/fitness/health clubs, resorts
   - Examples of employers include: travel agencies, cruise lines, dance studios, special event companies, resorts, multipurpose sports clubs and health & fitness clubs

2. Natural Resource Recreation
   - Park(s) management, protected areas, wilderness conservation
   - State parks, river floating, horseback riding, hiking trails
   - Beach management, rivers and lakes, sustainability
   - Outdoor recreation leadership
   - Conservation management, planning, and policy
   - Federal agencies (National Parks, U.S. Army Corp of Engineers)

3. Recreation Administration and Supervision
   - City/state public parks
   - City pools
   - City skate parks, family parks
   - Public tennis courts
   - City sports teams/leagues, youth sports
   - Organized group and youth camps
   - Military recreation departments (Morale, Welfare & Recreation [MWR] programs)

4. Campus Recreation Programming & Administration
   - college campus intramural recreation programs
   - campus fitness / exercise centers

Graduates of the Master of Science in Recreation, Parks & Tourism will be trained for middle and/or upper level management positions, in their respective fields mentioned above. Students can choose between three options: 1.) Thesis, or 2.) Non-Thesis Internship, or 3.) Non-Thesis with Paper.

For more information, please see our website: http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/recreation-parks-and-tourism

Degrees Offered with a Major in Recreation, Parks, and Tourism

Master of Science

without a concentration

concentration in Historic Preservation

concentration in Natural Resource Recreation
concentration in Therapeutic Recreation

concentration in Tourism

concentration in Tropical Conservation and Development

Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMG 6076: Introduction to Hospitality and Tourism
- HMG 6608: Hospitality Law and Risk Management
- HMG 6747: Marketing in Hospitality and Tourism
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6536: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- LEI 5188: Trends in Leisure Studies
- LEI 5121: Outdoor Recreation and Park Management
- LEI 6106: Contemporary Theories of Recreation and Leisure
- LEI 6325: Ecotourism
- LEI 6326: Sport Tourism
- LEI 6336: Tourism Planning and Development
- LEI 6351: Heritage Tourism
- LEI 6439: Campus Recreation Administration and Programming
- LEI 6513: Administrative Procedures in Leisure Services
- LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
- LEI 6557: Recreation Management and Development in the Coastal Zone
- LEI 6562: Advanced Marketing for Recreation, Parks, and Tourism
- LEI 6895: Tourism Theory and Concepts
- LEI 6903: Readings in Recreation, Parks, and Tourism
- LEI 6903: Directed Independent Study
- LEI 6910: Supervised Research
- LEI 6931: Special Topics in Recreation, Parks, and Tourism
- LEI 6933: Seminar in Recreation, Parks, and Tourism
- LEI 6940: Supervised Teaching
- LEI 6944: Practicum in Leisure Studies
- LEI 6971: Research for Master's Thesis
- LEI 7170: Foundations of Leisure Behavior
- LEI 7901: Recreation, Parks, and Tourism in Higher Education
- LEI 7904: Advanced Readings in Recreation, Parks, and Tourism
- LEI 7905: Advanced Independent Study in Recreation, Parks and Tourism
- LEI 7910: Advanced Supervised Research
- LEI 7933: Advanced Special Topics in Recreation, Parks, and Tourism
- LEI 7938: Advanced Seminar in Recreation, Parks, and Tourism
- PET 6910: Supervised Research
- SPM 5016: Sport Sociology
- SPM 5206: Sport Ethics
- SPM 5309: Sport Marketing
- SPM 5506: Sport Finance
- SPM 5936: Current Topics in Sport Management
- SPM 6006: Contemporary Sport Industry
- SPM 6036: Research Seminar in Sport Management
- SPM 6106: Management and Planning of Sport and Physical Activity Facilities
- SPM 6158: Management and Leadership in Sport
- SPM 6308: Study of Sport Consumer Behaviors
- SPM 6726: Issues in Sport Law
- SPM 6905: Directed Independent Study
- SPM 6910: Supervised Research
- SPM 6947: Graduate Internship in Sport Management
- SPM 6948: Advanced Practicum in Sport Management
- SPM 6971: Research for Master's Thesis

Sport Management
College

College of Health and Human Performance

Department/School

Tourism, Recreation, and Sport Management Department

Sport Management Program Information

Sport Management integrates concepts of management, marketing, finance and law to apply to sport organizations at various levels and prepares students for a variety of volunteer and employment opportunities at the professional, collegiate, community and amateur level sport entities. Its focus is on the business and organization aspects of sport, not coaching or athletic performance.

For more information, please see our website: http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/sport-management.

Degrees Offered with a Major in Sport Management

Master of Science

without a concentration

concentration in Historic Preservation

concentration in Tropical Conservation and Development

Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMD 6076: Introduction to Hospitality and Tourism
- HMD 6608: Hospitality Law and Risk Management
- HMD 6747: Marketing in Hospitality Tourism
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6536: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- LEI 5188: Trends in Leisure Studies
- LEI 5121: Outdoor Recreation and Park Management
- LEI 6108: Contemporary Theories of Recreation and Leisure
- LEI 6325: Ecotourism
- LEI 6326: Sport Tourism
- LEI 6336: Tourism Planning and Development
- LEI 6351: Heritage Tourism
- LEI 6439: Campus Recreation Administration and Programming
- LEI 6513: Administrative Procedures in Leisure Services
- LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
- LEI 6557: Recreation Management Development in the Coastal Zone
- LEI 6562: Advanced Marketing for Recreation, Parks, and Tourism
- LEI 6805: Tourism Theory and Concepts
- LEI 6802: Readings in Recreation, Parks, and Tourism
- LEI 6902: Directed Independent Study
- LEI 6910: Supervised Research
- LEI 6931: Special Topics in Recreation, Parks, and Tourism
Departments and Programs within the College of Liberal Arts and Sciences

College of Liberal Arts and Sciences

Interim Dean: David Richardson

Complete faculty listings: Follow this link.

The College of Liberal Arts and Sciences constitutes the intellectual core of the university. Its principal mission is to lead the academic quest to understand our place in the universe, and to help shape our society and environment.

For more information, please see our website: http://www.clas.ufl.edu

Departments and Programs within the College of Liberal Arts and Sciences

College of Liberal Arts and Sciences Courses

Other

Genetics and Genomics

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Medicine

Genetics and Genomics Program

Chair: C. Mulligan
Graduate Coordinator: J. Bungert

Complete faculty listing: Follow this link
or visit media.news.health.ufl.edu/misc/mgm/UFGI/search/members-list4.php

The University of Florida Genetics Institute is a multi-college, multi-faceted research center. Good geneticists are integrative geneticists, who incorporate many different subfields of genetics into their work. The core mission is to improve the quality of life of people throughout the world via integrative, genetics-based research. Accordingly, faculty interests and graduate research opportunities include a wide range of areas from advances in gene therapy to understanding the maintenance of genetic variation, from understanding plant immune responses to developing improved algorithms for identifying regulatory motifs in DNA sequences, and from the challenges of bioethics to strategies for controlling malaria.

The highlight of the first year core training is the research rotations program. Student laboratory rotations are a particularly exciting feature of the genetics and genomics doctoral program, and epitomize the philosophy that good geneticists are broadly trained and integrative. Many current Graduate Faculty members still vividly recall the transforming effects of their rotations during graduate school—they didn’t always end up where they expected! Rotations can open students’ eyes to areas of genetics that they had never considered and entice them into considering brand new career opportunities. Each student will sample the breadth and depth of genetics research at UF by carrying out three 8-week modules consisting of design, implementation, and analysis of genetics experiments. Each rotation is conducted in close association with a Graduate Faculty member. To ensure that students fully experience the impressive breadth of genetics research at UF, their rotations are hosted by Graduate Faculty in at least two different colleges. Students will also take PCB 5065, Advanced Genetics; GMS 6181, Special Topics in Microbiology (among the topics are genomics and bioinformatics, and ethics for genetics research); STA 6166, Statistical Methods I; and other electives as desired. In addition, throughout their tenure in the
program, students participate in the Genetics Seminar, which is an opportunity to present their rotation plans and results of research to faculty and other students. Prospective students should have strong backgrounds in biology and other hard sciences. Exceptional students with other backgrounds will also be considered. The research statement required as part of the application has a particularly important part in the admissions decision. Each applicant must describe his/her research interests, so that Graduate Faculty can evaluate knowledge of the discipline, fit to the program, and ability to articulate and motivate an interesting research problem. The required letters of recommendation are also extremely important in helping identify applicants with exceptional aptitude for genetics, and with research experience and promise.

For more information, write to the Genetics and Genomics Graduate Program, Attn: Graduate Secretary, Genetics Institute, University of Florida, PO Box 100196, Gainesville, FL 32610-0196.

Expanded information can be found at [http://www.ufg.ufl.edu](http://www.ufg.ufl.edu).

Degrees Offered with a Major in Genetics and Genomics

**Doctor of Philosophy**

**Doctor of Philosophy - Clinical and Translational Science**

Courses

- AGR 6322: Advanced Plant Breeding
- ANG 6532: Molecular Genetics of Disease
- ANG 7979: Advanced Research
- ANG 7980: Research for Doctoral Dissertation
- BCH 6415: Advanced Molecular and Cell Biology
- BCH 7410: Advanced Gene Regulation
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5805: Computer Simulation Concepts
- CIS 6930: Special Topics in CIS
- COT 5405: Analysis of Algorithms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6920: Genetics Journal Colloquy
- GMS 7979: Advanced Research
- GMS 7980: Research for Doctoral Dissertation
- HOS 6201: Breeding Perennial Cultivars
- PCB 5065: Advanced Genetics
- PCB 5235L: Experiments in Immunology
- PCB 5615: Molecular Evolution and Systematics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 6166: Statistical Methods in Research I
- STA 6167: Statistical Methods in Research II
- STA 6178: Genetic Data Analysis
- STA 6208: Basic Design and Analysis of Experiments
- STA 6329: Matrix Algebra and Statistical Computing
- STA 6934: Special Topics in Statistics
- STA 7979: Advanced Research
- STA 7980: Research for Doctoral Dissertation
- ZOO 6927: Special Topics in Zoology
- ZOO 7979: Advanced Research
- ZOO 7980: Research for Doctoral Dissertation

Animal Molecular and Cellular Biology Department

**Director:** P.J. Hansen

Complete faculty listing by department: [Follow this link](http://www.animal.ufl.edu/amcb/).

For more information about the program, contact P.J. Hansen at [pjhansen@ufl.edu](mailto:pjhansen@ufl.edu), follow the link below to our catalog page, or visit the programs website at [http://www.animal.ufl.edu/amcb/](http://www.animal.ufl.edu/amcb/).

Other
Animal Molecular and Cellular Biology

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine

Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
- Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program's website at http://www.animal.ufl.edu/amcb/.

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5905: Individual Study
- ALS 6046: Grant Writing
- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
- ANS 6668L: Molecular and Cellular Research Methods
- ANS 6702: Lactation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
- PCB 6816: Thermal Physiology
- ANS 6707: Growth Physiology in Farm Animals
- ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
- ANS 6715: Gastrointestinal and Feed Microbiology
- ANS 6716: Physiology in Farm Animals
- ANS 6718: Nutritional Physiology of Domestic Animals
- ANS 6723: Mineral Nutrition and Metabolism
- ANS 6745: Introduction to Statistical Genetics
- ANS 6750: Reproductive Physiology in Farm Animals
- ANS 6751: Physiology of Reproduction
- ANS 6751C
- ANS 6767: Molecular Endocrinology
- ANS 6905: Problems in Animal Science
- ANS 6910: Supervised Research
- ANS 6932: Special Topics in Animal Science
- ANS 6933: Graduate Seminar in Animal Science
Anthropology Department

Chair: S. deFrance
Graduate Coordinator: P. Collings

Complete faculty listing by department: Follow this link.

The Anthropology Department takes pride in maintaining a holistic perspective, bridging the four traditional fields that have composed the discipline: sociocultural, archaeological, biological, and linguistic anthropology. Both graduate students and faculty conduct research that cut across the four-fields, and extend anthropological investigations into other disciplines.

The graduate program is a mentoring program emphasizing the PhD degree. Students are mentored by faculty advisors, together with supervisory committees chosen by students with the advice of advisors. Graduate students are expected to be in residence to attend classes and seminars, and receive individualized training. Distance-education graduate degrees are not offered. Students formally report on their progress each year, and the progress of each graduate student is evaluated by the faculty in their primary field.

Students receiving graduate degrees are well-prepared intellectually and professionally for success in a wide variety of careers, and become leaders in developing the next generation of anthropology. The department offers teaching experience and resources for presenting conference papers, submitting grant proposals, conducting fieldwork, and other activities appropriate to their professionalization. Graduate students are welcome to contribute to discussions in departmental meetings, and serve on some departmental committees.

Other

Anthropology

College

College of Liberal Arts and Sciences

Department/School

Anthropology Department
Anthropology Program

The department of Anthropology offers graduate work leading to the Master of Arts (thesis or nonthesis option) and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog. For more information, visit the departmental website: http://anthro.ufl.edu. Graduate training is offered in cultural anthropology, archaeology, and biological anthropology.

Each graduate student should specify a major field of study among the four fields of anthropology. In addition, each must choose one of three tracks: the specialized track in which a student focuses on one field of anthropology, the multifield track in which a student combines two fields, or the interdisciplinary track in which a student adds study in a second discipline to anthropology. Knowledge of a foreign language or of statistics may be required by the student's supervisory committee.

The department generally requires applicants to have acceptable scores on the GRE (verbal and quantitative portions) and a 3.2 overall grade point average based on a 4.0 system. Previous work in anthropology is an asset but not a strict requirement for admission. Potential applicants are urged to visit the website to familiarize themselves with the specializations of our faculty and to indicate in their application those faculty with whom they might work. Barring special circumstances, the Department restricts admission to applicants interested in earning a Ph.D. Entering students who have earned a master's degree may apply for direct admission to the doctoral program. Students who enter without an M.A. will generally work for their M.A. on the way to the Ph.D. This requires either a formally-defended thesis or written comprehensive exams combined with a high-quality paper or research report. With their adviser's permission, they may opt to bypass the M.A.

Students enrolled in the M.A. program who wish to continue their studies for a Ph.D. must apply to the Department for certification.

New students are admitted into the graduate program only in the fall of each academic year. The deadline for receiving completed applications for admission into the graduate program is December 15, though the department encourages early applications.

Degrees Offered with a Major in Anthropology

Doctor of Philosophy

without a concentration

concentration in Historic Preservation

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

Master of Arts

without a concentration

concentration in Historic Preservation

concentration in Tropical Conservation and Development
Master of Arts in Teaching

without a concentration

collection in Tropical Conservation and Development

Courses

- ANG 5012: Fantastic Anthropology and Fringe Science
- ANG 5085: Collection and Analysis of Visual Data in Anthropology
- ANG 5126: Zooarchaeology
- ANG 5158: Florida Archeology
- ANG 5162: Maya Archeoastronomy and Ethnoastronomy
- ANG 5164: The Inca and Their Ancestors
- ANG 5172: Historical Archeology
- ANG 5194: Principles of Archeology
- ANG 5255: Rural Peoples in the Modern World
- ANG 5265: Methods in Ethnoecology
- ANG 5266: Economic Anthropology
- ANG 5303: Women and Development
- ANG 5310: The North American Indian
- ANG 5323: Peoples of Mexico and Central America
- ANG 5327: Maya and Aztec Civilizations
- ANG 5330: The Tribal Peoples of Lowland South America
- ANG 5331: Peoples of the Andes
- ANG 5336: The Peoples of Brazil
- ANG 5341: Anthropology of the Caribbean
- ANG 5352: Peoples of Africa
- ANG 5354: Anthropology of Modern Africa
- ANG 5395: Visual Anthropology
- ANG 5420: Social Network Analysis in Cultural Anthropology
- ANG 5426: Kinship and Social Organization
- ANG 5464: Culture and Aging
- ANG 5485: Research Design in Anthropology
- ANG 5486: Computing for Anthropologists
- ANG 5488: Geospatial Analysis in Cultural Anthropology
- ANG 5525: Human Osteology and Osteometry
- ANG 5531: Culture and Nutrition
- ANG 5546: Seminar: Human Biology and Behavior
- ANG 5620: Language and Culture
- ANG 5621: Proseminar in Cultural and Linguistic Anthropology
- ANG 5700: Applied Anthropology
- ANG 5702: Anthropology and Development
- ANG 5711: Culture and International Business
- ANG 5743: Human Rights Missions in Forensic Anthropology
- ANG 5744: International Forensic Fieldwork in Human Rights
- ANG 5824L: Field Sessions in Archeology
- ANG 6034: Seminar in Anthropological History and Theory
- ANG 6086: Historical Ecology
- ANG 6091: Research Strategies in Anthropology
- ANG 6110: Archaeological Theory
- ANG 6112: Critical Archaeology of Time
- ANG 6113: Ideology and Symbolic Approaches in Archaeology
- ANG 6120C: Environmental Archaeology
- ANG 6122C: Archaeological Ceramics
- ANG 6128: Lithic Technology
- ANG 6146: Archaeology of Maritime Adaptations
- ANG 6155: Southeastern U.S. Prehistory
- ANG 6161: Problems in Caribbean Prehistory
- ANG 6165: Problems in South American Archaeology
- ANG 6183: Laboratory Training in Archeology
- ANG 6185: Ethnoarchaeology
- ANG 6186: Seminar in Archeology
- ANG 6187: Experimental Archaeology
- ANG 6190: Seminar in Contemporary Methods
- ANG 6191: Archaeology of Death
- ANG 6224: Painted Books of Ancient Mexico: Codices of Aztecs, Mixtecs, and Mayas
- ANG 6241: Special Topics in Ecology of Religion
ANG 6267: Anthropology, Geographic Information System, and Human Ecosystems
ANG 6273: Legal Anthropology
ANG 6274: Principles of Political Anthropology
ANG 6286: Seminar in Contemporary Theory
ANG 6304: Seminar in Gender and International Development
ANG 6314: Peoples of the Arctic
ANG 6351: Peoples and Culture in Southern Africa
ANG 6360: Ethnicity in China
ANG 6366: Family, Gender, and Population in China
ANG 6407: Sickness and Power
ANG 6421: Landscape, Place, Dwelling
ANG 6452: Race and Racism in Anthropological Theory
ANG 6453: Human Rights in Cross-Cultural Perspective
ANG 6478: Evolution of Culture
ANG 6481: Research Methods in Cognitive Anthropology
ANG 6483L: Anthropology of Science
ANG 6511: Seminar in Physical Anthropology
ANG 6514: Human Origins
ANG 6524: Skeletal Mechanics in Biological Anthropology
ANG 6532: Molecular Genetics of Disease
ANG 6547: Human Adaptation
ANG 6552: Primate Behavior
ANG 6553: Primate Cognition
ANG 6555: Issues in Evolutionary Anthropology
ANG 6583: Primate Functional Morphology
ANG 6591L: Advanced Molecular Anthropology Laboratory
ANG 6592: Seminar in Molecular Anthropology
ANG 6593L: Biological Anthropology Laboratory
ANG 6701: Seminar on Applied Anthropology
ANG 6737: Medical Anthropology
ANG 6740: Advanced Techniques in Forensic Anthropology
ANG 6801: Ethnographic Field Methods
ANG 6905: Individual Work
ANG 6910: Supervised Research
ANG 6915: Research Projects in Social, Cultural, and Applied Anthropology
ANG 6917: Professions of Anthropology
ANG 6930: Special Topics in Anthropology
ANG 6940: Supervised Teaching
ANG 6945: Internship in Anthropology
ANG 6971: Research for Master's Thesis
ANG 7979: Advanced Research
ANG 7980: Research for Doctoral Dissertation

Astronomy Department

Chair: C. Telesco
Graduate Coordinator: V. Sarajedini.

Complete faculty listing by department: Follow this link.

The University of Florida’s Astronomy Department is one of the largest in the country. Research is an integral part of the graduate program. Students have opportunities to work with faculty and staff on a broad range of astronomical problems using in-house, national and international, and ground- and space-based facilities. Support for graduate studies is available through fellowships, research assistantships, and teaching assistantships. For more information on the program, please follow the link below or visit our website.

Other

Astronomy

College

College of Liberal Arts and Sciences

Department/School

Astronomy Department

Astronomy Program Information

The Astronomy Department offers graduate programs leading to the M.S., M.S.T. or Ph.D. degrees in astronomy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.
Planetary Systems: Observational and theoretical studies concentrate in the areas of planet formation, the dynamical evolution of planetary systems and the detection and characterization of extrasolar planets. Members of the department are active in Kepler Mission and ground-based Dopple surveys to identify extrasolar planets. Researchers are also active in studying the origins and orbital evolution of interplanetary dust and small bodies in the solar system and around nearby stars.

Stellar populations: Observational studies concentrate on resolved stars in the Milky Way and nearby galaxies. Studies of particular classes of stars include various types of binary stars and blue stragglers. The goal of these studies is to apply our theoretical understanding of stellar structure and evolution to the properties of stars in a variety of environments.

Origins of stars and planets: Observational studies focus on the properties of giant molecular clouds, the collapse of molecular cloud cores, the formation of stars in clusters and in isolation, and the formation and evolution of circumstellar and protoplanetary disks. The department is active in several star formation surveys, involving many international ground- and space-based facilities. Theoretical studies emphasize the development of analytic models and numerical simulations, as well as their testing against observational constraints.

Structure and evolution of galaxies: Observational programs use multi-wavelength photometry of stars and star clusters in galaxies throughout the Local Group and in nearby groups, including the Milky Way, to study galaxy evolution. Other observations focus on the structure and dynamics of galaxies and their interstellar medium using neutral hydrogen (HI) and molecules such as carbon monoxide.

Extragalactic astronomy and cosmology: Observational programs investigate the nature of ultra-luminous galaxies, active galactic nuclei (AGNs), and the formation and chemical evolution of distant galaxies and clusters of galaxies. Theoretical investigations focus on the emission/absorption features in AGN spectra, the star-formation and chemical-evolution properties of galaxies, and applications of general relativity and particle physics to conditions in the very early universe.

Instrumentation programs: The UF Infrared Astrophysics Laboratory is a world leader in designing and constructing advanced near-infrared and mid-infrared instrumentation for major telescopes around the world, including the 8m Gemini North and South Telescopes and the 10m Gran Telescopio Canarias. Instrumentation is also developed in the area of high precision Doppler techniques for planet searches and the development of high contrast imaging techniques for direct imaging of extrasolar planets.

Computing facilities: The Astronomy Department maintains a network of high-performance computers running Linux and OS-X. The local network is maintained by a full-time systems manager. Astronomy students have access to supercomputing facilities maintained by the UF High Performance Computing Center, including thousands of CPU cores with high-performance networking.

Degrees Offered with a Major in Astronomy

Doctor of Philosophy

Master of Science

Master of Science in Teaching

Courses

- AST 5113: Solar System Astrophysics I
- AST 5114: Solar System Astrophysics II
- AST 6112: Solar System Astrophysics
- AST 6215: Stellar Structure and Function
- AST 6245: Stellar Atmospheres and Radiative Processes
- AST 6309: Galactic and Extragalactic Astronomy
- AST 6336: Interstellar Matter
- AST 6415: Observational Cosmology
- AST 6416: Physical Cosmology
- AST 6506: Celestial Mechanics
- AST 6725C: Observational Techniques
- AST 6905: Individual Work
- AST 6910: Supervised Research
- AST 6925: Departmental Colloquium
- AST 6935: Frontiers in Astronomy
- AST 6936: Astronomy Journal Club
- AST 6971: Research for Master's Thesis
- AST 7938: Special Topics
- AST 7979: Advanced Research
- AST 7980: Research for Doctoral Dissertation
The Department of Biology offers two graduate programs: Botany and Zoology. Both programs offer graduate work leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

More information regarding these programs is available by following the links below and by visiting our departmental website: http://www.biology.ufl.edu.

Other Botany

Degrees Offered with a Major in Botany

Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development
concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
- BOT 5725C: Taxonomy of Vascular Plants
- BOT 6505C: Proteomics: Theory and Practice
- BOT 6516: Plant Metabolism
- BOT 6566: Plant Growth and Development
- BOT 6716C: Advanced Taxonomy
- BOT 6726C: Principles of Systematic Biology
- BOT 6905: Individual Studies in Botany
- BOT 6910: Supervised Research
- BOT 6927: Advances in Botany
- BOT 6935: Special Topics
- BOT 6936: Graduate Student Seminar
- BOT 6940: Supervised Teaching
- BOT 6943: Internship in College Teaching
- BOT 6971: Research for Master's Thesis
- BOT 7979: Advanced Research
- BOT 7980: Research for Doctoral Dissertation
- PCB 5046C: Advanced Ecology
- PCB 5338: Principles of Ecosystem Ecology
- PCB 5356: Tropical Ecology
- PCB 6675C: Evolutionary Biogeography
PLP 6656C: Fungal Biology

Zoology

College

College of Liberal Arts and Sciences

Department/School

Biology Department

Zoology Program Info

Chair: Craig W. Osenberg
Graduate Coordinator: W. Bradley Barbazuk

The Department of Biology offers graduate programs in Zoology leading to the Master of Science in Teaching, Master of Science, and Doctor of Philosophy degrees. The requirements for these degrees can be found in the Graduate Degrees section of this catalog.

Our program emphasizes Integrative Biology, with integration accomplished through a focus on the theoretical foundations provided by evolutionary biology and ecology. Our faculty has expertise in ecology, evolution, behavior, comparative and environmental physiology, genetics, development, and phylogenetics. We work in a variety of terrestrial and aquatic environments and geographic regions (tropics through subpolar), and on a range of organisms (including plants). Our faculty value integrative research (e.g., by crossing levels of organization from gene expressions to species interactions), linking theory with data (through use of statistical and mathematical tools), and using natural history to guide the development and testing of rigorous conceptual frameworks. Many of our faculty also are interested in applying and testing basic science in applied contexts (e.g., conservation biology and ecotoxicology).

Our approach is highlighted through our first-year, required, graduate course, Integrative Principles. Each student's supervisory committee will recommend additional courses according to the academic background and research plans of the student.

Degrees Offered with a Major in Zoology

Doctor of Philosophy

without a concentration

concentration in Animal Molecular and Cellular Biology

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration
concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Zooology Courses

- BOT 6726C: Principles of Systematic Biology
- PCB 5307C: Limnology
- PCB 5415C: Behavioral Ecology
- PCB 5615: Molecular Evolution and Systematics
- PCB 6049: Seminar in Ecology
- PCB 6377C: Physiological Ecology of Vertebrates
- PCB 6447C: Community Ecology
- PCB 6675C: Evolutionary Biogeography
- PCB 6695: Seminar in Evolutionary Biology
- ZOO 5115C: Vertebrate Paleontology
- ZOO 5486C: Mammalogy
- ZOO 6005: Integrative Principles of Zoology I
- ZOO 6308: Dynamic Optimization Modeling in Behavioral and Evolutionary Ecology
- ZOO 6406: Biology of Sea Turtles
- ZOO 6456C: Ichthyology
- ZOO 6542: Nutritional Ecology
- ZOO 6905: Individual Studies
- ZOO 6910: Supervised Research
- ZOO 6920: Zoology Colloquium
- ZOO 6927: Special Topics in Zoology
- ZOO 6931: Seminar in Marine Turtle Biology
- ZOO 6939: Seminar in Animal Behavior
- ZOO 6971: Research for Master’s Thesis
- ZOO 7979: Advanced Research
- ZOO 7980: Research for Doctoral Dissertation

Chemistry Department

Chair: W. Dolbier
Graduate Coordinator: B. W. Smith

Complete faculty listing Follow this link.

The Department of Chemistry granted its first master's degree in 1909 and the first Ph.D. in 1930. Specializations in biochemistry, organic, physical, inorganic and analytical are offered with extensive interdisciplinary research opportunities (e.g., bio/nano-science, particle science, green chemistry, polymer chemistry, chemical physics, health related biochemistry, chemistry-engineering, and genomics).

The Department presently offers the Master of Science and Doctor of Philosophy degrees with a major in chemistry. The non-thesis Master of Science in Teaching degree is also offered with a major in chemistry.
Other

Chemistry

College

College of Liberal Arts and Sciences

Department/School

Chemistry Department

Chemistry Program

The department offers the Master of Science (thesis or nonthesis) and Doctor of Philosophy degrees with a major in chemistry and specialization in biochemistry, analytical, organic, inorganic, or physical chemistry. The nonthesis degree Master of Science in Teaching is also offered with a major in chemistry. New graduate students should have adequate undergraduate training in inorganic, analytical, organic, and physical chemistry. Normally this will include as a minimum a year of general chemistry, one semester of quantitative analysis, one year of organic chemistry, one year of physical chemistry, and one semester of advanced inorganic chemistry. Additional courses in instrumental analysis, biochemistry, and advanced physical and organic chemistry are desirable. Deficiencies in any of these areas may be corrected during the first year of graduate study. Such deficiencies are determined by a series of placement tests given prior to registration, and the results of these tests are used in planning the student's program. Doctoral candidates are required to complete at least 9 semester credits of courses specified by the division of the Chemistry Department in which they choose to specialize, as well as at least 9 semester credits of out-of-major-division courses. There are some minor restrictions on courses that may be used to meet this requirement. Additional courses may be required by the student's supervisory committee or major professor.

Ph.D. candidates must serve not less than one year as teaching assistants. This requirement will be waived only when, in the opinion of the department, unusual circumstances justify such action. A chemical physics option is offered for students who will be doing research in areas of physical chemistry which require a strong background in physics. For this option, a student meets the departmental requirements for concentration in physical chemistry, except that only one out-of-major division course is required. In addition, a minimum of 14 credits in 4000 level or higher physics courses or a minimum of 7 such credits in physics and 7 in 4000 level or higher mathematics courses is required. Candidates for the master's degree are required to complete any two core courses. The Master of Science degree in chemistry has both thesis and nonthesis options. The nonthesis degree Master of Science in Teaching is offered with a major in chemistry and requires a written paper of substantial length (30 to 50 pages) on an approved topic pertaining to some phase of chemistry, under the course CHM 6905.

Degrees Offered with a Major in Chemistry

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

concentration in Imaging Science and Technology

Master of Science

Master of Science in Teaching
Courses

- CHM 5224: Basic Principles for Organic Chemistry
- CHM 5235: Organic Spectroscopy
- CHM 5242: The Organic Chemistry of Polymers
- CHM 5275: The Organic Chemistry of Polymers
- CHM 6036: Chemical Biology
- CHM 6037: Chemical Biology and Biochemistry Seminar
- CHM 6153: Electrochemical Processes
- CHM 6154: Chemical Separations
- CHM 6155: Spectrochemical Methods
- CHM 6158: Chemistry and Biology of Nucleic Acids
- CHM 6225: Advanced Principles of Organic Chemistry
- CHM 6226: Advanced Synthetic Organic Chemistry
- CHM 6227: Topics in Synthetic Organic Chemistry
- CHM 6251: Organometallic Compounds
- CHM 6271: The Chemistry of High Polymers
- CHM 6301: Enzyme Mechanisms
- CHM 6302: Chemistry and Biology of Nucleic Acids
- CHM 6303: Methods in Computational Biochemistry and Structural Biology
- CHM 6306: Special Topics in Biological Chemistry Mechanisms
- CHM 6381: Special Topics in Organic Chemistry
- CHM 6390: Organic Chemistry Seminar Presentation
- CHM 6391: Organic Chemistry Seminar Discussion
- CHM 6430: Chemical Thermodynamics
- CHM 6461: Statistical Thermodynamics
- CHM 6470: Chemical Bonding and Spectra I
- CHM 6471: Chemical Bonding and Spectra II
- CHM 6480: Elements of Quantum Chemistry
- CHM 6490: Theory of Molecular Spectroscopy
- CHM 6520: Chemical Physics
- CHM 6658: Special Topics in Physical Chemistry
- CHM 6658: Computational Chemistry
- CHM 6659: Physical Chemistry Seminar
- CHM 6660: Advanced Inorganic Chemistry I
- CHM 6661: Advanced Inorganic Chemistry II
- CHM 6662: Applications of Physical Methods in Inorganic Chemistry
- CHM 6662: Chemistry of Solid Materials
- CHM 6670: Inorganic Biochemistry
- CHM 6680: Special Topics in Inorganic Chemistry
- CHM 6690: Inorganic Chemistry Seminar
- CHM 6720: Chemical Dynamics
- CHM 6805: Individual Problems, Advanced
- CHM 6810: Supervised Research
- CHM 6834: Advanced Topics in Chemistry
- CHM 6935: Chemistry Colloquium
- CHM 6934: Internship in College Teaching
- CHM 6971: Research for Master's Thesis
- CHM 7485: Special Topics in Theory of Atomic and Molecular Structure
- CHM 7979: Advanced Research
- CHM 7980: Research for Doctoral Dissertation
- CHS 5110L: Radiochemistry Laboratory

Classics Department

Chair: Victoria Pagán.
Graduate Coordinator: Jennifer Rea.

Complete faculty listing: Follow this link

The department offers the following degrees and programs: the Doctor of Philosophy in classical studies; the Master of Arts degree in classical studies or Latin; the Master of Latin degree, and the Master of Arts in Teaching degree in Latin. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Within the Ph.D. program are three tracks:

- Philology (prepares students for careers in colleges and universities)
- Classical civilization (available via distance course work)
- Latin and Roman studies (available via distance course work).

Requirements for the philology track of the doctoral degree include:

- 60 credit hours after the M.A. (or a total of 90 credit hours)
- Five additional seminars after the M.A. in classics at the 500 level or higher
Three of the following seminars: GRE 6425, GRW 6105, LAT 6425, LNW 6105, and CLA 6805

A reading knowledge of two modern languages, one of which must be German

Reading lists in Greek and Roman authors

Supervised experience in teaching Latin, Greek, or civilization courses is advised

Successful completion of a series of qualifying examinations appropriate to the chosen specialization (Greek reading; Latin reading; classical Greek literature in its historical context; classical Latin literature in its historical context; special author/topic)

An oral preliminary examination, dissertation, and final examination

The M.A. degree in classical studies is recommended for students who plan to continue on to the doctoral level. The M.A. degree in Latin is recommended for students who plan to pursue a career in secondary teaching. Both M.A. programs require 30 credit hours, including 6 credits of GRW 6971 or LNW 6971, a thesis, and final examination.

The Master of Latin degree is a non-thesis degree, designed for currently employed and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of classics, and enhance their professional qualifications through a program of summer course work and directed independent study and/or distance learning courses during the regular academic year. The Master of Arts in Teaching, a non-thesis degree, is offered with a program in Latin and is intended for students preparing to teach in community colleges or high schools.

Other

Classical Studies

College

College of Liberal Arts and Sciences

Department/School

Classics Department

Classical Studies Program Information

(The following information refers only to our on-campus programs. Please visit the Distance Learning Homepage for further details on our Distance Learning programs, especially aimed at elementary, secondary, or community college teachers.)

Ph.D. in Classical Studies

The Ph.D. program in classical studies is a traditional course of study in Greek and Latin language and literature that prepares students for careers in research and teaching at colleges and universities. Students awarded a TA position receive a stipend plus a full tuition waiver. The University also offers competitive fellowships. The department routinely provides research fellowships for its Ph.D. candidates. Department awards are also available for study abroad opportunities. Students are expected to become Florida residents after one year.

M.A. in Classical Studies

The Department of Classics at the University of Florida offers an M.A. degree in Classical Studies. Students awarded a TA position receive a stipend plus a full tuition waiver. Students are expected to become Florida residents after one year.

The Master of Arts in Classical Studies is recommended for students who plan to continue their studies at the doctoral level

For minimum degree requirements, see the Graduate Degrees section of the catalog. For additional requirements, please see the department website: http://classics.ufl.edu.

Admissions Requirements to the Classical Studies Programs:

Admission into the university and the program for Classics is ultimately determined and granted according to the rules established by the Graduate School of the University of Florida (see the Graduate Catalog).

Submission of Graduate Record Examination (GRE) scores, with a minimum score of 1000 (combined verbal and quantitative). Competitive applicants for funding awards from the department typically have a combined score of at least 1200.

Ph.D. program (Level II) requirements include:

1. M.A. in Classics or the equivalent.
2. A GPA of at least 3.25 in previous graduate work, and an undergraduate average of at least 3.0.
3. Demonstrated reading knowledge of German, French, Italian or Modern Greek (competency in the second language to be demonstrated before the completion of the second year at Level II).
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the applicant's record gives evidence of the capacity to undertake and complete guided independent reading and research at the doctoral level.

Master's program (Level I) requirements include:

1. Extensive study of Greek and Latin, with at least three years of coursework in one language and at least two years in the other language.
2. At least six hours in one or more of the following ancient history, ancient art, archaeology, philosophy, literary criticism, linguistics.
3. A GPA of at least 3.0.
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the record shows promise on other grounds.

Degrees Offered with a Major in Classical Studies
Doctor of Philosophy

Master of Arts

Classics Departmental Courses

- CLA 6125: Augustan Age
- CLA 6515: Roman Dynasty: Nero and the Julio-Claudians
- CLA 6765: Greek and Roman Archeology
- CLA 6805: The Classical Research Tradition
- CLA 6885: Roman Law and Society
- CLA 6895: Athenian Law and Society
- CLA 6905: Individual Work
- CLA 6930: Greece and the Near East
- CLT 6295: Greek Drama in Translation
- GRE 6425: Greek Prose Composition
- GRE 6755: Epigraphy
- GRK 6905: Individual Work in Modern Greek
- GRW 6105: The Greek Tradition
- GRW 6216: Greek Novel
- GRW 6316: Greek Tragedy
- GRW 6317: Ancient Greek Comedy
- GRW 6345: Greek Lyric Poetry
- GRW 6346: Pindar
- GRW 6347: Homer
- GRW 6386: Greek Historians
- GRW 6506: Plato
- GRW 6705: Attic Orators
- GRW 6905: Individual Work
- GRW 6931: Comparative Study of Greek and Latin Literature
- GRW 6971: Research for Master's Thesis
- GRW 7979: Advanced Research
- GRW 7980: Research for Doctoral Dissertation
- LAT 6425: Latin Prose Composition
- LNW 5225: Roman Elegiac Poetry
- LNW 5655: Roman Poets: Horace
- LNW 5665: Roman Poets: Vergil
- LNW 5675: Roman Poets: Ovid
- LNW 5931: Comparative Study of Latin and Greek Literature
- LNW 6105: The Roman Tradition
- LNW 6225: The Ancient Roman Novel
- LNW 6335: Roman Oratory and Rhetoric
- LNW 6365: Studies in Roman Satire
- LNW 6385: Roman Historians
- LNW 6495: Late Latin Literature
- LNW 6905: Individual Work
- LNW 6933: Special Topics in Latin Literature
- LNW 6935: Proseminar in Classics
- LNW 6940: Supervised Teaching
- LNW 6971: Research for Master's Thesis
- LNW 7979: Advanced Research
- LNW 7980: Research for Doctoral Dissertation

Latin

College

College of Liberal Arts and Sciences

Department/School

Classics Department
Latin Program Information

(The following information refers only to our on-campus programs. Please visit the Distance Learning Homepage for further details on our Distance Learning MA and ML Programs, especially aimed at elementary, secondary, or community college teachers.)

The Department of Classics at the University of Florida offers an M.A. degree in Latin, an M.A.T. degree in Latin, as well as a Master of Latin degree. Students awarded a TA position receive a stipend plus a full tuition waiver. Students are expected to become Florida residents after one year.

The Master of Arts in Latin is a thesis degree designed specifically for students who are aiming toward a career in secondary teaching, but who still desire the writing experience and credential that a thesis provides.

The Master of Arts in the Teaching of Latin (M.A.T.) is recommended for students who wish to pursue a career in teaching and who want to include educational courses in their program. This is a non-thesis degree.

The Master of Latin (M.L.) degree is designed primarily for currently employed, and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of Classics, and enhance their professional qualifications. This is a non-thesis degree.

For minimum degree requirements, see the Graduate Degrees section of the catalog. For additional requirements, please see the department website: http://classics.ufl.edu.

Admission Requirements to the Latin Programs:

Admission into the university and the program for Classics is ultimately determined and granted according to the rules established by the Graduate School of the University of Florida (see the Graduate Catalog).

Submission of Graduate Record Examination (GRE) scores, with a minimum score of 1000 (combined verbal and quantitative). Competitive applicants for funding awards from the department typically have a combined score of at least 1200.

Master's level (Level I) requirements include:

1. Extensive study of Greek and Latin, with at least three years of coursework in one language and at least two years in the other language.
2. At least six hours in one or more of the following: ancient history, ancient art, archaeology, philosophy, literary criticism, linguistics.
3. A GPA of at least a 3.0.
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the record shows promise on other grounds.

Degrees

Master of Arts

Master of Arts in Teaching

Master of Latin

Classics Departmental Courses

- CLA6125: Augustan Age
- CLA6515: Roman Dynasty: Nero and the Julio-Claudians
- CLA6705: Greek and Roman Archeology
- CLA6805: The Classical Research Tradition
- CLA6865: Roman Law and Society
- CLA6895: Athenian Law and Society
- CLA6905: Individual Work
- CLA6930: Greece and the Near East
- CLT6295: Greek Drama in Translation
- GRE 6425: Greek Prose Composition
- GRE 6755: Epigraphy
- GRK 6905: Individual Work in Modern Greek
- GRW6105: The Greek Tradition
- GRW6216: Greek Novel
- GRW6316: Greek Tragedy
- GRW6317: Ancient Greek Comedy
- GRW6345: Greek Lyric Poetry
- GRW6346: Pindar
- GRW6347: Homer
- GRW6386: Greek Historians
- GRW6506: Plato
Computer and Information Science and Engineering Department

College of Liberal Arts and Sciences

Chair: Paul Gader
Graduate Coordinator: Ji-Hyeon Peir.

Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, Engineer, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems**: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies.
- **Database and information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics.
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry.
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics.
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases.
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or non-thesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below "B," to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A maximum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization, and a number of other campus research centers provide opportunities for students enrolled in the program.
The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: http://www.cise.ufl.edu

Other

Computer Science

College

College of Liberal Arts and Sciences

Department/School

Computer and Information Science and Engineering Department

Computer Science Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science degree in Computer Science through the College of Liberal Arts and Sciences. Minimum requirements for this degree are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in Algorithms, Computer Vision, Databases, Graphics and Modeling, Machine Learning, Networks, and Systems, with active labs in Bioinformatics; Computational Science and Intelligence; Vision, Graphics and Medical Imaging; Database Systems Research and Development; Data Science Research; Mobile and Pervasive Computing; Human-Centered Computing; and Cybersecurity.

Specific degree requirements and options may be found here: http://cise.ufl.edu/academics/grad

Instructions for application for admission may be found here: http://cise.ufl.edu/admissions/grad

Degrees Offered with a Major in Computer Science

Master of Science

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5636: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5805: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6685: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6156: High Performance Computer Architecture
- CEN 5035: Software Engineering
- CEN 6070: Software Testing and Verification
- CEN 6075: Software Specification
- CIS 6905: Individual Study
- CIS 6910: Supervised Research
- CIS 6930: Special Topics in CIS
The Department of Sociology and Criminology & Law offers several programs of graduate study leading to the Ph.D. in Sociology, the Ph.D. in Criminology, Law and Society, the MA in Sociology, the MA in Criminology, Law and Society, and a Joint MA in Criminology/JD degree. The department also partners with the School of Natural Resources and Environment Department to offer the Ph.D. or MA in Interdisciplinary Ecology. Advanced undergraduate majors may complete a combined BA/MA degree in Sociology or a combined BA/MA degree in Criminology, Law and Society.
B.A./M.A. program. Both M.A. options (thesis and non-thesis) require satisfactory completion of at least 36 credit hours.

**Ph.D. degree program:** The Doctor of Philosophy program includes a minimum of 90 semester hours of credit beyond the B.A. Students with a criminology or closely related M.A. received in the last 7 years from an accredited U.S. university may request that up to 30 hours credit from their M.A. work be counted toward this total. Those with an M.A. from this department may apply 36 hours. The Department requires Ph.D. students to complete at least 66 hours of course work (excluding research credits), including the M.A. hours. Qualifying examinations take place at the end of a student's course work.

**Criminology, Law and Society/Law joint degree programs:** The Department of Sociology and Criminology & Law (CLS) and the College of Law offer a joint degree program leading to an M.A. or a Ph.D. in Criminology, Law and Society and a J.D. in law. The joint degree programs enable students to earn both the degrees (the J.D. and the M.A. or the J.D. and the Ph.D.) in less time than would be required to earn both degrees consecutively. Students wishing to pursue the joint program must be admitted to both the Graduate School and the College of Law. These requirements include both the LSAT and GRE. Admission to one may precede the other. Students are encouraged to announce their intent to seek a joint degree as soon as possible. CLS allows 12 hours of appropriate law school courses to be credited toward the CLS degree. The 12 credits selected from the law curriculum must be approved by the graduate coordinator on the recommendation of the student’s supervisory committee. The College of Law will permit 12 hours of credit earned in graduate courses to be credited toward the J.D.

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**Degrees**

**Doctor of Philosophy**

**Master of Arts**

**Courses**

- CCJ 5934: Contemporary Issues in Criminology and Law
- CCJ 6936: Proseminar in Crime, Law, and Justice
- CJL 6039: Law and Society
- CCJ 6063: Communities and Crime
- CCJ 6658: Drugs, Crime, and Policy
- CCJ 6285: Criminal Justice Process
- CCJ 6619: Crime and the Life Course
- CCJ 6643: White Collar Crime
- CCJ 6705: Research Methods in Crime, Law, and Justice
- CCJ 6708: Research Issues in Crime and Deviance
- CCJ 6712: Evaluation Research
- CCJ 6905: Independent Study
- CCJ 6910: Supervised Research
- CCJ 6920: Seminar in Criminological Theory
- CCJ 6971: Research for Master's Thesis
- CCJ 7742: Research Methods in Crime, Law, and Justice II
- CCJ 7921: Professional Development in Criminology, Law, and Society
- CCJ 7979: Advanced Research
- CCJ 7980: Research for Doctoral Dissertation
- CJC 6120: Corrections and Public Policy
- CJL 6090: Humanitarian Law
- CJL 6091: Law and Social Science
- CJL 6091: Anthropology of Law
- CJL 6095: Human Rights in Cultural Context

**Sociology**

**College**

**College of Liberal Arts and Sciences**

**Department/School**

**Sociology and Criminology & Law Department**

**Sociology Program Information**
Sociologists conduct research to understand the social forces that shape all of our lives, often in hopes of improving everyday life and the life chances of each person. Graduate studies in sociology provide the people skills and technical skills to organize information, communicate analytical research to academic and lay audiences, and prepare well-reasoned and carefully-written reports and documents that contribute to societal well-being. Our award-winning and internationally-known faculty successfully mentor graduate students to complete their studies and become established in their professional academic and nonacademic careers.

We offer particular expertise in these areas: environment and resources, families, aging, gender, health, sexualities, life course, and race-ethnicity in US and global perspectives. There is also considerable expertise in demography, social inequality, Latin American studies, Latino sociology, social psychology, deviance, and political sociology. We take great pride in the fact that our faculty are involved in interdisciplinary research projects that span nearly all of the University's colleges and academic programs, including the School of Natural Resources and the Environment, the Water Institute, the Emerging Pathogens Institute, the Center for Latin American Studies, the Center for European Studies, the Center for Women's Studies and Gender Research, the Health Science Center, and the Jewish Studies Center. Wherever you go on campus, you will most likely find at least one Sociologist from our department making major contributions.

Minimum requirements for the M.A. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Admission to either Sociology graduate program requires a bachelor's degree in Sociology or related social science as approved by the Department. Current UF students may also enter the M.A. program through the combined B.A./M.A. program. The Sociology graduate programs look for mature students with outstanding potential and research interests that complement those of our faculty.

Prospective students should examine the research interests of the Sociology Graduate Faculty to obtain a more detailed sense of faculty expertise and research areas, see the department website: http://soccrim.clas.ufl.edu/graduate/. Applications for admission and fellowship support are due December 1 of each year. Students planning to apply for admission should take the Graduate Record Examination at the earliest possible date.

Degrees Offered with a Major in Sociology

Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

Master of Arts

without a concentration

concentration in Tropical Conservation and Development

Courses

- SYA6018: Classical Social Theories
- SYA6126: Contemporary Sociological Theory
- SYA6305: Methods in Social Research I
- SYA6306: Methods in Social Research II
- SYA6315: Qualitative Research Methods
English Department

Chair: K. Kidd
Graduate Coordinator: S. I. Dobrin

Complete faculty listing by department: Follow this link.

The Department of English offers the Master of Arts degree (thesis and nonthesis options) and the Doctor of Philosophy degree in English, along with the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog. For more information about our programs, please follow the hyperlinks below or visit our website: http://www.english.ufl.edu/programs.html.

Other

Creative Writing

College

College of Liberal Arts and Sciences

Department/School

English Department

Creative Writing Program Information

The Department of English offers the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.F.A. are provided in the Graduate Degrees section of this catalog. Full information concerning courses of study is available from the graduate coordinator.

Degrees

Master of Fine Arts
English Departmental Courses

- AML 6017: Studies in American Literature Before 1900
- AML 6027: Studies in 20th-Century American Literature
- CRW 6130: Fiction Writing
- CRW 6166: Studies in Literary Form
- CRW 6331: Verse Writing
- CRW 6906: Individual Work
- ENC 5236: Advanced Business Writing for Accounting
- ENC 6428: Digital English
- ENG 6016: Psychological Approaches to Literature
- ENG 6075: Literary Theory: Issues
- ENG 6076: Literary Theory: Theorists
- ENG 6077: Literary Theory: Forms
- ENG 6137: The Language of Film
- ENG 6138: Studies in the Movies
- ENG 6906: Individual Work
- ENG 6910: Supervised Research
- ENG 6932: Film and Video Production
- ENG 6971: Research for Master's Thesis
- ENG 7939: Seminar in Variable Topics
- ENG 7979: Advanced Research
- ENG 7980: Research for Doctoral Dissertation
- ENL 6206: Studies in Old English
- ENL 6216: Studies in Middle English
- ENL 6226: Studies in Renaissance Literature
- ENL 6236: Studies in Restoration and 18th-Century Literature
- ENL 6246: Studies in Romantic Literature
- ENL 6256: Studies in Victorian Literature
- ENL 6276: Studies in 20th-Century British Literature
- LAE 6940: Supervised Teaching
- LAE 6947: Writing Theories & Practices
- LIT 5335: Approaches to Children's and Adolescent Literature
- LIT 6037: Studies in Verse
- LIT 6047: Studies in Drama
- LIT 6309: Communications and Popular Culture
- LIT 6326: Postcolonial Studies
- LIT 6308: Studies in Comics and Animation
- LIT 6327: Studies in Folklore
- LIT 6357: African-American or African Diaspora Literature
- LIT 6558: Theoretical Approaches to Black Cultural Studies
- LIT 6855: Issues in Cultural Studies
- LIT 6856: Cultural Studies: Interventions
- LIT 6857: Cultural Studies: Movements
- LIT 6934: Variable Topics
- SPC 6239: Studies in Rhetorical Theory

English

College

College of Liberal Arts and Sciences

Department/School

English Department

English Program Information

The Department of English offers the Master of Arts degree (thesis and nonthesis options) and the Doctor of Philosophy degree in English with the specializations listed below. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog. Specific areas of specialization for the Master of Arts and the Doctor of Philosophy include literature (Medieval, Renaissance, Restoration, and 18th-century and 19th-century British literature, American literature to 1900, contemporary British and American studies, critical theory, cultural studies, film and media studies, feminism, genders and sexualities, postcolonial studies, composition and rhetoric, comics and visual rhetoric, and children's literature).

New graduate students should have completed an undergraduate English major of at least 24 semester hours, and doctoral students should have a Master of Arts degree in English. Full information concerning courses of study is available from the graduate coordinator.
Degrees

Doctor of Philosophy

Master of Arts

English Departmental Courses

- AML 6017: Studies in American Literature Before 1900
- AML 6027: Studies in 20th-Century American Literature
- CRW 6130: Fiction Writing
- CRW 6166: Studies in Literary Form
- CRW 6331: Verse Writing
- CRW 6906: Individual Work
- ENC 5236: Advanced Business Writing for Accounting
- ENC 6428: Digital English
- ENG 6016: Psychological Approaches to Literature
- ENG 6075: Literary Theory: Issues
- ENG 6076: Literary Theory: Theorists
- ENG 6077: Literary Theory: Forms
- ENG 6137: The Language of Film
- ENG 6138: Studies in the Movies
- ENG 6906: Individual Work
- ENG 6910: Supervised Research
- ENG 6932: Film and Video Production
- ENG 6971: Research for Master's Thesis
- ENG 7909: Seminar in Variable Topics
- ENG 7979: Advanced Research
- ENG 7980: Research for Doctoral Dissertation
- ENL 6206: Studies in Old English
- ENL 6216: Studies in Middle English
- ENL 6226: Studies in Renaissance Literature
- ENL 6236: Studies in Restoration and 18th-Century Literature
- ENL 6246: Studies in Romantic Literature
- ENL 6256: Studies in Victorian Literature
- ENL 6276: Studies in 20th-Century British Literature
- LAE 6940: Supervised Teaching
- LAE 6947: Writing Theories & Practices
- LIT 5335: Approaches to Children's and Adolescent Literature
- LIT 6037: Studies in Verse
- LIT 6047: Studies in Drama
- LIT 6308: Communications and Popular Culture
- LIT 6326: Postcolonial Studies
- LIT 6308: Studies in Comics and Animation
- LIT 6327: Studies in Folklore
- LIT 6357: African-American or African Diaspora Lit/Cultures
- LIT 6358: Theoretical Approaches to Black Cultural Studies
- LIT 6855: Issues in Cultural Studies
- LIT 6856: Cultural Studies: Interventions
- LIT 6857: Cultural Studies: Movements
- LIT 6934: Variable Topics
- SPC 6239: Studies in Rhetorical Theory

Geography Department

Chair: M. W. Binford
Graduate Coordinator: C. J. Matyas

Complete faculty listing by department: Follow this link.

The Department of Geography offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The focus of the Department is in human-environment interactions, with "environment" interpreted very broadly. The Department provides four main areas of specialization for graduate research: economic and cultural geography, resource management and land use and land cover change, medical geography, and physical geography. Economic and cultural geography concerns such topics as spatial economic theory; housing and care of the elderly. Resource management and land-use and land-cover change focus on agricultural change and resource conservation and development in the tropics and subtropics, and rural and urban land use and land cover change in tropical and temperate regions. Africa and Latin America are the primary areas of regional emphasis outside of the U.S. Physical geography in the Department concentrates on climatology, fluvial geomorphology, and hydrology. Medical geography studies the geographic aspects of
human health including disease ecology and transmission and healthcare issues. The Department’s extensive geographic information system, remote sensing, and computer cartography teaching and research facilities contribute to and support all of the areas of research. Faculty from the Department are also major participants in the Emerging Pathogens Institute, Florida Climate Institute, Land Use and Environmental Change Institute (L.U.E.C.I.), and the Water Institute. Prospective students should examine the research interests of the Graduate Faculty to obtain a more detailed sense of the Department’s specialties (see the departmental website: www.geog.ufl.edu).

To ensure the incorporation of relevant interdisciplinary perspectives in each student’s program, the Department maintains close ties with other departments in Liberal Arts and Sciences, and with programs in African studies, Latin American studies, the School of Natural Resources and Environment, the Institute on Aging, urban and regional planning, tropical agriculture, tropical ecology, water resources, the Warrington College of Business Administration, the College of Agricultural and Life Sciences, College of Public Health and Health Professions, and the Hydrological Sciences Academic Cluster. Certificates in certain of these fields may be obtained in addition to graduate degrees in geography. Geography administers the Graduate Certificate in Applied Atmospheric Sciences.

A graduate student should preferably have an undergraduate major in geography, but applicants with degrees in one of the social or physical sciences are accepted into the Department’s graduate program. Deficiencies in undergraduate work in geography must be corrected concurrently with registration in graduate level courses. All students in the graduate program are required to take courses in contemporary geographic thought and geographic research skills.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Geography

College

College of Liberal Arts and Sciences

Department/School

Geography Department

Geography Program Information

The Department of Geography offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees Section of this catalog.

Degrees

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences
Master of Arts

without a concentration

corcentration in Applications of Geographic Technologies

corcentration in Geographic Information Systems

corcentration in Tropical Conservation and Development

corcentration in Wetland Sciences

Master of Arts in Teaching

without a concentration

corcentration in Geographic Information Systems

corcentration in Tropical Conservation and Development

corcentration in Wetland Sciences

Master of Science

without a concentration

corcentration in Applications of Geographic Technologies
concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- GEA 6419: Seminar: South America
- GEA 6466: Seminar on Geography of Amazonia
- GEA 6468: Resource Utilization and Conservation in Latin America
- GEO 5305: Environmental Biogeography
- GEO 5346: Natural Hazards
- GEO 5556: Geography of Innovation and Technological Change
- GEO 5605: Advanced Urban Geography
- GEO 5809: Geography of World Agriculture
- GEO 5905: Individual Study: Directed Reading
- GEO 5920: Geography Colloquium
- GEO 5945C: Field Course in Geography
- GEO 6118: Contemporary Geographic Thought and Research
- GEO 6119: Proposal Writing in Geography
- GEO 6160: Introduction to Quantitative Methods for Geographers
- GEO 6161: Intermediate Quantitative Methods for Geographers
- GEO 6166: Advanced Quantitative Methods for Spatial Analysis
- GEO 6255: Climatology
- GEO 6282: Fluvial Morphology
- GEO 6348: Floods Seminar
- GEO 6375: Land Change Science Seminar
- GEO 6429: Seminar: Cultural Geography
- GEO 6435: Seminar in Population
- GEO 6451: Medical Geography
- GEO 6495: Environment and Behavior
- GEO 6905: Individual Work
- GEO 6921: How to Survive and Thrive in Academia
- GEO 6931: Seminar in Cultural and Political Ecology
- GEO 6938: Selected Topics in Geography
- GEO 6971: Research for Master's Thesis
- GEO 7979: Advanced Research
- GEO 7980: Research for Doctoral Dissertation
- GEY 6341: Shelter and Care Options for U.S. Elderly
- GIS 5008C: Maps and Graphs
- GIS 5009C: Advanced Cartography
- GIS 5028C: Advanced Aerial Photo Interpretation
- GIS 5038C: Remote Sensing
- GIS 5107C: Geographic Information Systems in Research
- GIS 5306: Geographic Information Systems Applications in Environmental Systems
- GIS 5540: Business Geography and New Real Estate Market Analysis
- GIS 6104: Spatial Networks
- GIS 6425C: GIS Models for Public Health
- MET 5504: Weather and Forecasting
- MET 6530: Hurricanes
- MET 6565: Seminar in Atmospheric Teleconnections
- MET 6752: Atmospheric Data Analysis

Geological Sciences Department

Chair: P. A. Mueller.
Graduate Coordinator: J. M. Jaeger.

Complete faculty listing Follow this link.
The Department of Geological Sciences is composed of a group of internationally recognized faculty, graduate students, and dedicated support staff. Faculty and students in the Department of Geological Sciences are involved in exciting and groundbreaking research projects throughout the world and in Florida. The Department houses world-class analytical and computing facilities for research and teaching.

The Department has identified six primary areas of emphasis in its research and teaching programs: environmental geology and hydrology, palaeoclimatology, tectonophysics, geochemistry and mineralogy/petrology, marine and coastal geology, and palaeomagnetism. For more detailed information on current departmental activities, faculty, and research centers, see http://web.geology.ufl.edu. The Department has collaborative, interdisciplinary programs of study and research with the Florida Museum of Natural History, the Center for Wetlands Research, the Land Use and Environmental Change Institute (L.U.E.C.I.), and the hydrological sciences cluster.

### Other

**Geology**

**College**

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**Department/School**

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**Geology Program**

The Department of Geological Sciences offers programs leading to the Master of Science (thesis), the Master of Science in Teaching (non-thesis), and the Doctor of Philosophy degrees in geology. Requirements for these degrees are described in the General Information section of this catalog.

For admission to graduate status in the Department of Geological Sciences, a student must have a baccalaureate degree with a major in geology or a related field or its equivalent. Deficiencies in undergraduate preparation can be corrected by completing the undergraduate courses without credit while enrolled as a graduate student.

Applicants should take the GRE general test. The scores of this examination must be reported to the Department of Geological Sciences. Three letters of recommendation are also required for admission to the doctoral program and for financial aid applications at any level.

A minimum of 33 semester hours of graduate level courses are required for the Master of Science in geology. At least 24 hours must be in organized graduate-level geology courses (excluding research, teaching, special projects, etc.). Six hours of thesis research credit are required. All master's degrees are terminal; a separate and new application for admission to the doctoral program is required.

For the Master of Science in Teaching degree, at least 36 hours are required. Six of these hours must be in GLY 6943 and at least 24 must be in organized graduate-level geology courses. The remaining 6 hours must be in approved electives. A minor in education is required. Candidates also must pass the final oral examination.

Of the 90 semester hours required for the Ph.D., 45 must be in formal, organized graduate-level class work (excluding individual work, supervised research and teaching, advanced research, dissertation, special projects, etc.). Remaining credits will be in GLY 7979 and GLY 7980, additional geology courses, or courses in a related field.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

### Degrees

**Doctor of Philosophy**

**without a concentration**

**concentration in Hydrologic Sciences**

**concentration in Tropical Conservation and Development**
concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- BOT 5305: Paleobotany
- ESC 5211: Current Topics in Earth Science for Teachers
  - ESC 5211L
  - GLY 5020
  - GLY 5020L
- GLY 5075
- GLY 5156: Geologic Evolution of North America
- GLY 5246: Geochemistry
- GLY 5245: Hydrogeochemistry
- GLY 5247: Surface and Ground Water Interactions
- GLY 5248: Physical Geochemistry
- GLY 5255: Organic Geochemistry and Geobiology
- GLY 5328: Advanced Igneous Petrology
- GLY 5455: Introduction to Geophysics and Tectonics
  - GLY 5456
- GLY 5466: Seismology and Earth Structure
- GLY 5468: Terrestrial Gravity and Magnetism
History Department

College of Liberal Arts and Sciences

Chair: Sean P. Adams
Graduate Coordinator: Elizabeth Dale

The Department of History offers the following graduate degrees: Master of Arts with fields of specialization in African, Asian, European, Latin American, and United States history, and the Doctor of Philosophy with fields of specialization in African, European, Latin American, and United States history. In addition to materials required by the Graduate School for admission, applicants must send directly to the History Department the following evidence of aptitude and interest: Three recommendations, from persons competent to evaluate your potential for graduate work; A 3- to 5-page essay identifying your career goals and particular areas of interest; a sample of your written work in history. Interested students should consult the department web page for more information.

Other

History

College

College of Liberal Arts and Sciences

History Department

History Program

The Department of History offers the following graduate degrees: Master of Arts degree with fields of specialization in African, Asian, European, Latin American, and United States history and the Doctor of Philosophy degree with fields of specialization in African, European, Latin American, and United States history, or with a dual major which allows students to create their own major fields.

Master of Arts: This degree serves to prepare students for admission to a Ph.D. program, for a teaching career in high school or community colleges, or for a career in government or business.

Fields of specialization:

- African (East Africa, Southern Africa, West Africa)
- European (medieval, early modern, or modern)
- Latin American (colonial Latin America, post-Colonial Latin America, Brazil, and the Caribbean or Spanish America)
- United States history (early America, 19th century, 20th century)

Thesis option requirements:

- A minimum of 30 credit hours
- At least 12 graduate-level regular course credit hours in your major field. In European, you must take at least two seminars in your area of specialization. In U.S. history, you must take the
19th-century America readings seminar, either the 20th-century or early America readings seminar, and at least one research seminar. In Latin American and African history, you must take the relevant readings seminars in your area of specialization, one other readings seminar, and at least one research seminar.

- At least 6 graduate-level regular course credit hours outside the major field (but in the Department of History). We recommend that you invest these regular course hours in readings seminars.

- Take 3 hours of historiography (HIS 6061) by the fourth semester of graduate study.

- Take 3 regular course credit hours from outside the Department. These should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.

- Complete a master's thesis. The semester you graduate, you must be registered for a minimum of 3 thesis research hours (HIS 7980) in the fall or spring term or 2 in a summer term. Your thesis should demonstrate your ability to handle the primary-source material of your field, and a working knowledge of the secondary literature; and should demonstrate your ability to present research results in a coherent, well-written study. The student must complete the thesis and make it available to readers 2 weeks before the oral examination, complete the application for the degree at the Office of the University Registrar before the deadline, and take the examination.

- Each student must pass a final comprehensive oral examination at the end of the program.

Non-thesis option requirements:

- A minimum of 30 credit hours.

- At least 12 graduate-level regular course credit hours inside your major field. In European, you must take at least two seminars in your area of specialization. In U.S. history, you must take the 19th-century American readings seminar, either the 20th-century or the early America readings seminar, and at least one research seminar. In Latin American or African history, you must take the relevant readings seminars in your area of specialization, one other readings seminar, and at least one research seminar.

- At least 6 graduate-level regular course credit hours outside your major field (but in the Department of History). We recommend that you invest these regular course hours in readings seminars.

- Take 3 hours of historiography (HIS 6061) by your fourth semester of graduate study.

- Take 3 regular course credit hours from outside the Department; these should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.

- Complete a research seminar and/or a nonthesis project in history. Your primary goal in either is to complete an article-length essay (approximately 35 to 40 pages) of publishable or near-publishable quality. The essay should be based largely on primary sources.

- You must pass a final comprehensive oral and written examination conducted by your supervisory committee.

Supervisory committee for the M.A.: The committee normally consists of the chair and two other members of the graduate faculty. Additional members may be added if desirable. The committee assists in planning and supervising the student's program and conducts the final examination. The chair is also the thesis director if that option is chosen.

Duration: The M.A. program can be completed in 3 semesters of full-time registration but may take longer. The Department believes that normally no more than 4 semesters of full-time registration should be spent on the degree. These semesters need not be consecutive. The Board of Education has established 60 credit hours as a maximum for the master's degree. Up to 6 credits of graduate-level courses taken at another school with a grade of B or better may be transferred into the master's program if approved by the Graduate School.

Bachelor's/master's program: The Department offers a combined 4/1 degree program that enables outstanding undergraduates to obtain both the B.A. and M.A. degrees in history after successful completion of 150 credit hours. The program is designed for the students who wish to continue their education in history past the bachelor's level but do not intend to pursue a doctorate in history or for students who wish to expand their training in a specific field before moving on to a doctoral program. The department offers a 4/1 degree program in the standard M.A. fields of study and offers two specialized tracks: oral history and academic publishing. Please see the Department website for more information. Students in this program are not eligible for departmentally controlled financial aid.

Doctor of Philosophy requirements:

- Professional competence in your major field, or major fields for students pursuing a dual degree.

- Knowledge of a minor, which may be drawn from the approved major fields of specialization for the doctorate (African, European, Latin American, or U.S. history), from approved minor fields (Atlantic history, gender, legal history), or may be self designed as a thematic research or teaching field. It must include at least 3 hours outside the historical area that defines your major field. Note: Students pursuing a dual major do not take a department minor field.

- At least 3 regular course credit hours from outside the Department; these should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.

- Pass a set of written and oral qualifying examinations testing competence in major and additional fields and your knowledge of the nature of history and the historian's task.

- A dissertation for which credit is given in HIS 7980.

History/Law joint degree program: The Department of History and the College of Law offer a program in legal history leading to either the M.A. or a Ph.D. degree in history and the J.D. in law. Because the faculties of history and law stress interdisciplinary training, students admitted to the joint degree program will be allowed to count a significant number of hours toward both degrees. Applicants must be accepted by both the Graduate School and the College of Law. Normally, students will complete the course and examination requirements of both degrees in 4 years. Students may begin their first year of work in either history or law, but they must complete the first year of law school within 1 year and they must do so within the first 2 years after admission to the joint degree program. For further information write to the Legal History Coordinator, Department of History, University of Florida, Box 117320, Gainesville, FL 32611-7320.

Degrees

Doctor of Philosophy without a concentration

concentration in Historic Preservation
concentration in Women's/Gender Studies

Master of Arts

without a concentration

concentration in Historic Preservation

concentration in Jewish Studies

Courses

- AFH 5297: History of African Agriculture
- AFH 5348: History of West Africa
- AFH 5458: Southern Africa
- AFH 5934: Topics in African History
- AFH 6259: Seminar in Modern Africa
- AFH 6805: Theories and Methods of African History
- AFH 6934: Africa
- AFH 6936: Readings in African History
- AMH 5405: The South to 1860
- AMH 5905: Special Studies
- AMH 5930: Topics in United States History
- AMH 6198: Early American Society
- AMH 6199: Nineteenth Century America
- AMH 6290: Modern America
- AMH 6356: Research in U.S. History
- AMH 6406: Readings in Southern History, 1607-1865
- AMH 6465: Seminar in U.S. Urban History
- AMH 6506: Seminar in American Labor History
- AMH 6516: Seminar in American Foreign Relations and Expansion
- AMH 6557: Seminar in Constitutional or Legal History of the United States
- ASH 5388: Topics in East Asian History
- EUH 5546: Topics in British History
- EUH 5934: Topics in European History
- EUH 6126: Readings in Medieval History
- EUH 6174: Conversion in the Middle Ages
- EUH 6175: Ethnicity in the Middle Ages
- EUH 6176: Villages and Peasants in the Middle Ages
- EUH 6177: Economy and Society in Late Antiquity and the Early Middle Ages
- EUH 6213: Europe, 1500-1763
- EUH 6289: Readings, Modern Europe
- EUH 6469: Modern German History
- EUH 6935: Readings, Early Modern Europe
- EUH 6937: Readings in Mediterranean History
- HIS 5450: Slavery in the New World: Comparative Perspectives
- HIS 5484: Science and the Enlightenment
- HIS 5485: Special Studies in the History of Science
- HIS 6000: Historical Method
- HIS 6001: Introduction to Historiography
- HIS 6416: Problems in Comparative Legal History
- HIS 6445: Postcolonial Theories
- HIS 6469: Topics in Historiography of History of Science
- HIS 6478: Topics in the Scientific Revolution
- HIS 6480: Pre-Newtonian Sciences
- HIS 6488: Readings in the History of Science
- HIS 6905: Individual Study
- HIS 6910: Supervised Research
- HIS 6940: Supervised Teaching
- HIS 6943: Internship in College Teaching
- HIS 6957: Nonthesis Project in History
Department of Languages, Literatures and Cultures

Complete faculty listing by department: Follow this link.

Other

French and Francophone Studies

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

French and Francophone Studies Program Information

Bachelor’s/master's program: French and Francophone Studies offers a combined 4/1 degree program that enables outstanding undergraduates to obtain both the B.A. and M.A. degrees after successful completion of 152 credit hours. The program is designed for the students who wish to continue their education in French and Francophone Studies past the bachelor’s level but do not intend to pursue a doctorate or for students who wish to expand their training in a specific field before moving on to a doctoral program. Since students in the bachelor’s/master’s program have a graduate classification, students receiving undergraduate scholarships or Pell grants should check with the funding provider to make sure that they will not lose eligibility.

Degrees

Master of Arts

Master of Arts in Teaching

Courses

- FLE 6385: Foreign Languages Teaching Methods
- FRE 6060: Beginning French for Graduate Students I
- FRE 6061: Beginning French for Graduate Students II
- FRE 6466: Advanced Translation and Stylistics
- FRE 6735: Special Studies in French Linguistics
- FRE 6736: The French language in the Americas
- FRE 6785: French Phonetics and Phonology
- FRE 6827: Sociolinguistics of French
- FRE 6845: History of the French Language
- FRE 6855: Structure of French
- FRE 6866: French in the 21st Century
- FRE 6940: Supervised Teaching
- FRE 6943: Romance Language Teaching Methods
- FRE 6945: Practice in Advanced College Teaching
- FRE 6956: Overseas Studies in French
- FRW 6217: Seventeenth-Century French Prose
- FRW 6276: Readings in Eighteenth-Century Literature
- FRW 6288: Twentieth-Century French Novel
- FRW 6315: Seventeenth-Century French Drama
- FRW 6328: Twentieth-Century French Theater
- FRW 6346: French Poetry of the Renaissance
- FRW 6355: Modern French Poetry
- FRW 6396: French Cinema
- FRW 6416: Later French Medieval Literature
- FRW 6536: The Romantic Period
- FRW 6556: French Realism and Naturalism
- FRW 6715: The Philosophic Movement
- FRW 6780: Studies in Francophone Literature and Culture (Excluding the Caribbean and Sub-Saharan Africa
- FRW 6805: Introduction to Graduate Study and Research
- FRW 6825: French Critical Theory
  - FRW 6827
- FRW 6900: Special Study in French Literature
- FRW 6905: Individual Work
- FRW 6910: Supervised Research
- FRW 6938: Seminar in French Literature
- FRW 6971: Research for Master's Thesis
- FRW 7979: Advanced Research
- FRW 7980: Research for Doctoral Dissertation

German

Chair: M. Watt
Graduate Coordinator: W. Hasty

Complete faculty listings: Follow this link.

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

Degrees

Doctor of Philosophy

without a concentration

concentration in Women's/Gender Studies

Master of Arts
German Literature and Cinema

- GET 6295: Weimar Cinema
- GET 6299: New German Cinema and Its Legacy
- GEW 6205: Foundations of Literary Study
- GEW 6266: History of the German Novel
- GEW 6305: Studies in German Drama and Theater
- GEW 6405: Medieval and Renaissance Literature
- GEW 6425: From Luther to Lessing: Early Modern German Literature
- GEW 6535: German Classical and Romantic Literature
- GEW 6558: Young Germany, Biedermeier, Realism, and Naturalism
- GEW 6725: Culture and Society in the Weimar Republic
  - GEW 6726
- GEW 6735: Modern German Literature
- GEW 6736: Contemporary German Literature
- GEW 6745: Literature and Culture in the Third Reich
- GEW 6826: German Literary Theory
- GEW 6900: Seminar in Germanic Languages and Literatures
- GEW 6901: Special Study in Germanic Languages and Literatures
- GEW 6905: Independent Study
- GEW 6910: Supervised Research
- GEW 6971: Research for Master’s Thesis
- GEW 7970: Advanced Research
- GEW 7980: Research for Doctoral Dissertation

German Language

- GER 6060: Beginning German for Graduate Students I
- GER 6061: Beginning German for Graduate Students II
- GER 6505: German Culture
- GER 6940: Supervised Teaching

Romance Languages (Language, Literature and Culture)

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

Degrees Offered with a Major in Romance Languages

Doctor of Philosophy

concentration in French and Francophone Studies

Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW 6930: Special Study in Romance Languages and Literatures
Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6715: Formal Instruction and Acquisition of Spanish
- SPN 6735: Special Study in Spanish Linguistics
- SPN 6745: History of the Spanish Language
- SPN 6827: Sociolinguistics of the Spanish-Speaking World
- SPN 6835: Spanish and Spanish-American Dialectology
- SPN 6845: History of the Spanish Language
- SPN 6848: Medieval Spanish Linguistics
- SPN 6855: Structure of Spanish
- SPN 6856: Spanish in Contact: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FOL 6943: Romans Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6236: Spanish-American Narrative from the origins to Criollismo
- SPW 6269: Spanish Novel of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6286: Contemporary Spanish-American Narrative II
- SPW 6306: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPW 6425: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6729: The Generation of 1898
- SPW 6806: Introduction to Graduate Study and Research
- SPW 6902: Special Study in Spanish or Spanish-American Literature
- SPW 6906: Individual Work
- SPW 6910: Supervised Research
- SPW 6934: Seminar in Spanish American Literature and Culture
- SPW 6938: Seminar in Spanish Literature and Culture
- SPW 6971: Research for Master's Thesis
- SPW 7979: Advanced Research
- SPW 7980: Research for Doctoral Dissertation

Portuguese

- POW 6276: Twentieth-Century Brazilian Novel
- POW 6385: Brazilian Lyric
- POW 6386: Brazilian Drama
- POW 6905: Individual Work
- POW 6930: Rotating Topics in Brazilian or Portuguese Literature

Latin American Studies Department

Director: C. D. Deere.
Graduate Coordinator: R. F. Brown.

Complete faculty listing by department: Follow this link.

The Center for Latin American Studies offers the following graduate programs:

- Latin American Studies
- Sustainable Development Practice

Other

Latin American Studies
College of Liberal Arts and Sciences

Latin American Studies Department

Latin American Studies Program

The Center for Latin American Studies offers the following graduate programs:

- An interdisciplinary Master of Arts degree
- Graduate certificate and advanced graduate certificate in Latin American studies in conjunction with disciplinary degrees in the Colleges of Agricultural and Life Sciences; Design, Construction, and Planning; Business Administration; Education; Fine Arts; Journalism and Communications; Law; and Liberal Arts and Sciences.

The graduate program in Latin American studies relies on over 250 courses with Latin American content taught in more than 35 academic units of the above colleges. The degree and certificate programs in Latin American studies are described on their website [www.latam.ufl.edu/academics/graduate-programs](http://www.latam.ufl.edu/academics/graduate-programs). Complete course listings are available at the Center for Latin American Studies (319 Grinter Hall) and on the website.

Degrees

Master of Arts

- without a concentration
- concentration in Tropical Conservation and Development

Latin American Studies Courses

- FOT 6940: Translation Studies Practicum
- LAS 6008: Ecological Principles
- LAS 6220: Issues and Perspectives in Latin American Studies
- LAS 6290: Tropical Conservation and Development
- LAS 6291: Conservation and Development Skills
- LAS 6292: Tropical Conservation and Development Research Methods
- LAS 6293: Design and Methods of Research in Latin American Studies
- LAS 6295: Latin American Business Environment
- LAS 6296: Latin American Business Topics
- LAS 6905: Individual Work
- LAS 6938: Seminar in Modern Latin American Studies
- LAS 6940: Tropical Conservation and Development Practicum
- LAS 6943: Development Theory and Practice in Latin America
- LAS 6971: Research for Master's Thesis

Sustainable Development Practice
The Master of Sustainable Development Practice (MDP) Program offers the following academic programs:

- An interdisciplinary Master’s degree in Sustainable Development Practice
- A graduate certificate in Sustainable Development Practice

The MDP Program is jointly administered by the Center for Latin American Studies and the Center for African Studies. The Master’s degree is described in the Other Master’s Degrees section of the Graduate Catalog. The certificate program is described in the Interdisciplinary Graduate Certificates section of the Graduate Catalog. More information about the MDP Program can also be found at the website http://www.africa.ufl.edu/mdp/index.html.

Degrees

Master of Sustainable Development Practice

Sustainable Development Courses

- AFS 6905: Individual Work in African Studies
- EVR 5705: Natural Resources and Innovation Systems
- LAS 6291: Conservation and Development Skills
- LAS 6938: Seminar in Modern Latin American Studies
- LAS 6943: Development Theory and Practice in Latin America
- PHC 6445: Global Public Health and Development II
- PHC 6764: Global Public Health and Development I

African Studies Courses

- AFS 5061: Africana Bibliography
- AFS 6060: Research Problems in African Studies
- AFS 6305: Development Theory and Practice Intro
- AFS 6307: Foundations of Economics for Sustainable Development
- AFS 6357: Anthropology of Humanitarian Intervention
- AFS 6905: Individual Work in African Studies

Latin American Studies Courses

- FOT 6940: Translation Studies Practicum
- LAS 6008: Ecological Principles
- LAS 6220: Issues and Perspectives in Latin American Studies
- LAS 6290: Tropical Conservation and Development
- LAS 6291: Conservation and Development Skills
- LAS 6292: Tropical Conservation and Development Research Methods
- LAS 6293: Design and Methods of Research in Latin American Studies
- LAS 6295: Latin American Business Environment
- LAS 6296: Latin American Business Topics
- LAS 6905: Individual Work
- LAS 6938: Seminar in Modern Latin American Studies
- LAS 6940: Tropical Conservation and Development Practicum
- LAS 6943: Development Theory and Practice in Latin America
Additional Course Offerings

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6308: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
PHC 6917: Supervised Research Project
PHC 6601: Seminar in Contemporary Public Health Issues
PHC 6931: Seminars in Public Health
PHC 6937: Special Topics in Public Health
PHC 6945: Public Health Pracicum
PHC 6946: Public Health Internship
PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
PHC 7038: Psychiatric Epidemiology
PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
PHC 7727: Grant Writing for Population Health Research
PHC 7752: Seminar in Instrument Development for Public Health
PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
PHC 7907: Social and Behavioral Science Journal Club
PHC 7979: Advanced Research
PHC 7980: Research for Doctoral Dissertation
PHT 5156: Exercise Physiology
PHT 6125C: Concepts in Clinical Biomechanics
PHT 6127C: Control of Gait and Posture
PHT 6167C: Applied Neurophysiology for Physical Therapy
PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
PHT 6615L: Research Instrumentation in Physical Therapy
PHT 6718: Neuroplasticity: A Foundation for Neurerehabilitation
RSD 6110: Rehabilitation Science Theory and Application I
RSD 6112: Rehabilitation Science Theory and Application II
RSD 6114: Rehabilitation in the United Kingdom
RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
RSD 6700: Rasch Measurement: Introduction and Application
RSD 6705: Research Methods in Rehabilitation
RSD 6706: Scientific Writing for the Rehabilitation Professional
RSD 6900: College Classroom: Teaching Process and Practice
RSD 6905: Individual Work
RSD 6910: Supervised Research
RSD 6930: Special Topics in Rehabilitation Science
RSD 6940: Supervised Teaching
RSD 7979: Advanced Research
RSD 7980: Research for Doctoral Dissertation
RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
RCS 6066: Rehabilitation Issues in Human Growth and Development
RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
RCS 6412: Rehabilitation Counseling Theory and Practice
RCS 6470: Human Sexuality and Disability
RCS 6601: Forensic Rehabilitation Consultation I
RCS 6602: Forensic Rehabilitation Consultation II
RCS 6625: Community Counseling and Case Management
RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
RCS 6740: Rehabilitation Research
RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
RCS 6801: Rehabilitation Counseling Practicum
RCS 6825: Internship in Rehabilitation Counseling
RCS 6905: Individual Work
RCS 6910: Supervised Research
RCS 6931: Special Topics
RCS 6940: Supervised Teaching
RCS 6945: Advanced Rehabilitation Counseling Practicum
RCS 6971: Research for Master's Degree

Linguistics Department

Chair: F. McLaughlin
Graduate Coordinator: E. Potsdam

Complete faculty listing by department: Follow this link

The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

Requirements for these degrees are given in the Graduate Degrees section of this catalog. For detailed information on the program, please visit the link below. For further information on the program, including financial aid, please visit http://lin.ufl.edu.

Other
Linguistics

College

College of Liberal Arts and Sciences

Department/School

Linguistics Department

Linguistics Program Information

The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

For detailed information on the program, including financial aid, please visit the website http://lin.ufl.edu.

The Certificate in Second Language Acquisition and Teaching is offered to University of Florida graduate degree-seeking students in linguistics and related disciplines.

As part of its service to the University community, Linguistics also offers English as a Second Language training for international applicants and admitted students. These programs, the English Language Institute (ELI), Academic Written English (AWE), and Academic Spoken English (ASE), are described in the Student Services section of this catalog. This information, along with links to the application form, are available at http://lin.ufl.edu.

Applicants who lack a background in linguistics should develop basic competency in the core areas before commencing graduate work. These deficiencies can be met by taking LIN 3010, LIN 3201, and LIN 3460 or the equivalent.

Degrees

Doctor of Philosophy

Master of Arts

Linguistics Departmental Courses

- EAP 5835: Academic Spoken English I
- EAP 5836: Academic Spoken English II
- EAP 5837: Academic Spoken English Tutorial
- EAP 5845: Academic Writing
- EAP 5846: Research and Technical Writing
- EAP 5937: Special Topics in Academic Spoken English
- LIN 5657: Gender and Language
- LIN 5741: Applied English Grammar
- LIN 6084: Introduction to Graduate Research
- LIN 6165: Field Methods
- LIN 6208: Phonetics for Linguists
- LIN 6226: Advanced Phonetics
- LIN 6323: Phonology
- LIN 6341: Issues in Phonology
- LIN 6402: Morphology
- LIN 6410: Issues in Morphology
- LIN 6501: Syntax
- LIN 6520: Issues in Syntax
Mathematics Department

Chair: D. Cenzer
Graduate Coordinator: J. A. Larson

Complete faculty listing [Follow this link](http://www.math.ual.edu).

The Department of Mathematics offers the degrees of Doctor of Philosophy, Master of Science and Master of Arts, and the Master of Arts in Teaching and Master of Science in Teaching, each with a major in mathematics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

Interdisciplinary Programs — The Department offers a co-major program in conjunction with the Statistics Department leading to the Doctor of Philosophy degree in mathematics and statistics. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Statistics, Industrial and Systems Engineering, and Finance, Insurance, and Real Estate Departments.

Combined Program — The Department has an accelerated bachelor's/master's program designed for superior undergraduate students who have the ability to pursue such a plan of study leading to the Master of Science or Master of Arts degree. The main feature of the program is that up to 12 semester hours of approved graduate level mathematics courses may be used as dual credit for both the undergraduate and the graduate degree. All other requirements for both the bachelor's degree and the master's degree must be met. For admission requirements for this program, see the undergraduate coordinator.

There are opportunities for concentrated study in a number of specific areas of pure and applied mathematics at both the master's and doctoral levels. The faculty directs studies and research in algebra, number theory, analysis, geometry, topology, logic, differential equations, dynamical systems, probability theory, numerical analysis, numerical optimization, approximation theory, combinatorial analysis, graph theory, computer applications, biomathematics, mathematical physics, inverse problems, and medical imaging. In addition to the requirements of the Graduate School, the minimum prerequisite for admission to the program of graduate studies in mathematics is the completion, with an average grade of B or better, of at least 24 credits of undergraduate mathematics, including a full year of calculus and three semesters of appropriate work beyond the calculus. The most appropriate courses for this purpose are advanced calculus, linear algebra and abstract algebra. Students lacking part of the requirements will be required to make up the deficiency early in their graduate work. Prerequisites to individual courses should be determined before registration by consultation with the instructor concerned. Some of the courses listed are offered only as needed. Since times of offering courses are estimated a year in advance, certain changes may be made if needs are known by the Department. The courses MAA 5228, MAA 5290, MAS 5311, and MAS 5312 are required for all advanced degree programs in mathematics. The requirements for the master's degree nonthesis option include a minimum of 32 semester hours of course work. Students pursuing the master's degree in mathematics must pass two comprehensive written examinations, one in algebra and one in analysis. Students pursuing the master's degree with a specialization in applied mathematics have two options: the examination option requires passage of the algebra and analysis examinations; the thesis option requires instead the preparation and oral defense of a thesis on original research conducted under the supervision of a faculty adviser. Students pursuing the Master of Arts in Teaching or the Master of Science in Teaching degree must prepare a teaching portfolio and pass an oral examination. Each of these programs normally requires two years for completion. The requirements for a doctoral degree include 36 hours of 6000-level course work in mathematics; no hours of teaching, colloquium, dissertation, or individual work will count toward this requirement. To become a candidate for the doctoral degree, the student must pass a comprehensive preliminary examination and written and oral components administered by the Department. The doctoral student must also pass a reading knowledge examination in one of the following foreign languages: French, German, or Russian. The dissertation is an important requirement for the doctoral degree in mathematics. The topic for the dissertation may be chosen from a number of areas of current research in pure and applied mathematics. Every graduate student is expected to attend the regular colloquium. Details concerning all requirements for graduate degrees in mathematics may be obtained by writing the Mathematics Department Graduate Selection Committee or consulting the Department website, [http://www.math.ual.edu](http://www.math.ual.edu).

Other

Mathematics

College

College of Liberal Arts and Sciences

Department/School

Mathematics Department
Degrees

Doctor of Philosophy

without a concentration

concentration in Imaging Science and Technology
concentration in Quantitative Finance

Master of Arts in Teaching

Master of Science

Master of Science in Teaching

Courses

- MAA 5104: Advanced Calculus for Engineers and Physical Scientists I
- MAA 5105: Advanced Calculus for Engineers and Physical Scientists II
- MAA 5228: Modern Analysis I
- MAA 5229: Modern Analysis II
- MAA 5404: Introduction to Complex Variables for Engineers and Physical Scientists
- MAA 6236: Mathematical Analysis for Statisticians
- MAA 6406: Complex Analysis I
- MAA 6407: Complex Analysis II
- MAA 6616: Analysis I
- MAA 6617: Analysis II
- MAA 7526: Advanced Topics in Functional Analysis I
- MAA 7527: Advanced Topics in Functional Analysis II
- MAD 6206: Combinatorial Theory I
- MAD 6207: Combinatorial Theory II
- MAD 6406: Numerical Linear Algebra
- MAD 6407: Numerical Analysis
- MAD 7396: Topics in Combinatorial Theory I
- MAD 7397: Topics in Combinatorial Theory II
- MAE 6940: Supervised Teaching
- MAE 6943: Internship in College Teaching
- MAP 5304: Intermediate Differential Equations for Engineers and Physical Scientists
- MAP 5345: Introduction to Partial Differential Equations
- MAP 5489: Modeling in Mathematical Biology
- MAP 6208: Numerical Optimization
- MAP 6327: Applied Differential Equations I
- MAP 6356: Partial Differential Equations I
- MAP 6357: Partial Differential Equations II
- MAP 6375: Numerical Partial Differential Equations
- MAP 6376: Finite Element Method
- MAP 6467: Stochastic Differential Equations and Filtering Theory I
- MAP 6468: Stochastic Differential Equations and Filtering Theory II
- MAP 6472: Probability and Potential Theory I
- MAP 6473: Probability and Potential Theory II
- MAP 6487: Biomathematics Seminar I
- MAP 6488: Biomathematics Seminar II
- MAP 6505: Mathematical Methods of Physics and Engineering
- MAP 6506: Mathematical Methods of Physics and Engineering II
- MAP 6941: Internship in Applied Mathematics
- MAP 7436: Seminar in Applied Mathematics I
- MAP 7437: Seminar in Applied Mathematics II
- MAS 5311: Introductory Algebra I
- MAS 5312: Introductory Algebra II
Philosophy Department

Chair: G. Witmer.
Graduate Coordinator: C. Liu.

Complete faculty listing by department: Follow this link.

The Department offers the Master of Arts and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog.

Admission to the program requires a bachelor’s degree in philosophy or sufficient course work in philosophy, as determined by the department. Applicants are evaluated on the basis of academic achievement, GRE scores, three letters of recommendation, a statement of purpose, and a sample essay in philosophy. Students may be admitted as for a terminal M.A. degree or for the Ph.D. Program.

The M.A. degree requires two years (36 hours) of course work. All graduate students take foundational courses in their first four semesters: the graduate Proseminar (PHI 5935), Graduate Logic (PHI 5135), a course in Ancient Philosophy (PHP 5005 or PHP 5015), a course in Modern Philosophy (PHI 5405 or PHI 5406), and other Foundations of Analytic Philosophy (PHP 5785) or Epistemology (PHI 5365).

The Ph.D. requires 90 credit hours, which may include 36 used as credit for the M.A. In addition to the foundational courses required for the M.A., the Ph.D. requires Ethical Theory (PHI 5665) and both of PHP 5785 and PHI 5365. It also requires six courses at the advanced 6000-level, 3 proposal research hours and 12 doctoral research hours, and of course the successful completion and defense of a dissertation.

Further information about the department’s programs and admissions can be obtained on the department’s website web.phil.ufl.edu or by contacting the Graduate Coordinator, 330 Griffin-Floyd Hall, (352)392-2064 or gradcoord@phil.ufl.edu.

Other

Philosophy

College

College of Liberal Arts and Sciences

Department/School

Philosophy Department

Degrees

Doctor of Philosophy
Master of Arts

Master of Arts in Teaching

Courses

- PHH 5405: Modern Philosophy I
- PHH 5406: Modern Philosophy II
- PHH 5605: Studies in Continental Philosophy
- PHH 6105: Seminar in Ancient Philosophy
- PHH 6425: Seminar in Modern Philosophy
- Phi 5135: Graduate Logic
- Phi 5225: Philosophy of Language
- Phi 5325: Philosophy of Mind
- Phi 5365: Epistemology
- Phi 5405: Philosophy of Science
- Phi 5425: Philosophy of Social Science
- Phi 5505: Metaphysics
- Phi 5665: Ethical Theory
- Phi 5905: Individual Work
- Phi 5934: Topics in Philosophy
- Phi 5935: Proseminar
- Phi 6105: Seminar in Logic
- Phi 6226: Seminar in Philosophy of Language
- Phi 6306: Seminar in Epistemology
- Phi 6326: Seminar in Philosophy of Mind
- Phi 6405: Seminar in Philosophy of Science
- Phi 6505: Seminar in Metaphysics
- Phi 6667: Seminar in Ethics
- Phi 6787: Seminar in Continental Philosophy
- Phi 6905: Individual Work
- Phi 6910: Supervised Research
- Phi 6934: Special Topics
- Phi 6940: Supervised Teaching
- Phi 6971: Research for Master's Thesis
- Phi 7979: Advanced Research
- Phi 7980: Research for Doctoral Dissertation
- PHP 5005: Ancient Philosophy I
- PHP 5015: Ancient Philosophy II
- PHP 5785: Foundations of Analytic Philosophy
- PHP 6415: Seminar in Kant
- PHP 6795: Seminar in Analytic Philosophy
- PHP 6930: Seminar in a School or Thinker

Physics Department

College of Liberal Arts and Sciences

Chair: Kevin Ingersent
Graduate Coordinator: Guido Mueller

Complete faculty listings: Follow this link.

The Department of Physics offers the Master of Science (thesis or nonthesis) and the Doctor of Philosophy degrees. The nonthesis Master of Science in Teaching is also offered. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Areas of specialization for graduate research include astrophysics and cosmology, atomic and molecular physics, biological physics, chemical physics, condensed matter physics (theory and experiment), nuclear physics, particle physics (theory and experiment), statistical physics, and low temperature physics.

Special interdisciplinary research programs include the Institute for Fundamental Theory (carried out jointly with the Department of Mathematics), the Institute for Theoretical and Computational Studies in Molecular and Materials Science (carried out jointly with the Department of Chemistry), the Institute of High Energy and Particle Astrophysics, and Microfabritich (jointly with the College of Engineering). A curriculum is offered by the Center for Chemical Physics for students interested in research related to chemistry or chemical engineering. The Center for Condensed Matter Sciences provides opportunities for investigations in a diverse range of subjects and fields, including the Microkelvin Research Laboratory. The University of Florida operates the National High Magnetic Field Laboratory jointly with Florida State University and Los Alamos National Laboratory.

The core curriculum is designed to provide a thorough foundation for all physics graduate students. It consists of PHY 6346, PHY 6347, PHY 6536, and PHY 6645. All students must pass a preliminary examination at the undergraduate level. All degree candidates are required, as part of their graduate education, to participate continuously in the research and/or teaching programs of the Department.
The Department of Physics is dedicated to advancing the frontiers of knowledge in both pure and applied physics, thus providing an exciting intellectual climate for our graduate students. Our research activities include astrophysics (particle astrophysics, cosmology and gravitation), condensed matter and materials physics (experimental, theoretical and computational), low temperature physics, elementary particle physics (experimental and theoretical) and biological physics. With such diversity in research offerings you will have an opportunity to pursue research in most areas of contemporary physics. In spite of the size of our Department, we are committed to designing a program of graduate study that is tailored to your experience and interests. Our Graduate Coordinator sees that each of our graduate students receives personal attention and advice as they progress toward their advanced degree.

Graduate Program Overview

Preliminary Examination:
- Covers undergraduate subject matter
- Given twice a year; two years to complete

Graduate Core Courses
- Two semesters of quantum mechanics
- Two semesters of electromagnetism
- One semester of classical mechanics
- One semester of statistical mechanics
- Waivers given for equivalent work at other institutions
- Completed in first or second years

Distribution Requirement
- Advanced course work in three subfields
- Usually completed by the end of the second year

Highlights
- Involvement in research in first summer (or sooner)!
- Diversity of research interdisciplinary options!
- Individualized program designed to meet the unique background of each student!

For more information, please see our website: http://www.physics.ufl.edu.

Degrees

Doctor of Philosophy

without a concentration

concentration in Imaging Science and Technology
Master of Science

Master of Science in Teaching

Courses

- AST 6416: Physical Cosmology
- PHY 5277: Physics of Accident Reconstruction and Biomechanics
- PHY 6905: Individual Work
- PHY 6246: Classical Mechanics
- PHY 6346: Electromagnetic Theory I
- PHY 6347: Electromagnetic Theory II
- PHY 6536: Statistical Mechanics I
- PHY 6555C: Cryogenics
- PHY 6645: Quantum Mechanics I
- PHY 6646: Quantum Mechanics II
- PHY 6648: Quantum Field Theory I
- PHY 6905: Individual Work
- PHY 6910: Supervised Research
- PHY 6920: Departmental Colloquium
- PHY 6932: Seminar in Molecular and Computational Physics
- PHY 6943: Internship in College Teaching
- PHY 6971: Research for Master's Thesis
- PHY 7097: Advanced Topics in Theoretical Physics
- PHY 7689: Quantum Field Theory II
- PHY 7939: Special Topics
- PHY 7979: Advanced Research
- PHY 7980: Research for Doctoral Dissertation
- PHZ 5155C: Physical Modeling and Simulation
- PHZ 5245: Introduction to Magnetic Resonance
- PHZ 5354: Introduction to Particle Physics
- PHZ 5405: Introduction to Solid-State Physics
- PHZ 6156: Computer Methods in Physics
- PHZ 6166: Qualitative Methods of Theoretical Physics
- PHZ 6355: Elementary Particle Physics I
- PHZ 6358: Standard Model of Elementary Particles I
- PHZ 6391: Seminar in Astrophysics
- PHZ 6392: Seminar in Particle Physics
- PHZ 6426: Solid State I
- PHZ 6493: Seminar in Condensed Matter Physics
- PHZ 6607: Special and General Relativity
- PHZ 7357: Elementary Particle Physics II
- PHZ 7359: Standard Model of Elementary Particles II
- PHZ 7427: Solid State II
- PHZ 7428: Modern Condensed Matter Physics
- PHZ 7429: Phases of Condensed Matter
- PHZ 7608: Special and General Relativity II

Plant Molecular and Cellular Biology Department

College of Agricultural and Life Sciences
College of Liberal Arts and Sciences
College of Medicine

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology, within the colleges of Agriculture and Life Sciences, Medicine, and Liberal Arts and Sciences.

Other

Plant Molecular and Cellular Biology

College
Plant Molecular and Cellular Biology (PMCB) is an interdisciplinary and interdepartmental graduate degree program that emphasizes understanding the molecular and cellular mechanisms that mediate plant development, adaptation, and evolution. Students can pursue an M.S. or a Ph.D. degree through the PMCB program. All students complete core courses in Advanced Genetics, Plant Molecular Biology and Genomics, Plant Cellular and Developmental Biology, and Plant Biochemistry. In addition to the core classes, students can select from a variety of courses in biochemistry, molecular biology, physiology, breeding, genetics, evolution, microbiology, and plant pathology.

New students are exposed to a variety of faculty and experimental systems while they rotate through several laboratories during their first two semesters before selecting an adviser and dissertation research area. Both M.S. and Ph.D. students take four required courses: PCB 5065 Advanced Genetics, PCB 5530 Plant Molecular Biology and Genomics, PCB 6528 Plant Cell and Developmental Biology and BOT 6935 Plant Biochemistry, as well as journal colloquium classes (PCB 7922 Journal Colloquium). Additional elective courses are taken after approval by the student’s supervisory committee. For additional information see http://pmcb.ifas.ufl.edu.

Successful candidates should have a strong interest in plant molecular and cellular mechanisms controlling development, metabolism, adaptation, and evolution. Applicants typically have a B.S. or M.S. in the agricultural, forestry, biological or chemical sciences with advanced undergraduate coursework in genetics, molecular and cellular biology, and biochemistry. However, outstanding students from a broad range of science disciplines are actively considered.

Plant Molecular and Cellular Biology Courses

- BOT 6935: Special Topics
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6910: Supervised Research
- PCB 6937: Special Topics in Plant Molecular and Cellular Biology
- PCB 6971: Research for Master's Thesis
- PCB 7922: Journal Colloquium in Plant Molecular and Cellular Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation

Political Science Department
The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science–international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information, please contact the Political Science Department or follow the hyperlinks below to more information about the specific programs offered.

Other

Political Science

College

College of Liberal Arts and Sciences

Department/School

Political Science Department

Political Science Program Information

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science–international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information about international relations, please contact the Political Science Department or visit their departmental page in this catalog.

Admission to graduate study in the Department of Political Science normally requires the completion of an undergraduate major in political science or its equivalent. Students without this preparation may be required to make up deficiencies early in their graduate work. The core sequence begins in the fall term, providing basic knowledge that students need in later semesters. In evaluating candidates for admission, the Department considers:

- Prior academic achievement
- GRE scores
- Letters of recommendation from three faculty members or others familiar with the academic potential or work habits of the applicant
- A statement of purpose that conveys intellectual ambitions, indicates how the program of study satisfies the student's interests and goals, and tells how the student would contribute to the program.

Fields of specialization offered by the Department include American government and politics, comparative politics, international relations, public policy, political theory, political behavior, and political methodology.

Master of Arts: The M.A. curricula are designed to serve students who want to pursue goals of an advanced general education, to gain skills and knowledge suitable for various types of public or private employment, or to prepare for further work at the doctoral level. M.A. students are required to complete POS 6736: The Conduct of Inquiry, and either POS 6737: Political Data Analysis or STA 6126: Statistical Methods in Social Research I. Students may complete their M.A. degrees with or without writing a thesis. Students pursuing the thesis option must complete 30 hours of graduate course work. The thesis is expected to be of length and quality comparable to papers presented at professional academic conferences or published in academic journals. Students pursuing the nonthesis option must complete 36 semester hours of graduate course work and defend two qualifying papers. For both M.A. options, course work in political science, exclusive of core courses, must include a minimum of two graduate-level courses in one field of political science.

The M.A. degree may be taken in conjunction with the following certificate programs:

- Political campaigning
- Public affairs

Students in these certificate programs pursue the nonthesis option.

Public affairs: This program trains students for leadership positions in state, local, and national governments as well as for careers in nonprofit organizations by providing students with knowledge and skills in the areas of organization behavior, public budgeting and finances, public management, policy analysis, program evaluation, and computer applications. The curriculum consists of seminars in political science, public administration, public policy, process, state and local politics, and research methods. Supervised internships in selected agencies in Florida are arranged by the Department of Political Science as an integral part of the training program. This specialization requires 39 hours of course work plus satisfactory completion of a 3-hour internship at the discretion of the Department. Students must also defend a final management-policy paper that incorporates analytical and substantive expertise. Graduates of the program serve in a variety of professional positions, including city managers, heads of municipal departments, directors of nonprofit organizations, analysts for the state legislature, and budget analysts for the federal government. In addition to the M.A. degree in political science, students receive the Certificate in Public Affairs.

Political campaigning: The program is designed to provide students with the basic political skills, insights, and experience that are critical for success in the rapidly changing profession of politics and political consulting. The program combines an awareness of the academic literature on mass and elite behavior with exposure to the increasingly sophisticated techniques used by campaigns. Students take a total of 39 hours from four major areas:

- Courses required of all M.A. students
- Courses oriented to practical aspects of political campaigning and governmental affairs (lobbying), including a 3-credit campaign-related internship
- Courses placing campaigns and elections in the broader context of American politics
- Related courses offered by the College of Journalism and Communications

Entry-level jobs have included such positions as legislative aide, campaign (or deputy campaign) manager, polling analyst, state party political coordinator, general campaign consultant, and media relations. With additional experience, some former students have gone on to become state legislator (and later, member of the U.S. House of Representatives), deputy chief of staff to the governor of Florida, partner in a major Washington area polling firm, assistant to the Minister of Justice and Attorney General of Canada, and head lobbyist for a nationwide restaurant chain. In addition to the M.A. degree in political science, students receive the Certificate in Political Campaigning.

Law/Public Affairs joint degree program: This program culminates in the Master of Arts in political science and Juris Doctor degrees. A joint degree program culminating in the Master of
Arts in political science international relations and Juris Doctor degrees is also available. The joint program enables students to earn both the J.D. and the M.A. in less time than would be required to earn both degrees consecutively. Full-time students who make satisfactory progress can usually earn both degrees in 4 years. Candidates for the joint degree program must meet the entrance requirements for, and be admitted to, both the College of Law and the Department of Political Science. These requirements include both the LSAT and the GRE. Students are encouraged to announce their intent of seeking a joint degree as soon as possible. The Department of Political Science will allow 12 hours of appropriate law school courses to be credited toward the M.A. degree. The 12 credits selected from the law curriculum must be approved by the Political Science graduate coordinator on the recommendation of the student's supervisory committee. The College of Law will permit 12 hours of credit earned in political science graduate courses to be credited toward the J.D. degree. Students in the joint degree program are permitted, but not required, to pursue a companion certificate program in public affairs, political campaigning, or international development policy and administration.

**Combined bachelor/master's degree program:** This combined program is designed for superior students who have the ability to pursue an accelerated program leading to the Bachelor of Arts and the Master of Arts degrees in political science or political science international relations. Up to 12 semester hours of approved graduate-level political science courses may be used as credit for both the undergraduate and graduate degree. Applicants to the program must present

- Acceptable scores on the verbal, quantitative, and analytical writing portions of the GRE
- Completion of at least 24 semester hours at the University of Florida (including at least 12 semester hours of political science) with a GPA of 3.7 or higher
- Letters of recommendation from two faculty members in the Department of Political Science

The combined program is not recommended for students considering a Ph.D. program in political science at UF but is appropriate for those considering one of the M.A. degree plus certificate programs described above. Further information concerning this program is available from the departmental undergraduate and graduate coordinators.

**Doctor of Philosophy:** The Ph.D. program emphasizes preparation for academic careers through seminars, independent work with faculty, and professional development experiences including graduate paper readings, placement workshops, and a distinguished lecture series. The Ph.D. prepares students for teaching and research in either an academic or governmental environment and opens doors to other career opportunities in both the private and public sectors. The Ph.D. program emphasizes the development of strong analytic skills and sophisticated research methods. As resources permit, the Department provides students with funding for travel expenses to scholarly meetings and professional (methodological) training support. As part of the preparation for careers in academia, doctoral students are also generally expected to contribute to the teaching mission of the Department. All Ph.D. students must complete the following:

- POS 6736: The Conduct of Inquiry
- POS 6716: Scope and Epistemologies of Political Science
- POS 6737: Political Data Analysis
- POT 6505: Politics and Theory
- Course work in a major and two minor fields of study
- Qualifying examinations in a major field and one minor field
- A dissertation

Fields of study open to Ph.D. students include comparative politics, American politics, public policy, international relations, political behavior, political theory, and political methodology. Applications are particularly welcome from students whose intellectual interests traverse these fields, including those with interests in religion and politics, state political institutions and policy, environmental politics, international development, and minority and ethnic politics.

University of Florida Ph.D. students benefit from associations with faculty in numerous other departments and centers. The Centers for Latin American Studies, African Studies, and European Studies, and the Asian Studies Program complement department faculty strengths in comparative politics and international relations. Students in the public policy concentration benefit from substantive expertise of faculty in the Institute for Child Health Policy, the Shimberg Center for Affordable Housing, and the Center for Gerontological Studies. Several faculty in the College of Journalism and Communications have interests in media and politics.

For more information, please see our website: [http://polisci.ufl.edu](http://polisci.ufl.edu).

**Degrees Offered with a Major in Political Science**

**Doctor of Philosophy**

without a concentration

concentration in Educational Policy

concentration in Tropical Conservation and Development

**Master of Arts**

without a concentration

concentration in International Development Policy and Administration
concentration in Public Affairs

concentration in Political Campaigning

concentration in Tropical Conservation and Development

Political Science Departmental Courses

- CPO 5935: Advanced Topics in Comparative Politics
- CPO 6048: Politics in Advanced Industrial Societies
- CPO 6059: Democracy and Its Competitors
- CPO 6077: Social Movements in Comparative Perspective
- CPO 6091: Introduction to Comparative Political Analysis
- CPO 6206: Seminar in African Politics
- CPO 6307: Latin American Politics I
- CPO 6732: Democratization and Regime Transition
- CPO 6736: Post-Communist politics
- CPO 6756: Comparative Elections and Party Systems
- CPO 6757: The European Union In Comparative Perspective
- CPO 6786: Peasant Politics and Society
- CPO 6795: Environmental Politics
- CPO 6796: Water Politics
- INR 5935: Advanced Topics in International Relations
- INR 6038: Globalization, Regionalism, and Governance
- INR 6039: International Political Economy
- INR 6208: Advanced International Relations Theory
- INR 6213: Seminar: Politics of the European Union
- INR 6249: Inter-American Relations
- INR 6305: Politics of American Foreign Policy Making
- INR 6337: Survey of International Security
- INR 6352: International Environmental Relations
- INR 6507: International Organization
- INR 6607: International Relations Theory
- INR 6936: Seminar in Transnational and Global Studies
- INR 6938: Seminar in Culture and World Politics
- PAD 5935: Advanced Topics in Public Administration
- PAD 6108: Public Administration Theory
- PAD 6227: Public Budgeting and Finance
- PAD 6434: Leadership and Ethics in Public Agencies
- POS 6458: Politics of Campaign Finance
- PAD 6946: Internship in Government
- POS 5935: Advanced Topics in Political Science
- POS 6045: Seminar in American Politics
- POS 6048: American Political Development
- POS 6127: State Government and Politics
- POS 6146: Urban Politics
- POS 6157: Community Analysis
- POS 6196: Patrons, Clients, Corruption, and Accountability
- POS 6207: Political Behavior
- POS 6208: Empirical Political Research
- POS 6272: Political Participation
- POS 6274: Political Campaigning
- POS 6278: Advanced Campaign Strategy
- POS 6279: The Politics of Direct Democracy
- POS 6292: Religion and Politics
- POS 6427: Legislative Process
- POS 6453: Political Parties and Interest Groups
- POS 6476: Bureaucratic Politics in the U.S.
- POS 6707: Qualitative Research Methods for Political Science
- POS 6712: Empirical Theories of Politics
- POS 6716: Scope and Epistemologies of Political Science
- POS 6736: The Conduct of Inquiry
- POS 6737: Political Data Analysis
- POS 6747: Topics in Political Research Methodology
- POS 6757: Survey Research
- POS 6909: Individual Work
- POS 6910: Supervised Research
- POS 6933: Special Topics
- POS 6940: Supervised Teaching
- POS 6971: Research for Master's Thesis
- POS 7979: Advanced Research
- POS 7980: Research for Doctoral Dissertation
- POT 5935: Advanced Topics in Political Theory
- POT 6016: Ancient Political Thought
The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science–international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information, please contact the Political Science Department directly or visit their departmental catalog page.

Admission to graduate study in the Department of Political Science normally requires the completion of an undergraduate major in political science or its equivalent. Students without this preparation may be required to make up deficiencies early in their graduate work. The core sequence begins in the fall term, providing basic knowledge that students need in later semesters. In evaluating candidates for admission, the Department considers:

- Prior academic achievement
- GRE scores
- Letters of recommendation from three faculty members or others familiar with the academic potential or work habits of the applicant
- A statement of purpose that conveys intellectual ambitions, indicates how the program of study satisfies the student’s interests and goals, and tells how the student would contribute to the program.

Political science–international relations: The M.A. degree in political science–international relations is designed to provide professional education to those whose primary interest is a career in foreign relations. In this program, students must complete a core course in the core of international relations theory and in two or more of the four major subfields of international relations, international political economy, international security, foreign policy, and international organization. The M.A. is a 36-hour degree, requiring successful completion of a 6-credit political science core sequence, 15 credits of departmental or extra-department electives, and a 15-credit international relations major. Students may pursue either a thesis option or take a comprehensive examination at the end of the program.

Law/Public Affairs joint degree program: This program culminates in the Master of Arts in political science and Juris Doctor degrees. A joint degree program culminating in the Master of Arts in political science international relations and Juris Doctor degrees is also available. The joint program enables students to earn both the J.D. and the M.A. in less time than would be required to earn both degrees consecutively. Full-time students who make satisfactory progress can usually earn both degrees in 4 years. Candidates for the joint degree program must meet the entrance requirements for, and be admitted to, both the College of Law and the Department of Political Science. These requirements include both the LSAT and the GRE. Students are encouraged to announce their intent of seeking a joint degree as soon as possible. The Department of Political Science will allow 12 hours of appropriate law school courses to be credited toward the joint degree. The 12 credits selected from the law curriculum must be approved by the Political Science graduate coordinator on the recommendation of the committee. The College of Law will permit 12 hours of credit earned in political science graduate courses to be credited toward the J.D. degree. Students in the joint degree program are permitted, but not required, to pursue a comprehensive examination in public affairs, political campaigning, or international development policy and administration.

Combined bachelor's/master's degree program: This combined program is designed for superior students who have the ability to pursue an accelerated program leading to the Bachelor of Arts and the Master of Arts degrees in political science or political science international relations.

Up to 12 semester hours of approved graduate-level political science courses may be used as credit for both the undergraduate and graduate degree. Applicants to the program must present:

- Acceptable scores on the verbal, quantitative, and analytical writing portions of the GRE
- Completion of at least 24 semester hours at the University of Florida (including at least 12 semester hours of political science) with a GPA of 3.7 or higher
- Letters of recommendation from two faculty members in the Department of Political Science

The combined program is not recommended for students considering a Ph.D. program in political science at UF but is appropriate for those considering one of the M.A. degree plus certificate programs described above. Further information concerning this program is available from the departmental undergraduate and graduate coordinators.
Master of Arts in Teaching

Political Science Departmental Courses

- CPO 5935: Advanced Topics in Comparative Politics
- CPO 6046: Politics in Advanced Industrial Societies
- CPO 6059: Democracy and Its Competitors
- CPO 6077: Social Movements in Comparative Perspective
- CPO 6091: Introduction to Comparative Political Analysis
- CPO 6206: Seminar in African Politics
- CPO 6307: Latin American Politics I
- CPO 6732: Democratization and Regime Transition
- CPO 6736: Post-Communist Politics
- CPO 6756: Comparative Elections and Party Systems
- CPO 6757: The European Union in Comparative Perspective
- CPO 6768: Peasant Politics and Society
- CPO 6795: Environmental Politics
- CPO 6796: Water Politics
- INR 5935: Advanced Topics in International Relations
- INR 6036: Globalization, Regionalism, and Governance
- INR 6039: International Political Economy
- INR 6208: Advanced International Relations Theory
- INR 6213: Seminar: Politics of the European Union
- INR 6249: Inter-American Relations
- INR 6305: Politics of American Foreign Policy Making
- INR 6337: Survey of International Security
- INR 6352: International Environmental Relations
- INR 6507: International Organization
- INR 6607: International Relations Theory
- INR 6936: Seminar in Transnational and Global Studies
- INR 6938: Seminar in Culture and World Politics
- PAD 5935: Advanced Topics in Public Administration
- PAD 6108: Public Administration Theory
- PAD 6227: Public Budgeting and Finance
- PAD 6434: Leadership and Ethics in Public Agencies
- POS 6458: Politics of Campaign Finance
- POS 6946: Internship in Government
- POS 5935: Advanced Topics in Political Science
- POS 6045: Seminar in American Politics
- POS 6048: American Political Development
- POS 6127: State Government and Politics
- POS 6146: Urban Politics
- POS 6157: Community Analysis
- POS 6196: Patrons, Clients, Corruption, and Accountability
- POS 6207: Political Behavior
- POS 6208: Empirical Political Research
- POS 6272: Political Participation
- POS 6274: Political Campaigning
- POS 6278: Advanced Campaign Strategy
- POS 6279: The Politics of Direct Democracy
- POS 6292: Religion and Politics
- POS 6427: Legislative Process
- POS 6453: Political Parties and Interest Groups
- POS 6476: Bureaucratic Politics in the U.S.
- POS 6707: Qualitative Research Methods for Political Science
- POS 6712: Empirical Theories of Politics
- POS 6716: Scope and Epistemologies of Political Science
- POS 6736: The Conduct of Inquiry
- POS 6737: Political Data Analysis
- POS 6747: Topics in Political Research Methodology
- POS 6757: Survey Research
- POS 6909: Individual Work
- POS 6910: Supervised Research
- POS 6933: Special Topics
- POS 6940: Supervised Teaching
- POS 6971: Research for Master's Thesis
- POS 7979: Advanced Research
- POS 7980: Research for Doctoral Dissertation
- POT 5935: Advanced Topics in Political Theory
- POT 6016: Ancient Political Thought
- POT 6056: Modern Political Thought
- POT 6067: Contemporary Political Theory
- POT 6308: Liberalism and Its Critics
- POT 6314: Democratic Theory
The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees section of this catalog. Students are not accepted for a terminal master's degree.

For more information, please see the program page below and our website: http://www.psych.ufl.edu.

Other

Counseling Psychology

College

College of Liberal Arts and Sciences

Department/School

Psychology Department

Degrees Offered with a Major in Counseling Psychology

Doctor of Philosophy

Psychology Departmental Courses

- CBH 6056: Comparative Psychology
- CLP 6169: Seminar: Psychology and Deviant Behavior
- CLP 7525: Best Methods for Studying Psychological Change
- DEP 6057: Advanced Developmental Psychology I
- DEP 6058: Advanced Developmental Psychology II
- DEP 6059: Seminar: Special Topics in Developmental Psychology
- DEP 6099: Survey of Developmental Psychology
- DEP 6216: Psychological Disturbances of Children
- DEP 6406: Advanced Adulthood and Aging
- DEP 6409: Seminar: Adult Development and Aging
- DEP 6799: Current Research Methods in Developmental Psychology
- DEP 6936: Current Research in Developmental Psychology
- DEP 7608: Theories of Developmental Psychology
- EAB 5436: Behavioral Pharmacology
- EAB 6099: Survey of Behavior Analysis
- EAB 6118: Theoretical Foundations of Behavior Analysis
- EAB 6707: Applied Behavior I
- EAB 6712: Experimental Psychopathology
- EAB 6714: Behavior Analysis in Developmental Disabilities
- EAB 6719: Seminar: Strategies and Tactics of Human Behavioral Research
- EAB 6750: Quantitative Methods
- EAB 6780: Ethics and Professional Issues
- EAB 6937C: Seminar: Special Topics in Experimental Analysis of Behavior
Psychology (Psychology - CLAS)

College

College of Liberal Arts and Sciences

Department/School

Psychology Department

Psychology Program Information

The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees section of this catalog. Students are not accepted for a terminal master’s degree.

Doctoral areas of specialization include the research areas of developmental, behavior analysis, behavioral and cognitive neuroscience, social psychology, and counseling psychology. The training program in counseling psychology is accredited by the American Psychological Association. A predoctoral internship of one year is required for the counseling psychology program.

Undergraduate preparation should include at least one course in experimental methods and one course in statistics. Other courses in psychology should include at least three or four of the following: cognition, developmental, learning, personality, physiological, sensory, and social. Applicants should have competitive GRE scores and GPA (3.5 or higher).

Co-major: The Department offers a co-major program in conjunction with the College of Education leading to the Doctor of Philosophy degree in psychology and research and evaluation methodology.
Degrees

Doctor of Philosophy

without a concentration

concentration in Women's/Gender Studies

Master of Arts

Master of Science

without a concentration

Psychology Departmental Courses

- CBH 6056: Comparative Psychology
- CLP 6169: Seminar: Psychology and Deviant Behavior
- CLP 7525: Best Methods for Studying Psychosocial Processes
- DEP 6057: Advanced Developmental Psychology I
- DEP 6058: Advanced Developmental Psychology II
- DEP 6059: Seminar: Special Topics in Developmental Psychology
- DEP 6099: Survey of Developmental Psychology
- DEP 6216: Psychological Disturbances of Children
- DEP 6406: Advanced Adulthood and Aging
- DEP 6409: Seminar: Adult Development and Aging
- DEP 6799: Current Research Methods in Developmental Psychology
- DEP 6936: Current Research in Developmental Psychology
- DEP 7608: Theories of Developmental Psychology
- EAB 5436: Behavioral Pharmacology
- EAB 6099: Survey of Behavior Analysis
- EAB 6118: Theoretical Foundations of Behavior Analysis
- EAB 6707: Applied Behavior Analysis
- EAB 6712: Experimental Psychopathology
- EAB 6716: Behavior Analysis in Developmental Disabilities
- EAB 6719: Seminar: Strategies and Tactics of Human Behavioral Research
- EAB 6750: Quantitative Methods
- EAB 6759: Ethics and Professional Issues
- EAB 6937: Seminar: Special Topics in Experimental Analysis of Behavior
- EAB 6939: Seminar: Special Topics in Applied Behavior Analysis
- EAB 7089: Advanced Seminar: Experimental Analysis of Behavior
- EAB 7090: Verbal Behavior
- EXP 6099: Survey of Cognition and Sensory Processes
- EXP 6609: Seminar: Cognition
- EXP 6939: Seminar: Current Issues in Cognition and Sensory Processes
- GEY 7408: Psychotherapy with Older Adults
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marriage Counseling
- MHS 6460: Advanced Family Counseling
- PCO 6057: Psychology of Counseling I
- PCO 6058: Psychology of Counseling II
- PCO 6059: Psychology of Counseling III
- PCO 6278: Diversity and Multiculturalism in Counseling Psychology
- PCO 6316C: Psychological Assessment I
Course requirements: outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field. Students may choose to bypass the religion master's degree with additional religion coursework. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

Doctor of Philosophy:
The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish that status to be changed. A review and decision will be made by the field faculty and the graduate committee.

Promotion to doctoral status: The Department trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religion master's degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master's degree with additional religion coursework. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

Course requirements: The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours

Religion Department

Chair: Manuel A. Vasquez.
Graduate Coordinator: David G. Hackett.

Complete faculty listing by department: Follow this link.

The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asia
- Religion and nature.

Minimum requirements for these degrees are given in the General Information section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religious and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at http://religion.ufl.edu/graduate-studies under "Graduate Program." In special instances, and with the agreement of the supervisory committee and two sponsoring faculty members, master's degree students may choose an area outside the three specialty fields.

In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest:

- Three references from persons competent to evaluate the applicant's potential for graduate work
- An essay of 3 to 5 double-spaced, typewritten pages identifying the applicant's goals and particular interests pertinent to the three available specialty fields (this essay is extremely important and applicants should attend to it carefully)
- A writing sample.

Beyond these requirements, applicants need to show clear evidence of solid preparation before admission. This usually includes formal study of the primary language in the specialty field. Acceptable scores on the GRE General Test are required. In addition to evidence of preparation and academic promise, the Department gives careful consideration to the fit between an applicant's central scholarly interests and the resources the Department and University have to offer.

Master of Arts: The M.A. degree provides a broad background in the study of religious traditions, theoretical orientations in the discipline, and an initial concentration in one of the three specialty fields. Course work culminates in a thesis and oral examination on the thesis and course work.

Total credits: Thirty credit hours are required. These include Method and Theory I and II, the core course(s) of the major field (or equivalent for those not in one of the three specialty fields), and 6 hours of thesis research credits. The additional hours shall consist of further courses in the specialty field, other graduate seminars, and up to 6 hours of research language study.

Language study: All M.A. students are required to demonstrate competency in a scholarly language other than English before beginning the thesis. Most languages are acceptable, though students should consult the individual field requirements. The chosen language must be approved by the student's mentor and the graduate coordinator.

Thesis: Each student, guided by a supervisory committee, will prepare a Master of Arts thesis, acceptable to the Department of Religion and the Graduate School, and undergo an oral examination.

Promotion to doctoral status: The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish that status to be changed. A review and decision will be made by the field faculty and the graduate committee.

Doctor of Philosophy: The Ph.D. program trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religion master's degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master's degree with additional religion coursework. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

Course requirements: The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours
credited toward the Ph.D. is at the discretion of department faculty. A minimum of 45 hours is devoted to course work at the doctoral level. The specific distribution of course work depends on the specialization but will include intensive work in the major area of specialization, 6 hours of method and theory (if not taken at the M.A. level) and 15 hours devoted to dissertation writing and research.

**Language requirements:** All doctoral students must demonstrate proficiency in at least one and in many cases two languages other than English. The chosen language(s) as well as how and when the student's competence will be judged must be approved by the student's supervisory committee chair. Frequently language competence is documented by 1) taking an appropriate course or courses in the language with a grade of "B" or better, or 2) passing a translation exam (usually administered by a department member or a language department at the University). Basic course work for scholarly languages will not count toward the required 90 credit hours. However, students studying a scholarly language connected to their research needs (above and beyond basic competence) can receive 6 (or more) credit hours for such advanced courses toward the required 90 total credit hours, with approval of the student's supervisory committee chair.

**Qualifying examinations:** Qualifying examinations form a bridge between course work and dissertation research. Normally students will take qualifying examinations during their third year in residence. The precise areas of questioning and the reading list are decided by the supervisory committee in consultation with the student, well in advance of the examinations, but no later than the beginning of the term in which the student intends to take the qualifying examinations.

**Dissertation proposal:** Each doctoral candidate submits a formal dissertation proposal to the candidate's supervisory committee chair at least 3 weeks before the end of the semester after the qualifying examination.

**Admission to candidacy:** On successfully completing the qualifying examination and the dissertation proposal, and all other course and language requirements, and with the approval of the supervisory committee, students make formal application to the Department and Graduate School for admission to Ph.D. candidacy.

**Dissertation and its defense:** The final years of the program are devoted to dissertation research and writing. The student is expected to present the completed dissertation and defend it at a public oral defense conducted by the supervisory committee.

**Mentoring:** Each student is assigned a faculty mentor on admission to the program, based on expressions of faculty interest and the student's intended area of concentration. The mentor and graduate coordinator answer questions and provide support for the student in choosing courses and planning a program. By the end of the second semester, all master's degree students must designate their supervisory committee chair and one additional department committee member. By the end of the second semester, all doctoral students must designate their committee chair. By no later than the end of the fourth semester of study, all doctoral students must designate a four-member supervisory committee including the chair and one faculty member from outside the department. For details about the programs listed above, visit [http://religion.ufl.edu/graduate-studies/](http://religion.ufl.edu/graduate-studies/).

**Other**

**Religion**

**College**

College of Liberal Arts and Sciences

**Department/School**

Religion Department

**Religion Program**

The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asia
- Religion and nature.

Minimum requirements for these degrees are given in the [Graduate Degrees](http://religion.ufl.edu) section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religions and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at [http://www.religion.ufl.edu](http://www.religion.ufl.edu) under "Graduate Program." In special instances, with the agreement of the supervisory committee and two sponsoring faculty members, master's degree students may choose an area outside the three specialty fields.

In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest:

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specialty field, other graduate seminars, and up to 6 hours of research language study.

Language study: All M.A. students are required to demonstrate competency in a scholarly language other than English before beginning the thesis. Most languages are acceptable, though students should consult the individual field requirements. The chosen language must be approved by the student's mentor and the graduate coordinator.

Thesis: Each student, guided by a supervisory committee, will prepare a Master of Arts thesis, acceptable to the Department of Religion and the Graduate School, and undergo an oral examination.

Promotion to doctoral status: The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish that status to be changed. A review and decision will be made by the field faculty and the graduate committee.

Doctor of Philosophy: The Ph.D. program trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religion master's degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master's degree with additional religion course work. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

Course requirements: The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours credited toward the Ph.D. is at the discretion of department faculty. A minimum of 45 hours is devoted to course work at the doctoral level. The specific distribution of course work depends on the specialization but will include intensive work in the major area of specialization, 6 hours of method and theory (If not taken at the M.A. level) and 12 hours devoted to dissertation writing and research.

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Qualifying examinations: Qualifying examinations form a bridge between course work and dissertation research. Normally students will take qualifying examinations during their third year in residence. The precise areas of questioning and the reading list are decided by the supervisory committee in consultation with the student, well in advance of the examinations, but no later than the beginning of the term in which the student intends to take the qualifying examinations.

Dissertation proposal: Each doctoral candidate submits a formal dissertation proposal to the candidate's supervisory committee at least 3 weeks before the end of the semester after the qualifying examination.

Admission to candidacy: On successfully completing the qualifying examination and the dissertation proposal, and all other course and language requirements, and with the approval of the supervisory committee, students make formal application to the Department and Graduate School for admission to Ph.D. candidacy.

Dissertation and its defense: The final years of the program are devoted to dissertation research and writing. The student is expected to present the completed dissertation and defend it at a public oral defense conducted by the supervisory committee.

Mentoring: Each student is assigned a faculty mentor on admission to the program, based on expressions of faculty interest and the student's intended area of concentration. The mentor and graduate coordinator answer questions and provide support for the student in choosing courses and planning a program. By the end of the second semester, all master's degree students must designate their supervisory committee chair and one additional department committee member. By the end of the second semester, all doctoral students must designate their committee chair. By no later than the end of the fourth semester of study, all doctoral students must designate a four-member supervisory committee including the chair and one member from outside the department. For details about the programs listed above, visit http://www.religion.ufl.edu.

Degrees Offered with a Major in Religion

Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

Master of Arts
without a concentration

concentration in Jewish Studies

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

Courses

- REL 5***
  - RLG 5143: Religion and Social Change
  - REL 5187
  - RLG 5195: Topics in Religion and Society
  - REL 5199
  - RLG 5297: Topics in Biblical Studies
  - RLG 5338: Topics in Asian Religions
  - RLG 5365: Studies in Islam
  - RLG 5396: Religion and Animals
  - RLG 5495: Topics in Religious Thought
  - RLG 5549: Studies in Christianity
  - RLG 5696: Topics in Jewish Thought
  - RLG 5906: Individual Work
  - RLG 5937: Topics in Religious Studies
    - REL 5xxxA
    - REL 5xxxB
    - REL 5xxxC
    - REL 6***
  - RLG 6035: Method and Theory I
  - RLG 6036: Method and Theory II
  - RLG 6095: Utopias and Dystopias
  - RLG 6107: Core Seminar in Religion and Nature
  - RLG 6125: Religion and Politics in the Americas
  - RLG 6129: Hindu Traditions in America
  - RLG 6137: Religion in North America
  - RLG 6138: New Religious Movements
  - RLG 6126: Religion in the Americas
  - RLG 6167: Radical Environmentalism
  - RLG 6181: Ethics and the Natural Sciences
  - RLG 6183: Religion and Environmental Ethics
  - RLG 6187: Nature in Asian Religions
  - RLG 6196: Globalizing the Sacred
  - RLG 6319: Interpreting Asian Religions
  - RLG 6339: Women in the Hindu Tradition
  - RLG 6346: Buddhist Traditions
  - REL 6347: American Buddhism
  - REL 6368: Islam in Asia
  - RLG 6310: Religion and Nature in South Asia
  - RLG 6385: Native Religions in the Americas
  - RLG 6387: Religions in Latin America
  - REL 6397: Hindu Sacred Texts and Their Ritual Context
  - RLG 6910: Supervised Research
  - RLG 6940: Supervised Teaching
  - RLG 6957: Overseas Studies in Religion
  - RLG 6971: Research for Master's Thesis
    - REL 6xxxA
    - REL 6xxxB
  - RLG 7979: Advanced Research
  - RLG 7980: Research for Doctoral Dissertation
  - SRK 6905: Individual Study in Sanskrit

Spanish and Portuguese Studies Department
Chair: G. Lord  
Graduate Coordinator: L. Álvarez Castro  
Complete faculty listing by department: Follow this link.

The Department of Spanish and Portuguese Studies offers a Master of Arts degree (M.A.) in Spanish (thesis and non-thesis options) and a Doctor of Philosophy degree (Ph.D.) in Romance Languages and Literatures, with a concentration in Spanish. Descriptions of the minimum requirements for both degrees are provided in the General Information section of this catalog. For specific information about the program, please visit the graduate section of the departmental webpage:

http://www.spanishandportuguese.ufl.edu/spanish/graduate.html

Candidates for graduate degrees (both M.A. and Ph.D.) in Spanish can choose between two specializations—literature/culture or linguistics. In conjunction with their master's or doctoral work, students may also earn a certificate in Latin American Studies. Though a graduate degree is not offered in Portuguese, extensive course offerings at the graduate level permit students to develop a strong specialization in Portuguese language and Luso-Brazilian literature, film and culture.

The main prerequisite for admission to the M.A. program is an undergraduate major in Spanish, ideally including advanced courses in the proposed area of specialization. Applicants for the Ph.D. should hold an M.A. or equivalent degree in Spanish. At the discretion of the Graduate Studies Committee, candidates from related fields of study (History, Sociology…) may be offered a conditional admission into the Ph.D. program pending the passing of the M.A. Comprehensive Examination within the first year of study.

All M.A. and Ph.D. students in Spanish who are appointed as teaching assistants must take Romance Language Teaching Methods (FOL/FOL 6943). Besides, all M.A. and Ph.D. students specializing in literature and culture must take Introduction to Graduate Study and Research (SPW 6806). Other requirements vary with degree and specialization. For details, consult the graduate section of the departmental webpage (see above).

The Department is able to offer most students a teaching assistantship that provides a maintenance stipend and includes a tuition waiver. Contingent on positive performance in teaching and graduate work, M.A. students are guaranteed four semesters of support, and Ph.D. students are guaranteed eight semesters of support beyond the M.A. In addition, there are several fellowships, supplements and stipends for which students may apply, and summer teaching may be available.

Prospective students are encouraged to review the departmental webpage in order to familiarize themselves with the program and the application process. Only those applications including all required materials and submitted by the advertised deadlines will be considered. For any questions about the program or how to apply, please contact the graduate coordinator: lacastro@ufl.edu.

Highly qualified UF undergraduate students majoring in Spanish may apply for a combined B.A./M.A. program in Spanish that allows up to 12 graduate credits to be counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details.

Other

Romance Languages (Spanish and Portuguese Studies)

College

College of Liberal Arts and Sciences

Department/School

Spanish and Portuguese Studies Department

Degrees Offered with a Major in Romance Languages

Doctor of Philosophy

concentration in Spanish

Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW 6930: Special Study in Romance Languages and Literatures
- SPN 6166: Teaching Spanish for the Professions
- SPN 6940: Supervised Teaching
- SPW 6545: Spanish Romanticism
- SPN 6705: Foundations of Hispanic Linguistics
- SPN 6845: History of the Spanish Language
Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6715: Formal Instruction and Acquisition of Spanish
- SPN 6735: Special Study in Spanish Linguistics
- SPN 6785: Advanced Spanish Phonetics
- SPN 6827: Sociolinguistics of the Spanish-Speaking World
- SPN 6835: Spanish and Spanish-American Dialectology
- SPN 6845: History of the Spanish Language
- SPN 6848: Medieval Spanish Linguistics
- SPN 6855: Structure of Spanish
- SPN 6856: Spanish in Contact: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FCL 6943: Romance Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6236: Spanish-American Narrative from the Origins to Criollismo
- SPW 6269: Spanish Novel of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6286: Contemporary Spanish-American Narrative II
- SPW 6300: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPW 6425: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6729: The Generation of 1898
- SPW 6806: Introduction to Graduate Study and Research
- SPW 6902: Special Study in Spanish or Spanish-American Literature
- SPW 6905: Individual Work
- SPW 6910: Supervised Research
- SPW 6934: Seminar in Spanish American Literature and Culture
- SPW 6938: Seminar in Spanish Literature and Culture
- SPW 6971: Research for Master's Thesis
- SPW 7979: Advanced Research
- SPW 7990: Research for Doctoral Dissertation

Portuguese

- POW 6276: Twentieth-Century Brazilian Novel
- POW 6385: Brazilian Lyric
- POW 6386: Brazilian Drama
- POW 6905: Individual Work
- POW 6930: Rotating Topics in Brazilian or Portuguese Literature

Spanish

College

College of Liberal Arts and Sciences

Department/School

Spanish and Portuguese Studies Department

Degrees
Master of Arts

Master of Arts in Teaching

Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW 6930: Special Study in Romance Languages and Literatures
- SPN 6166: Teaching Spanish for the Professions
- SPN 6940: Supervised Teaching
- SPW 6545: Spanish Romanticism
- SPN 6705: Foundations of Hispanic Linguistics
- SPN 6845: History of the Spanish Language
- SPN 6895: Individual Study
- SPN 6910: Supervised Research
- SPS 6940: Supervised Teaching
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation
- SPW 6535: Spanish Romanticism

Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6775: Formal Instruction and Acquisition of Spanish
- SPN 6775: Special Study in Spanish Linguistics
- SPN 6785: Advanced Spanish Phonetics
- SPN 6872: Sociolinguistics of the Spanish-Speaking World
- SPN 6885: Spanish and Spanish-American Dialectology
- SPN 6885: History of the Spanish Language
- SPN 6884: Medieval Spanish Linguistics
- SPN 6885: Structure of Spanish
- SPN 6886: Spanish in Contact: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FOL 6943: Romance Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6236: Spanish-American Narrative from the Origins to Criollismo
- SPW 6269: Spanish Novel of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6286: Contemporary Spanish-American Narrative II
- SPW 6306: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPN 6426: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6729: The Generation of 1898
- SPW 6806: Introduction to Graduate Study and Research
- SPW 6902: Special Study in Spanish or Spanish-American Literature
- SPW 6905: Individual Work
- SPW 6910: Supervised Research
- SPW 6934: Seminar in Spanish American Literature and Culture
- SPW 6938: Seminar in Spanish Literature and Culture
- SPW 6971: Research for Master's Thesis
- SPW 7979: Advanced Research
- SPW 7990: Research for Doctoral Dissertation

Portuguese

- POW 6276: Twentieth-Century Brazilian Novel
- POW 6385: Brazilian Lyric
- POW 6386: Brazilian Drama
- POW 6805: Individual Work
• POW6930: Rotating Topics in Brazilian or Portuguese Literature

Statistics Department

Chair: M. J. Daniels
Graduate Coordinator: J. P. Hobert

Complete faculty listing Follow this link.

Graduate programs are available leading to Master of Science in Statistics, Master of Statistics, and Doctor of Philosophy degrees. Minimum requirements for these degrees are described in the General Information section of this catalog.

Both master's programs usually require 2 years of course work including material covered in STA 6208, 6208, STA 6326, STA 6327, STA 6246, and STA 6329. In addition to earning a "Ph.D. pass" on the first-year evaluation, requirements for the Ph.D. degree include STA 6466, 6467, STA 7249, and STA 7346.

Interdisciplinary programs: The Department offers a co-major program in conjunction with the Fisher School of Accounting leading to the Doctor of Philosophy degree in statistics and business administration accounting. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Departments of Mathematics; Industrial and Systems Engineering; and Finance, Insurance, and Real Estate. For information on these programs, consult the departmental graduate coordinator.

Combined program: The Department offers a bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Statistics

College

College of Liberal Arts and Sciences

Department/School

Statistics Department

Degrees Offered with a Major in Statistics

Doctor of Philosophy

without a concentration

concentration in Quantitative Finance

Master of Science in Statistics

Master of Statistics

Statistics Departmental Courses

• STA5106: Computer Programs in Statistical Analysis
Women's Studies Department

Director: Bonnie Moradi
Graduate Coordinator: Kendal Broad

Complete faculty listing by department: Follow this link.

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as two certificates. These options give students the opportunity to take advantage of scholarship in this dynamic field, and to become acquainted with different research perspectives and methodologies. Students become well grounded in theories of gender in cultural systems and in ways that gender intersects with other categories of difference such as race, ethnicity, religion, class, sexuality, nation, physical and mental ability, age, and economic and civil status. Faculty and students employ feminist and other appropriate theoretical approaches and methodologies.

The Center offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring. The Center in Ustler Hall houses archives, a small library, offices, and meeting space.

For more information about our program, please see the program page below or our website: http://web.wst.ufl.edu.

Other

Women's Studies

College

College of Liberal Arts and Sciences
Women's Studies Program Information

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as a two certificates. The Center also offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring.

Master of Arts (thesis and non-thesis): The Center offers the Master of Arts (M.A.) thesis degree option, which requires the completion and defense of a thesis (30 credit hours), and the Master of Arts non-thesis degree option, which requires completion and defense of a project or paper (30 credit hours). All Master's students take a core curriculum of 9 graduate credits (3 courses). For the thesis M.A., the remaining 21 hours consist of 15 credits of approved electives and 6 thesis credits. For the non-thesis M.A., 21 credits of approved electives are required.

Required courses for all MA students (9 credits):
- WST 5933: Proseminar in Women's Studies
- WST 6508: Advanced Feminist Theory
- WST 6935: Special Topics in Women's Studies

Thesis
15 approved credits at 5000-level or higher
6 credits of WST 6971: Research for Master's Thesis
(3 of which must be taken in the final graduating term)
Total for MA thesis: 30 credits

Non-thesis
21 approved credits at 5000-level or higher;
at least 6 of these credits must be classes in WST.
Total for MA non-thesis: 30 credits

BA/MA Program: UF offers a number of Bachelor's/Master's programs for superior students. The university created combined degree programs to provide academically talented students an opportunity to complete both a bachelor's and a master's degree in a shorter period of time. The program allows you to double-count graduate courses toward both degrees, thus reducing the time it would normally take to graduate by a semester or more. The combined-degree program reduces the cost of both degrees and enhances your marketability for career advancement.

Concurrent degree - MA in Women's Studies and an MA in Mass Communications (MAMC) with specialization in Journalism: When appropriate, the Center for Women's Studies and Gender Research will work with individual students to develop a collaborative degree program with the College of Journalism and Communication. At the University of Florida, students may apply to complete Master's degrees in two different programs or two Master's degrees in the same program concurrently. Those interested should discuss the proposed study with the office of Graduate Student Records (392-4643, 106 Grinter) before applying. Written approval is needed from each academic unit and the Graduate School Dean. The student must be officially admitted to both programs through regular procedures. No more than 9 credits from the first program may be applied toward the second.

M.A./J.D. Joint Degree: The faculties of the Levin College of Law and Women's Studies in the College of Liberal Arts and Sciences have approved a joint degree program culminating in both a J.D. degree, awarded by the College of Law, and an M.A. degree (thesis or non-thesis), awarded by the College of Liberal Arts and Sciences. Under this joint degree program, a student can obtain both degrees in approximately one year less than it would take to obtain both degrees if pursued consecutively. A student must satisfy the curriculum requirements for each degree before either degree is awarded. At least 12 credits must be taken in each program. The graduate program in Women's Studies will accept 12 credits of appropriate professional courses toward the M.A. degree. The 12 credits selected from the professional curriculum must be approved by the Graduate Coordinator upon the recommendation of the student's graduate supervisory committee. Reciprocally, the law school will accept 12 credits of appropriate Women's Studies courses toward the satisfaction of the J.D. degree. Admission to the second program is required no later than the end of the third consecutive semester after beginning one degree of the joint degree program. A summer term is counted as a single semester.

Certificates (MA or Ph.D. level): Two graduate certificates in Women's Studies for master's and doctoral students are offered in conjunction with degree programs in other academic units. The Graduate Certificate in Women's Studies and the Graduate Certificate in Gender and Development require specific sets of course work, designed to give students a thorough grounding in the discipline. The Graduate Certificate in Women's Studies offers students a general overview of the field. The Graduate Certificate in Gender and Development allows students to focus on issues related to gender, economic development, and globalization.

Graduate courses in women's studies are also available from the following academic units or programs:
- Agricultural and Life Sciences
- Anthropology
- Counseling Education
- English
- History
- Journalism and Communication
- Languages, Literatures, and Cultures
- Latin American Studies
- Linguistics
- Medicine
- Philosophy
- Psychology
- Religion
- Sociology
- Teaching and Learning

For more information, please see our website: http://web.wst.ufl.edu.

Degrees Offered with a Major in Women's Studies

Master of Arts
Courses

- WST 5933: Proseminar in Women's Studies
- WST 6348: Ecofeminism
- WST 6508: Advanced Feminist Theory
- WST 6905: Independent Study
- WST 6935: Special Topics in Women's Studies
- WST 6936: Feminist Challenges to Disciplinary Paradigms
- WST 6946: Internship in Applied Women's Studies and Gender Research
- WST 6957: International Studies in Women's Studies and Gender Research
- WST 6971: Research for Master's Thesis

Departments and Programs within the College of Medicine

College of Medicine

Dear: M.L. Good

Complete faculty listings: Follow this link.

The College of Medicine offers training opportunities leading to either the Doctor of Philosophy or Master of Science degree in medical sciences. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog. For more information, please see our website: http://med.ufl.edu.

The interdisciplinary program (IDP) in biomedical sciences is the major focus leading to the Doctor of Philosophy degree. Other graduate courses and programs are listed under departmental headings. For further information, visit http://idp.med.ufl.edu.

Departments and Programs within the College of Medicine

College of Medicine Courses

Other

Genetics and Genomics

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Medicine

Degrees Offered with a Major in Genetics and Genomics

Doctor of Philosophy

Doctor of Philosophy - Clinical and Translational Science

Courses

- AGR 6322: Advanced Plant Breeding
- ANG 6532: Molecular Genetics of Disease
- ANG 7979: Advanced Research
- ANG 7980: Research for Doctoral Dissertation
- BCH 6415: Advanced Molecular and Cell Biology
- BCH 7410: Advanced Gene Regulation
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5805: Computer Simulation Concepts
- CIS 6930: Special Topics in CIS
- COT 5405: Analysis of Algorithms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6934: Topics in Forest Resources and Conservation
FOR 7979: Advanced Research
FOR 7980: Research for Doctoral Dissertation
GMS 6011: Mouse Genetics
GMS 6012: Human Genetics
GMS 6013: Developmental Genetics
GMS 6014: Applications of Bioinformatics to Genetics
GMS 6015: Human Genetics II
GMS 6059: Gene Therapy from Bench to Bedside
GMS 6920: Genetics Journal Colloquy
GMS 7979: Advanced Research
GMS 7980: Research for Doctoral Dissertation
HGC 6201: Breeding Perennial Cultivars
PCB 5065: Advanced Genetics
PCB 5235L: Experiments in Immunology
PCB 5615: Molecular Evolution and Systematics
PCB 6528: Plant Cell and Developmental Biology
PCB 7979: Advanced Research
PCB 7980: Research for Doctoral Dissertation
STA 5325: Fundamentals of Probability
STA 5328: Fundamentals of Statistical Theory
STA 6166: Statistical Methods in Research I
STA 6167: Statistical Methods in Research II
STA 6178: Genetic Data Analysis
STA 6208: Basic Design and Analysis of Experiments
STA 6329: Matrix Algebra and Statistical Computing
STA 6934: Special Topics in Statistics
STA 7979: Advanced Research
STA 7980: Research for Doctoral Dissertation
ZOO 6927: Special Topics in Zoology
ZOO 7979: Advanced Research
ZOO 7980: Research for Doctoral Dissertation

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
- GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
- GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
- GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
- GMS 6029: Brain Journal Club
- GMS 6031: Molecular Immunology
- GMS 6032: Mechanisms of Host Defense
- GMS 6033: Immunity in Health and Disease
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Mechanisms of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6070: Sensory and Motor Systems
- GMS 6072: Neuroendocrinology and Neuroimmunology
Interdisciplinary Program in Biomedical Sciences

Dear M. L. Good,
Associate Dean for Graduate Education: P. A. Gulig

Complete faculty listing Follow this link.

The College of Medicine offers training opportunities leading to either the Doctor of Philosophy or Master of Science degree in medical sciences. Minimum requirements for these degrees are given in the General Information section of this catalog. The interdisciplinary program (IDP) in biomedical sciences is the major focus leading to the Doctor of Philosophy degree. Other graduate courses and programs are listed under departmental headings.

Interdisciplinary Program (IDP) in Biomedical Sciences

The goal of the IDP is to prepare students for a diversity of careers in research and teaching in academic and commercial settings, after completion of the Ph.D. in Medical Sciences. The program provides a modern, comprehensive graduate education in biomedical sciences while providing both maximum program flexibility and appropriate specialization for advanced training. The IDP represents a cooperative effort of six interdisciplinary advanced concentrations with participation of over 250 faculty members.

During the first semester of study, students undertake a common, comprehensive interdisciplinary core curriculum of classroom study and a responsible conduct of research course. During the second semester, students begin to focus their coursework in one or two concentrations. Throughout the first two semesters, students participate in at least three laboratory rotations in any of the laboratories of the IDP faculty members. The advanced concentration and the supervisory committee chair are chosen no later than the end of the spring semester to maximize flexibility and facilitate an informed decision. Students entering the advanced concentrations take more specialized courses that strengthen their knowledge of these disciplines. The advanced concentration curricula are flexible enough to allow students to integrate course work offered in other advanced concentrations. In addition, journal clubs and seminars associated with their research interests allow students to further augment their scientific development.

Prospective students should have strong backgrounds in biology including genetics, chemistry (organic, quantitative, and biochemistry), physics, and calculus. Demonstrated high motivation and a serious intention to pursue research-related careers are also important considerations. This is best accomplished by performing independent study in a research laboratory for at least a semester, with a year or more being preferred. For more information, write IDP, P.O. Box 100229, College of Medicine, Gainesville, FL 32610-0229. For expanded information about the IDP, visit http://idp.med.ufl.edu.

Advanced Concentration in Biochemistry and Molecular Biology

Directors: Robert McKenna and Kevin Brown

The Graduate Faculty of the biochemistry and molecular biology advanced concentration share an interest in the relationships between the structure of a biological macromolecule and the function of that molecule in the cell. The structure (encoded ultimately by the genome) sets the phenotype of the organism. The unifying theme among the Graduate Faculty is their approach to research: Each uses the techniques of biochemistry and molecular biology/genetics to characterize the function of a macromolecule and show how function (and the process it is part of) is determined by the structure of that molecule and its interactions with other macromolecules. Specific research directions range from physical determination of the molecular structure of proteins to regulation of cellular processes to the genetic mapping of disease loci.

For information about other programs and courses in this field, see the Department of Biochemistry and Molecular Biology listing.

Advanced Concentration in Biochemistry and Molecular Biology Courses
Advanced Concentration in Cancer Biology

Directors: Dietmar Siemann and Maria Zajac-Kaye

The Cancer Biology Concentration (CBC) provides training opportunities in cancer research ranging from basic to translational. The program spans many disciplines, including molecular and cell biology, genetics and epigenetics, biochemistry, microbiology, pharmacology, anatomy, pathology, epidemiology, bioinformatics, immunology and many others involved in the understanding of the development, progression, dissemination, and treatment of cancer.

Students in the CBC have opportunities to work with outstanding cancer investigators in state of the art facilities. Through combinations of courses, seminars, small group discussions, and an interdisciplinary approach to research, the program allows students to gain a unique understanding of cancer and to build a firm foundation upon which they can build careers in academia, government, and biotech and pharmaceutical industry.

For more information please see our website: http://idp.med.ufl.edu/about/cancer-biology-concentration

Advanced Concentration in Cancer Biology Courses

- BCH 5413: Mammalian Molecular Biology and Genetics
- BCH 7410: Advanced Gene Regulation
- BCH 7412: Epigenetics of Human Disease and Development
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6009: Principles of Drug Action
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6090: Research in Medical Sciences
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6338: Recent Advances in Cancer Metastasis
- GMS 6421: Cell Biology
- GMS 6644: Apoptosis
- GMS 6647: Transcriptional and Translational Control of Cell Growth and Proliferation
- GMS 6683: Fundamentals of Vascular Physiology and Pathology
- GMS 6891: Special Topics in Cell Biology and Anatomy
- GMS 6812: Cancer Health Outcomes Assessment
- GMS 6818: Design and Conduct Clinical Trials I
- PHC 6937: Special Topics in Public Health

Advanced Concentration in Genetics

Director: M. R. Wallace

The concentration in genetics offers graduate training in all facets of modern molecular genetics including bacterial, viral, lower eukaryotic, mouse, developmental, and human genetics. The courses listed are taught in a 5-week modular format.

Advanced Concentration in Genetics Courses
Advanced Concentration in Health Outcomes and Policy

The University of Florida's Master of Science in Medical Sciences, with a concentration in Health Outcomes and Policy, is a specialized degree designed to put its graduates at the forefront of innovative research to develop, implement, and evaluate clinical and community-based programs that promote health and health outcomes. Throughout the curriculum, special emphasis is placed on health disparities and vulnerable populations. In addition to traditional graduate students, our program is available to medical students, post-doctoral researchers, fellows, residents, Ph.D. students, and junior faculty.

We also offer a 16-credit graduate certificate designed to complement other concurrent courses of study and to provide continuing education opportunities for faculty. The certificate can be completed in one year on a part-time basis.

Advanced Concentration in Health Outcomes and Policy Courses

- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6802: Examining Health Outcomes for Chronic Diseases in Clinical and Community-based Research
- GMS 6803: Data Management for Clinical Research
- GMS 6804: Medical Informatics
- GMS 6811: Grant Writing Skills for Clinical Research
- GMS 6812: Cancer Health Outcomes Assessment
- GMS 6816: Pediatric Child Health Outcomes Assessment for Clinical and Community-Based Research
- GMS 6821: Measuring and Analyzing Health Outcomes I
- GMS 6822: Measuring and Analyzing Health Outcomes II
- GMS 6826: Advanced Design and Methodology for Case-Control Studies in Clinical Research
- GMS 6829: Longitudinal Research Design
- GMS 6830: Health Outcomes Research and Policy Development
- GMS 6832: Economic Methods for Evaluating Value in Health
- GMS 6833: Health Care Policy and Vulnerable Populations
- GMS 6834: Health Policy and Formulation of Payment Mechanisms for Health Care
- GMS 6835: Health Policy Issues in Children's Health
- GMS 6842: Translational Research Methods
- GMS 6844: Experimental and Quasi-Experimental Research Designs for Community Settings
- GMS 6846: Meta-Analysis in Clinical, Health Services Research and Public Health
- GMS 6851: Health Outcomes Research
- GMS 6852: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
- GMS 6853: Applied Topics in Dissemination and Implementation Science
- GMS 6854: Applied Topics in Clinical Effectiveness Research
- GMS 6881: Special Studies in Epidemiology and Health Policy Research
- GMS 6882: Directed Readings in Epidemiology and Health Policy
- GMS 6883: Practicum Experience in Epidemiology and Health Policy
- GMS 6884: Research in Epidemiology and Health Policy
- GMS 6885: Research Designs in Health Outcomes and Policy
- GMS 6893: Clinical and Translational Science Seminar Series
- GMS 6896: Health Outcomes and Policy Seminar

Advanced Concentration in Immunology and Microbiology

Directors: R. C. Condit and C. E. Mathews

The concentration in immunology and microbiology offers graduate training in cellular and molecular immunology (including immunopathology, immunogenetics, and autoimmunity) and in microbiology (including virology, bacteriology, microbial genetics, and microbial pathogenesis). The courses listed are taught in a 5-week modular format.

Advanced Concentration in Immunology and Microbiology Courses
Advanced Concentration in Molecular Cell Biology

Director: Alexander Ishov
Co-Director: Maria Zajac-Kaye

The advanced concentration in molecular cell biology (MCB) prepares investigators for careers in biomedical research in academic or industrial settings. This multidisciplinary specialization has more than 50 participating faculty members and offers an extraordinary range of opportunities for advanced study of life at the molecular and cellular levels. The Graduate Faculty share common interests in the molecular interactions that account for functionally integrated subcellular, cellular, and tissue organization found in living organisms. The model systems in use range from yeast and cellular slime molds through Drosophila to birds and mammals. These systems are manipulated and analyzed using a wide range of powerful molecular, genetic, protein chemical, immunological, pharmacological, nuclear magnetic resonance (NMR), and microscopic imaging strategies. Students who select MCB take advanced course work and initiate independent research during the second year. This approach provides broad-based vision early in the program and the appropriate degree of specialization later on.

Advanced Concentration in Molecular Cell Biology Courses

- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6013: Developmental Genetics
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Mechanisms of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6331: Stem Cell Biology
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
- GMS 6381: Special Topics in Pathology
- GMS 6417: Integrative Aging Physiology
- GMS 6421: Cell Biology
- GMS 6622: Mitochondrial Biology in Aging and Disease
- GMS 6635: Organization of Cells and Tissues
- GMS 6644: Apoptosis
- GMS 6647: Transcriptional and Translational Control of Cell Growth and Proliferation
- GMS 6690: Molecular Cell Biology Journal Club
- GMS 6691: Special Topics in Cell Biology and Anatomy
- GMS 6692: Research Conference in Anatomy and Cell Biology

Advanced Concentration in Neuroscience

Directors: W. J. Streit and J. L. Bizon

The Graduate Faculty associated with the neuroscience advanced concentration have expertise in neuroanatomy, molecular and cellular neurobiology, neurodevelopment and aging, neurotransmitter chemistry and pharmacology, neuroendocrinology and neuroimmunology, cellular and molecular neuro-oncology, cellular and membrane neurophysiology, somatosensory and motor systems, transplantation neurobiology, injury and repair of the CNS, and neurobehavioral sciences. Study in marine vertebrate and invertebrate neurobiology is available through Graduate Faculty at the Whitney Laboratory.

Advanced Concentration in Neuroscience Courses
Advanced Concentration in Oral Biology

Chair: R. A. Burne
Graduate Coordinator: J. Brady

The Department of Oral Biology, a unit of the College of Dentistry, offers graduate study leading to the degree of Doctor of Philosophy as part of the College of Medicine's Interdisciplinary Program (IDP) in Biomedical Sciences. The work is designed to provide the degree candidate with a strong background in basic biological principles relevant to the various subspecialties of oral biology, as well as specialized training in various aspects of the diseases and disorders of the oral cavity.

Areas of emphasis include application of microbiological, immunological, cellular, and molecular biological concepts and technologies to answer questions about host-pathogen interactions in oral disease; vaccine development; oral microbial physiology; oral bacterial biofilm biology; saliva and salivary gland biology; microbial antibiotic resistance; and autoimmune diseases. More information is available at http://dental.ufl.edu/departments/oral-biology/.

Prerequisites for admission in addition to those of the Graduate School include a broad base of courses in mathematics, physics, organic and analytic chemistry, advanced biology, biochemistry, molecular biology, and statistical methods. Specific requirements can be obtained from the Graduate Coordinator or the IDP office.

Oral Biology Departmental Courses

- GMS 6160: Introduction to Oral Biology I
- GMS 6161: Introduction to Oral Biology II
- GMS 6173: Stomatognathic System: Form and Function
- GMS 6176: Biology of Tooth Supporting Structures I
- GMS 6177: Biology of Tooth Supporting Structures II
- DEN 6680: Principles and Craniofacial Biology and Emerging Therapies
- DEN 6681: Craniofacial Pathobiology
- GMS 7179: Journal Colloquy

Advanced Concentration in Physiology and Pharmacology

Directors: J. K. Harrison and H. Kasahara

The Graduate Faculty associated with this advanced concentration have expertise in a variety of disciplines, including molecular and cellular biology, pharmacology, physiology, neuroscience, and biochemistry. These faculty bring together unique strengths to provide the students with diverse training. Students may train in laboratories involved in cardiovascular, neuro, endocrine, and developmental physiology; pharmacology; and toxicology. Students conduct research at the molecular, cellular, and integrative levels. Many of the faculty are involved in multidisciplinary, collaborative research efforts that aim to understand basic physiological mechanisms and pathophysiological processes (e.g., cardiovascular, neurodegenerative, and neoplastic diseases).

Advanced Concentration in Physiology and Pharmacology Courses

- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6400C: Principles of Physiology
- GMS 6405: Fundamentals of Endocrine Physiology
- GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
- GMS 6408: Fundamentals of Renal Physiology
Core Courses--IDP

- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6015: Fundamentals of Cancer Biology
- GMS 6090: Research in Medical Sciences
- GMS 6901: Seminar in Biology of Disease
- GMS 7003: Responsible Conduct of Biomedical Research
- GMS 7993: Topics in Pharmacology and Toxicology

General and Advanced Courses

- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6090: Research in Medical Sciences
- GMS 6622: Mitochondrial Biology in Aging and Disease
- GMS 6872: Science and Ethics of In Vitro Fertilization
- GMS 6905: Independent Studies in Medical Sciences
- GMS 6910: Supervised Research
- GMS 6931: Ethical and Policy Issues in Clinical Research
- GMS 6940: Supervised Teaching
- GMS 6971: Research for Master’s Thesis
- GMS 7001: Fundamentals of Biomedical Science Education
- GMS 7002: Practicum in Biomedical Science Education
- GMS 7003: Responsible Conduct of Biomedical Research
- GMS 7979: Advanced Research
- GMS 7980: Research for Doctoral Dissertation

Other Interdisciplinary Doctoral Concentrations Offered

The interdisciplinary emphasis on vision sciences is also discussed in the Interdisciplinary Graduate Studies section. The program director is Dr. W. Clay Simith, P.O. Box 100284 College of Medicine, Gainesville, FL 32610 or (352) 392-0476.

Interdisciplinary study in toxicology is coordinated by the Center for Environmental and Human Toxicology and is concerned with the effects of chemicals on human and animal health. Additional information is given in the Interdisciplinary Graduate Studies section of this catalog or may be obtained from the codirector, Dr. Colin Sumners, P.O. Box 100215, College of Medicine, Gainesville, FL 32610 or (352) 392-0740.

Degrees Offered with a Major in Medical Sciences

Doctor of Philosophy

without a concentration
concentration in Biochemistry and Molecular Biology
  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

concentration in Cancer Biology

concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

concentration in Genetics
  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

concentration in Health Outcomes and Policy
  optional second concentration in Clinical and Translational Science

concentration in Imaging Science and Technology

concentration in Immunology and Microbiology
  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

concentration in Molecular Cell Biology
  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

concentration in Neuroscience
  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

concentration in Physiology and Pharmacology
  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

concentration in Toxicology

Master of Science

without a concentration
concentration in Clinical and Translational Science

concentration in Health Outcomes and Policy

concentration in Translational Biotechnology

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018: Advanced In-Vitro Fertilization Laboratory Practicum
- GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
- GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
- GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
- GMS 6029: Brain Journal Club
- GMS 6031: Molecular Immunology
- GMS 6032: Mechanisms of Host Defense
- GMS 6033: Immunity in Health and Disease
- GMS 6034: Advanced Virology: Genetics and RNA
- GMS 6035: Advanced Virology: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Mechanisms of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6070: Sensory and Motor Systems
- GMS 6072: Neuroendocrinology and Neuroimmunology
- GMS 6073: Developmental Neurobiology
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
- GMS 6078: Synaptic Function and Plasticity
- GMS 6079: Computers in Biology
- GMS 6080: Basic Magnetic Resonance Imaging
- GMS 6090: Research in Medical Sciences
- GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
- GMS 6099: Foundations in Aging and Geriatric Research
- GMS 6121: Infectious Diseases
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA Microarray Data Analysis
- GMS 6160: Introduction to Oral Biology I
- GMS 6161: Introduction to Oral Biology II
Biochemistry and Molecular Biology Department

Chair: James B. Flanagan.
Graduate Coordinator: Kevin Brown

Complete faculty listing by department: Follow this link.

Biochemistry and Molecular Biology Department faculty mentor Ph.D. students in the College of Medicine interdisciplinary program (IDP) in medical sciences. Students interested in pursuing a doctoral degree can view specific features of the biochemistry and molecular biology concentration at http://biochem.med.ufl.edu/ and http://idp.med.ufl.edu. For admission information, visit the IDP website. Department faculty also mentor Ph.D. students in other college programs and participate actively in the research and teaching functions of various centers such as the Center for Epigenetics and the Center for Structural Biology. The Department offers a wide variety of courses for graduate students studying in the life sciences. The research expertise of the faculty spans the areas from cell biology, metabolism, and molecular biology to physical biochemistry/structural biology. Current research interests include viral protease inhibitors, viral RNA replication, bioenergetics and proton translocation, X-chromosome structure and function, cytoskeletal assembly and dynamics, enzyme mechanism and control, chromatin structure, gene expression and regulation, mitochondrial biogenesis and evolution, the genetics of inherited disease, nutrient membrane transporters, protein site-directed mutagenesis, ribosome structure and function, signal transduction, structural biology and dynamics of macromolecules, protein-nucleic acid interactions, transgenic animal models, and virus crystal structure. Prospective graduate students should have adequate training in chemistry and biology. Minor deficiencies may be made up immediately after entering graduate school. Previous undergraduate experience in a research laboratory is highly recommended. Doctoral students are required to take a core IDP course in fall term of their first year; and beginning in spring term, students take advanced classes in areas of interest. Specific advanced-level courses may be recommended by the student’s supervisory chair and committee. The following courses are open to all graduate students and advanced undergraduates. Additional courses are listed in the Advanced Concentration in Biochemistry and Molecular Biology section under Medical Sciences.

Other

Biochemistry and Molecular Biology

College

College of Medicine

Department/School

Biochemistry and Molecular Biology Department

Degrees Offered with a Major in Biochemistry and Molecular Biology

Master of Science

Courses

- BCH 5413: Mammalian Molecular Biology and Genetics
- BCH 6040: Research Discussion in Biochemistry and Molecular Biology
- BCH 6107: Biophysical Techniques in Proteomics and Protein Science
- BCH 6206: Advanced Metabolism
- BCH 6207: Advanced Metabolism: Role of Membranes in Signal Transduction and Metabolic Control
- BCH 6208: Advanced Metabolism: Regulation of Key Reactions in Carbohydrate and Lipid Metabolism
- BCH 6209: Advanced Metabolism: Regulation of Key Reactions in Amino Acid and Nucleotide Metabolism
- BCH 6415: Advanced Molecular and Cell Biology
- BCH 6740: Physical Biochemistry/Structural Biology
- BCH 6741C: Magnetic Resonance Imaging and Spectroscopy in Living Systems
- BCH 6744: Molecular Structure Determination by X-ray Crystallography
- BCH 6744L: Molecular Structure Determination by X-ray Crystallography Laboratory
- BCH 6745: Molecular Structure and Dynamics of NMR Spectroscopy
- BCH 6745L: Molecular Structure and Dynamics by NMR Spectroscopy Laboratory
BCH 6746: Structural Biology/Micromolecular Structure Determination
BCH 6747: Structural Biology/Advanced Physical Biochemistry: Spectroscopy and Hydrodynamics
BCH 6749C: Numerical Methods in Structural Biology
BCH 6785: Recent Advances in Membrane Biology
BCH 6875: Crystallography and Cryo-Electron Microscopy
BCH 6876: Recent Advances in Structural Biology
BCH 6877: Recent Advances in Cytoskeletal Processes
BCH 6905: Independent Studies in Biochemistry and Molecular Biology
BCH 6910: Supervised Research
BCH 6936: Biochemistry Seminar
BCH 6971: Research for Master's Thesis
BCH 7410: Advanced Gene Regulation
BCH 7412: Epigenetics of Human Disease and Development
BCH 7414: Advanced Chromatin Structure
BCH 7515: Structural Biology/Advanced Physical Biochemistry: Kinetics and Thermodynamics
BCH 7979: Advanced Research
BCH 7980: BioChem Doctoral Research

College of Medicine Courses

ENU 6652: Clinical Rotation in Diagnostic Radiology
ENU 6657: Diagnostic Radiological Physics
GEY 5935: Topics in Gerontology
GEY 6220: Overview of Geriatric Care Management
GEY 6646: Issues and Concepts in Gerontology
GEY 6905: Independent Study in Gerontology
GEY 6936: Professional Development in Gerontology/Geriatrics
GMS 5905: Special Topics in Biomedical Sciences
GMS 6001: Fundamentals of Biomedical Sciences I
GMS 6003: Fundamentals of Graduate Research and Professional Development
GMS 6004: IDP Practical Laboratory
GMS 6005: Fundamentals of Developmental Biology
GMS 6006: Fundamentals of Immunology and Microbiology
GMS 6007: Fundamentals of Neuroscience
GMS 6008: Fundamentals of Physiology and Functional Genomics
GMS 6009: Principles of Drug Action
GMS 6010: Yeast Genetics
GMS 6011: Mouse Genetics
GMS 6012: Human Genetics
GMS 6013: Developmental Genetics
GMS 6014: Applications of Bioinformatics to Genetics
GMS 6015: Human Genetics II
GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
GMS 6018C: Advanced In-Vitro Fertilization Laboratory Practicum
GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
GMS 6029: Brain Journal Club
GMS 6031: Molecular Immunology
GMS 6032: Mechanisms of Host Defense
GMS 6033: Immunity in Health and Disease
GMS 6034: Advanced Virology I: Genetics and RNA
GMS 6035: Advanced Virology II: RNA Viruses
GMS 6036: Molecular Virology III: DNA Viruses
GMS 6038: Bacterial Genetics and Physiology
GMS 6039: Bacterial Pathogenesis
GMS 6040: Host-Pathogen Interactions
GMS 6051: Signal Transduction
GMS 6052: Ion Channels of Excitable Membranes
GMS 6053: Cancer Biology and Therapeutics
GMS 6059: Gene Therapy from Bench to Bedside
GMS 6061: Nuclear Structure and Dynamics
GMS 6062: Protein Trafficking
GMS 6063: Mechanisms of Aging
GMS 6064: Tumor Biology
GMS 6065: Fundamentals of Cancer Biology
GMS 6070: Sensory and Motor Systems
GMS 6072: Neuroendocrinology and Neuroimmunology
GMS 6073: Developmental Neurobiology
GMS 6074: Comparative and Evolutionary Neurobiology
GMS 6077: Neural Degeneration and Regeneration
GMS 6078: Synaptic Function and Plasticity
GMS 6079: Computers in Biology
GMS 6080: Basic Magnetic Resonance Imaging
GMS 6090: Research in Medical Sciences
GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
GMS 6099: Foundations in Aging and Geriatric Research
GMS 6121: Infectious Diseases
GMS 6140: Principles of Immunology
GMS 6145: Immunology of Gene Transfer
GMS 6151: Genetic Analysis Using Model Systems
GMS 6153: Advanced Bacterial Genetics
Biostatistics Department

College of Public Health and Health Professions
College of Medicine

Chair: P. Qiu
Graduate Coordinator: Babette Brumback
Complete faculty listing by department: Follow this link.

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to:

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/.

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/.

Other

Biostatistics (Medicine)

College

College of Public Health and Health Professions
College of Medicine

Department

Biostatistics Department

Degrees
Doctor of Philosophy

Master of Science

Biostatistics Departmental Courses

- GMS 6818: Design and Conduct Clinical Trials I
- GMS 6819: Design and Conduct Clinical Trials II
- GMS 6827: Advanced Clinical Trial Methods
- GMS 6841: Design and Analysis of Translational Research in Biomedical Sciences
- GMS 6861: Applied Biostatistics I
- GMS 6862: Applied Biostatistics II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6020: Clinical Trial Methods
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6050C: Biostatistical Methods I
- PHC 6051: Biostatistical Methods II
- PHC 6052: Introduction to Biostatistical Methods
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6055: Biostatistical Computing Using R
- PHC 6063: Biostatistical Consulting
- PHC 6080: SAS for Public Health - Data
- PHC 6081: SAS for Public Health - Analysis
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6937: Special Topics in Public Health
- PHC 6946: Public Health Internship
- PHC 7013: Bias in Observational Research
- PHC 7056: Analysis of Longitudinal Data
- PHC 7057: Large Sample Theory
- PHC 7925: Biostatistics Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- STA 5223: Applied Sample Survey Methods
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 5503: Categorical Data Methods
- STA 5701: Applied Multivariate Methods
- STA 5715: Applied Survival Analysis
- STA 6092: Applied Statistical Practice
- STA 6166: Statistical Methods in Research I
- STA 7249: Generalized Linear Models
- STA 7346: Statistical Inference

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 6005: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018L: Advanced In-Vitro Fertilization Laboratory Practicum
- GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
GMS 6029: Brain Journal Club
GMS 6031: Molecular Immunology
GMS 6032: Mechanisms of Host Defense
GMS 6033: Immunity in Health and Disease
GMS 6034: Advanced Virology I: Genetics and RNA
GMS 6035: Advanced Virology II: RNA Viruses
GMS 6036: Molecular Virology III: DNA Viruses
GMS 6038: Bacterial Genetics and Physiology
GMS 6039: Bacterial Pathogenesis
GMS 6040: Host-Pathogen Interactions
GMS 6051: Signal Transduction
GMS 6052: Ion Channels of Excitable Membranes
GMS 6053: Cancer Biology and Therapeutics
GMS 6059: Gene Therapy from Bench to Bedside
GMS 6061: Nuclear Structure and Dynamics
GMS 6062: Protein Trafficking
GMS 6063: Mechanisms of Aging
GMS 6064: Tumor Biology
GMS 6065: Fundamentals of Cancer Biology
GMS 6070: Sensory and Motor Systems
GMS 6072: Neuroendocrinology and Neuroimmunology
GMS 6073: Developmental Neurobiology
GMS 6074: Comparative and Evolutionary Neurobiology
GMS 6077: Neural Degeneration and Regeneration
GMS 6078: Synaptic Function and Plasticity
GMS 6079: Computers in Biology
GMS 6080: Basic Magnetic Resonance Imaging
GMS 6090: Research in Medical Sciences
GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
GMS 6099: Foundations in Aging and Geriatric Research
GMS 6121: Infectious Diseases
GMS 6140: Principles of Immunology
GMS 6145: Immunology of Gene Transfer
GMS 6151: Genetic Analysis Using Model Systems
GMS 6153: Advanced Bacterial Genetics
GMS 6155: DNA/Microarray Data Analysis
GMS 6160: Introduction to Oral Biology I
GMS 6161: Introduction to Oral Biology II
GMS 6169: Antimicrobial Strategies
GMS 6173: Stomatognathic System: Form and Function
GMS 6181: Special Topics in Microbiology
GMS 6190: Seminar
GMS 6191: HIV Journal Club
GMS 6193: Research Conference in Oral Biology
GMS 6195: Epigenetics Journal Club
GMS 6196: Virology Journal Club
GMS 6198: Bacterial Pathogenesis Journal Club
GMS 6221: Ethics in Genetics
GMS 6223: Drosophila Neurogenetics: from Development to Function
GMS 6231: Genomics and Bioinformatics
GMS 6232: Advanced Applications of Bioinformatics in Genetics
GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
GMS 6234: Introduction to phyodynamics: A practical approach to molecular phylogenetics of pathogens
GMS 6290: Genetics/Genomics Program Graduate Seminar
GMS 6312: Clinical Chemistry and Toxicology
GMS 6313: Clinical Chemistry and Toxicology: A Rotation
GMS 6331: Stem Cell Biology
GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
GMS 6337: B Cell Development in Health and Disease
GMS 6361: Special Topics in Pathology
GMS 6362: Special Topics in Immunology
GMS 6400C: Principles of Physiology
GMS 6405: Fundamentals of Endocrine Physiology
GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
GMS 6408: Fundamentals of Renal Physiology
GMS 6410: Physiology of the Circulation of Blood
GMS 6411: Fundamentals of Cardiovascular Physiology
GMS 6412: Human Physiology for Biomedical Engineering
GMS 6413: Advances in Hypertension Research
GMS 6414: Advanced Renal Physiology
GMS 6415: Fundamentals of Gastrointestinal Physiology
GMS 6416: Human Endocrinology and Anatomy of Reproduction
GMS 6471: Fundamentals of Physiology and Functional Genomics I
GMS 6472: Fundamentals of Physiology and Functional Genomics II
GMS 6473: Fundamentals of Physiology and Functional Genomics III
GMS 6483: Theories of Aging
GMS 6485: Population Based Research on Aging
GMS 6486: Fundamentals of Biological Aging
GMS 6490C: Research Methods in Physiology
GMS 6491: Journal Club in Physiology
GMS 6495: Seminar in Physiology
GMS 6496: Recent Advances in Physiology
Epidemiology Department

College of Public Health and Health Professions
College of Medicine

Chair: Linda Cottler
Ph.D. Program Director: Cindy Prins
M.S. Program Director: Catherine Woodstock Striley

Complete faculty listing by department: Follow this link.

The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: http://epidemiology.phhp.ufl.edu

Other

Epidemiology (Medicine)

College

College of Medicine

Department
Epidemiology Program Information

The Ph.D. in Epidemiology program is in the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The program requires a minimum of 90 semester credits beyond the bachelor's degree. All students must complete a minimum of 9 credits in Epidemiology foundation course work, at least 36 credits of epidemiology core courses, 6 credits of statistics electives, 18 credits of epidemiology electives, 15 credits of general electives, and 12 credits of dissertation research. Students must also complete at least two mentored teaching experiences. All entering students who do not hold MPH or equivalent degrees are also required by the College of Public Health and Health Professions to complete an Introduction to Public Health course.

Students in the Ph.D. program in Epidemiology are admitted to work with a research mentor on that mentor's project, and that research mentor funds the student. Other funding sources are available such as the Graduate School and the Department.

The core course work is designed to incorporate competencies recommended in the report of the 2002 workshop on doctoral education in epidemiology from the American College of Epidemiology and the Association of Schools and Programs of Public Health, and criteria for applied epidemiology competencies. The overall outcomes expected of all graduates are as follows:

1. Apply epidemiological methods to address critical and/or emerging public health issues through the use of:
   - Appropriate epidemiological research designs
   - Advanced statistical analysis methods for health studies
   - Data structures and measurement methods for health research
   - Biological, behavioral and social theory applied to the understanding and prevention of contemporary threats to health and well-being
   - Depth of knowledge in an area of specialization

2. Assimilate the history, philosophy, and ethical principles of epidemiology into current research

3. Develop grant proposals and manage research projects

4. Write scientific papers for publication in peer-reviewed journals, and communicate research results to scientists, policy makers, and the public

5. Compete successfully for research and teaching positions in academic institutions, federal or state agencies, or private institutions.

Details of the Ph.D. in Epidemiology program and application information are available at our website: [http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2](http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2).

The Master of Science in Epidemiology degree is offered by the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The 36 credit program prepares students for careers in the public health arena that are focused on the surveillance and prevention of illnesses among diverse populations around the world. Students are trained in the foundational aspects of epidemiology including person, place and time, risk and protective factors, and the social determinants of health. Areas of focus include: chronic disease, infectious disease, geriatric, environmental, psychiatric, social, cancer and maternal and child health epidemiology.

Graduates of the M.S. in Epidemiology program are trained to:

- Apply surveillance, assessment, evaluation, and other foundational epidemiological research designs to areas of interest,
- Choose appropriate measurement and analytic methods to study health and disease in a population,
- Utilize biological, behavioral and social theory to understand how to prevent and intervene to promote the public health.

The program consists of required coursework and the successful completion of a thesis. The thesis is required to demonstrate skill in independent inquiry and investigation, under the tutelage of a mentor. Students may complete the course in three semesters with 36 credits.

More program information, including specific course requirements and elective options, is described at the program website: [http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2](http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2).

Degrees Offered with a Major in Epidemiology

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Master of Science

Epidemiology (PHHP/COM) Departmental Courses
- GMS 6820: Advanced Epidemiology Methods
- HPC 6008: Cardiovascular Epidemiology
- HPC 6009: Biology and Epidemiology of HIV/AIDS
- HPC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
- HPC 6034: Epidemiologic Investigation
- HPC 6070: Epidemiology of Aging
- HPC 6517: Public Health Concepts in Infectious Diseases
- HPC 6711: Measurement in Epidemiology and Outcomes Research
- HPC 6937: Special Topics in Public Health
- HPC 6938: Oral and Craniofacial Epidemiology
- HPC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- HPC 7007: Cancer Epidemiology
- HPC 7038: Psychiatric Epidemiology
- HPC 7065: Critical Skills in Epidemiological Data Management
- HPC 7427: Ethics in Population Science
- HPC 7727: Grant Writing for Population Health Research
- HPC 7901: Epidemiology Literature Review and Critique (Journal Club)
- HPC 7902: Epidemiology Supervised Research Writing Circle
- HPC 7910: International Field Epidemiology
- HPC 7916: National Field Epidemiology
- HPC 7934: Seminar I: Epidemiology Past, Present, and Future
- HPC 7979: Advanced Research
- HPC 7980: Research for Doctoral Dissertation

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
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- GMS 6018L: Advanced In-Vitro Fertilization Laboratory Practicum
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- GMS 6033: Immunity in Health and Disease
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Epidemiology of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6070: Sensory and Motor Systems
- GMS 6072: Neuroendocrinology and Neuroimmunology
- GMS 6073: Developmental Neurobiology
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
- GMS 6078: Synaptic Function and Plasticity
- GMS 6079: Computers in Biology
- GMS 6080: Basic Magnetic Resonance Imaging
- GMS 6090: Research in Medical Sciences
- GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
GMS 6099: Foundations in Aging and Geriatric Research
GMS 6121: Infectious Diseases
GMS 6145: Immunology of Gene Transfer
GMS 6151: Genetic Analysis Using Model Systems
GMS 6153: Advanced Bacterial Genetics
GMS 6155: DNA/Microarray Data Analysis
GMS 6160: Introduction to Oral Biology I
GMS 6161: Introduction to Oral Biology II
GMS 6169: Antimicrobial Strategies
GMS 6173: Stomatognathic System: Form and Function
GMS 6181: Special Topics in Microbiology
GMS 6190: Seminar
GMS 6191: HIV Journal Club
GMS 6193: Research Conference in Oral Biology
GMS 6195: Epigenetics Journal Club
GMS 6196: Virology Journal Club
GMS 6198: Bacterial Pathogenesis Journal Club
GMS 6211: Ethics in Genetics
GMS 6223: Drosophila Neurogenetics: from Development to Function
GMS 6231: Genomics and Bioinformatics
GMS 6232: Advanced Applications of Bioinformatics in Genetics
GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
GMS 6234: Introduction to phylodynamics: A practical approach to molecular phylogenetics of pathogens
GMS 6290: Genetics/Genomics Program Graduate Seminar
GMS 6312: Clinical Chemistry and Toxicology
GMS 6313: Clinical Chemistry and Toxicology - A Rotation
GMS 6331: Stem Cell Biology
GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
GMS 6337: B Cell Development in Health and Disease
GMS 6381: Special Topics in Pathology
GMS 6382: Special Topics in Immunology
GMS 6400C: Principles of Physiology
GMS 6405: Fundamentals of Endocrine Physiology
GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
GMS 6408: Fundamentals of Renal Physiology
GMS 6410: Physiology of the Circulation of Blood
GMS 6411: Fundamentals of Cardiovascular Physiology
GMS 6412: Human Physiology for Biomedical Engineering
GMS 6413: Advances in Hypertension Research
GMS 6414: Advanced Renal Physiology
GMS 6415: Fundamentals of Gastrointestinal Physiology
GMS 6416: Human Endocrinology and Anatomy of Reproduction
GMS 6471: Fundamentals of Physiology and Functional Genomics I
GMS 6472: Fundamentals of Physiology and Functional Genomics II
GMS 6473: Fundamentals of Physiology and Functional Genomics III
GMS 6483: Theories of Aging
GMS 6485: Population Based Research on Aging
GMS 6486: Fundamentals of Biological Aging
GMS 6490C: Research Methods in Physiology
GMS 6491: Journal Club in Physiology
GMS 6495: Seminar in Physiology
GMS 6496: Recent Advances in Physiology
GMS 6497: Seminar on Vision
GMS 6506: Biologic Drug Development
GMS 6593: Molecular Pharmacology
GMS 6595: Seminar in Pharmacology
GMS 6598: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
GMS 6609: Advanced Gross Anatomy
GMS 6621: Vision
GMS 6622: Mitochondrial Biology in Aging and Disease
GMS 6635: Organization of Cells and Tissues
GMS 6642: Morphogenesis: Organ Systems I
GMS 6643: Morphogenesis: Organ Systems II
GMS 6644: Apoptosis
GMS 6690: Molecular Cell Biology Journal Club
GMS 6715: Lifestyle Interventions in Aging I: Behavioral Aspects & Clinical Outcomes
GMS 6717: Lifestyle Interventions in Aging II: Physiologic Aspects
GMS 6771: Clinical Neuroscience of Aging
GMS 6876: Law & Ethics of Aging
GMS 6845: Clinical & Translational Research Practicum
GMS 6852: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
GMS 6895: CTS Journal Club
GMS 6903: Manuscript and Abstract Writing for Clinician/Scientists
GMS 6970: Individual Study
GMS 6983: Current Topics in Immunotherapy
GMS 6983: Fundamentals of Vascular Physiology and Pathology
GMS 5604: Medical Human Embryology
GMS 5605: Medical Anatomy
GMS 5606L: Medical Anatomy Lab
GMS 5613: Medical Human Anatomy by Diagnostic Imaging
GMS 5630: Medical Histology
GMS 6081: Biological Imaging Techniques
GMS 6394: Seminar in Mammalian Genetics
Health Outcomes and Policy Department

College of Medicine

Chair: Betsy Shenkman
Graduate Coordinator: Jill Hendon

Complete faculty listing by department: Follow this link.

Students can pursue either a Master of Science degree or a Graduate Certificate.

There is increasing emphasis on assessing health outcomes throughout the lifespan in a variety of health care and community settings. Nationally, the National Institute of Health and other federal and state agencies focus on the development of evidence-based programs to promote health, improve health care delivery, and enhance health outcomes.

Outcomes research generates evidence that informs health care program design in clinical and community settings, the promotion of effective clinical and community interventions, quality of care, cost-effective and clinically appropriate choices for patients in allocation of health care resources (clinical effectiveness), and incorporation of best practice models into health-related programs and policies. Outcomes research also provides mechanisms to understand how to translate research into practice and policy, how to improve the quality and efficiency of health programs, and how to achieve equitable and appropriate delivery of health programs and clinical care, particularly for underserved and vulnerable populations.

Our graduate programs are designed to train professionals in the health care and health research fields about the science that supports the development and evaluation of evidence-based clinical and community-based programs focused on improving health outcomes. Further, our programs emphasize methods for translating research into practice and policy. The unique combination of courses offered through these graduate programs will give trainees the tools needed to examine health outcomes and policies in a variety of settings across different age spans and to examine the individual, social, health system, and health policy factors that influence health outcomes.

In addition to traditional graduate students, both programs are available to medical students, post-doctoral students, fellows, residents, Ph.D. students, and junior faculty.

Molecular Genetics and Microbiology Department

Chair: H. V. Baker.
Graduate Coordinator: A. S. Lewin.

Complete faculty listing by department: Follow this link.

The Graduate Faculty of the Department of Molecular Genetics and Microbiology participate in the interdisciplinary program (IDP) in medical sciences, leading to the Doctor of Philosophy degree, with specialization in one of the six advanced concentration areas of the IDP (see Medical Sciences). Departmental areas of research associated with the IDP focus on topical problems in molecular genetics, viral genetics, and viral and bacterial pathogenesis. Faculty in the Department of Molecular Genetics and Microbiology also participate in the M.S. programs (see Medical Sciences). In addition to courses associated with the IDP, the Department of Molecular Genetics and Microbiology maintains the courses listed below.

Biotechnology: This Master of Science program is for students seeking careers in the biomedical industry as research or managerial associates; students seeking careers as teachers or educators at any level, but primarily high school or junior college; or students seeking an in-depth understanding of modern biology and scientific research as an end in itself or in preparation for further graduate study. The foundation of the M.S. program is a basic understanding of molecular and cell biology and the performance of a high-quality research project, culminating in a thesis, under the direction of a skilled mentor, with supervision by a committee composed of members of the Graduate Faculty. Specialization may be in any of the fields of research being pursued at the College of Medicine including but not limited to molecular genetics, gene therapy, bacterial or viral pathogenesis, protein structure, toxicology, mammalian genetics, wound healing, and congenital eye diseases.

For more information contact the Master's Program Coordinator, Molecular Genetics and Microbiology, P.O. Box 100266, College of Medicine, Gainesville, FL 32610, Telephone (352)392-3314.

Other

Molecular Genetics and Microbiology

College

College of Medicine

Department/School
Molecular Genetics and Microbiology Department

Courses

- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA Microarray Data Analysis
- GMS 6169: Antimicrobial Strategies
- GMS 6181: Special Topics in Microbiology
- GMS 6190: Seminar
- GMS 6195: Epigenetics Journal Club
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
- GMS 6221: Ethics in Genetics
- GMS 6231: Genomics and Bioinformatics
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6251: Molecular Therapy I – Vectors and Molecular Mechanisms
- GMS 6252: Molecular Therapy II – Disease Targets and Applications
- GMS 6253: Molecular Therapy III – Immunology of Gene Transfer
- GMS 6290: Genetics/Genomics Program Graduate Seminar
- GMS 6338: Recent Advances in Cancer Metastasis
- GMS 6906: Biologic Drug Development
- GMS 6920: Genetics Journal Colloquy
- GMS 6921: Immunology/Microbiology Journal Colloquy
- GMS 6943: Mster's Translational Biotechnology Internship
- GMS 6993: Introduction to Clinical and Translational Research
- GMS 7191: Research Conference
- GMS 7192: Journal Colloquy
- GMS 7194: Biotechnology Seminar
- PCB 5235L: Experiments in Immunology

Degrees

Doctor of Philosophy - Mammalian Genetics

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
- GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
- GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
- GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
- GMS 6029: Brain Journal Club
- GMS 6031: Molecular Immunology
- GMS 6032: Mechanisms of Host Defense
- GMS 6033: Immunology in Health and Disease
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Mechanisms of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6070: Sensory and Motor Systems
- GMS 6072: Neuroendocrinology and Neuroimmunology
- GMS 6073: Developmental Neurobiology
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
- GMS 6078: Synaptic Function and Plasticity
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- GMS 6090: Research in Medical Sciences
- GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
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- GMS 6181: Special Topics in Microbiology
- GMS 6190: Seminar
- GMS 6191: HIV Journal Club
- GMS 6193: Research Conference in Oral Biology
- GMS 6195: Epigenetics Journal Club
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
- GMS 6221: Ethics in Genetics
- GMS 6223: Drosophila Neurogenetics: From Development to Function
- GMS 6231: Genomics and Bioinformatics
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
- GMS 6234: Introduction to Phylogenetics: A Practical Approach to Molecular Phylogenetics of Pathogens
- GMS 6250: Genetics/Genomics Program Graduate Seminar
- GMS 6312: Clinical Chemistry and Toxicology
- GMS 6313: Clinical Chemistry and Toxicology: A Rotation
- GMS 6331: Stem Cell Biology
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
- GMS 6337: B Cell Development in Health and Disease
- GMS 6381: Special Topics in Pathology
- GMS 6382: Special Topics in Immunology
- GMS 6400C: Principles of Physiology
- GMS 6405: Fundamentals of Endocrine Physiology
- GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
- GMS 6408: Fundamentals of Renal Physiology
- GMS 6410: Physiology of the Circulation of Blood
- GMS 6411: Fundamentals of Cardiovascular Physiology
- GMS 6412: Human Physiology for Biomedical Engineering
- GMS 6413: Advances in Hypertension Research
- GMS 6414: Advanced Renal Physiology
- GMS 6415: Fundamentals of Gastrointestinal Physiology
- GMS 6416: Human Endocrinology and Anatomy of Reproduction
- GMS 6471: Fundamentals of Physiology and Functional Genomics I
- GMS 6472: Fundamentals of Physiology and Functional Genomics II
Departments and Programs within the College of Pharmacy

College of Pharmacy

Dear: J. Johnson

Complete faculty listings: Follow this link.

The College of Pharmacy offers the Doctor of Philosophy and the Master of Science in Pharmacy degrees in the pharmaceutical sciences, with concentrations in medicinal chemistry, pharmacodynamics, pharmaceutical outcomes and policy, and pharmacy which includes pharmaceutics. There are two additional concentrations in the Master of Science in Pharmacy program in pharmaceutical sciences: forensic drug chemistry, and forensic serology and DNA. Both offered in a distance-learning, nonthesis format. Complete descriptions of the minimum requirements for the M.S.P. and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

The Graduate Faculty and courses offered are listed under department headings in this catalog. The courses listed below consist of seminar, supervised teaching and research, and research for thesis or doctoral dissertation. These courses are offered in each of the departments.

Students who wish to pursue graduate studies in the College of Pharmacy must have an undergraduate degree in pharmacy, chemistry, biology, or related sciences.

Satisfactory completion of a thesis or dissertation based on research is a requirement for a graduate degree in the pharmaceutical sciences.

Inquiries regarding applications and general information about the graduate programs are processed through the

Office of Research and Graduate Studies,
College of Pharmacy,
P.O. Box 100484,
Health Science Center.
For more information, please see our website: http://pharmacy.ufl.edu

Departments and Programs within the College of Pharmacy
College of Pharmacy Courses

Medicinal Chemistry Department

College of Pharmacy
Chair: M. O. James.
Graduate Coordinator: H. Luesch
Complete faculty listing by department: Follow this link.

The College of Pharmacy offers the Doctor of Philosophy degree in pharmaceutical sciences with a concentration in medicinal chemistry. Medicinal chemistry is a unique blend of the physical and biological sciences. The scope of the field is sufficiently broad to give students with many different science backgrounds a rewarding and challenging program of study. Areas of active research include organic synthesis of medicinal agents, metal chelate design, prodrugs and topical drug delivery, drug metabolism, molecular toxicology, molecular biology, combinatorial chemistry, neurochemistry, analytical chemistry, molecular modeling natural products, and drug discovery.

The applicant should have an undergraduate degree in pharmacy, chemistry, biology, or premedical sciences. A background in calculus and physical and organic chemistry is required. In addition to graduate medicinal chemistry courses in the College of Pharmacy, graduate courses in chemistry and biochemistry are required for the program.

The College also offers the Master of Science in Pharmacy degree in pharmaceutical sciences (nonthesis option) with concentrations in both forensic drug chemistry and forensic serology and DNA in a distance learning format. Minimum requirements for the M.S.P. and Ph.D. degrees are described in the General Information section of this catalog.

The Department participates in the interdisciplinary concentration in toxicology. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

Other

Pharmaceutical Sciences (Medicinal Chemistry)

College
College of Pharmacy

Department/School
Medicinal Chemistry Department

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Medicinal Chemistry

optional second concentration in Clinical and Translational Science

concentration in Toxicology

Master of Science in Pharmacy

concentration in Pharmaceutical Chemistry
concentration in Medicinal Chemistry

concentration in Forensic Serology and DNA

concentration in Forensic Science

concentration in Forensic Drug Chemistry

concentration in Clinical Toxicology

Medicinal Chemistry Courses

- PHA5475: Synthesis of Prodrugs
- PHA6115: Equilibria, Complexations, and Interactions of Drugs
- PHA6354: Natural Medicinal Products
- PHA6356: Structure Determination of Complex Natural Products
- PHA6357: Herbal & Dietary Supplements
- PHA6417: Pharmaceutical Analysis II
- PHA6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA6432: Fundamentals of Pharmaceutical Chemistry
- PHA6444: Pharmaceutical Chemistry I
- PHA6447: Drug Design
- PHA6448: High Throughput Drug Discovery
- PHA6471: Synthetic Medicinal Chemistry
- PHA6534: Toxicology of Chemical Weapons
- PHA6536: Principles of Nucleotide Activity
- PHA6543: Pharmaceutical Chemistry II
- PHA6556: Introduction to Clinical Toxicology
- PHA6557: Clinical Toxicology I
- PHA6840: Medicinal Chemistry of Drugs of Abuse
- PHA6850: Principles of Forensic Science
- PHA6851: Forensic Analysis of DNA
- PHA6853: Biological Evidence and Serology
- PHA6854: Forensic Immunology
- PHA6855: Forensic Genetics
- PHA6856: Blood Spatter and Distribution
- PHA6905C: Research Procedures in Medicinal Chemistry
- PHA6934: Seminar in Medicinal Chemistry
- PHA6852: Mammalian Molecular Biology
- VME6602: General Toxicology
- VME6605: Toxic Substances
- VME6613: Forensic Toxicology I
- VME6614: Forensic Toxicology II
- VME6650: Principles of Mammalian Pharmacology
- VME6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA5270: Health Care and Patient Safety
- PHA5271: Health Care Risk Management
- PHA5272: Risk Management, Liability and Compliance
- PHA6227: Institutional Pharmacy Leadership I
- PHA6228: Institutional Pharmacy Leadership II
- PHA6235: Advanced Pharmaceutical Law
- PHA6236: Health Sciences Liability Law
- PHA6250: Patient Responsibility in Health Care
- PHA6264: Pharmacoeconomics and Health Technology Assessment
- PHA6265: Introduction to Pharmaceutical Outcomes and Policy I
PhA 6266: Introduction to Pharmaceutical Outcomes and Policy II
PhA 6268: Pharmacoepidemiology and Patient Safety
PhA 6269: Pharmaceutical Products and Public Policy
PhA 6273: Structure, Process, and Outcomes of Regulation
PhA 6274: Federal Regulations of Drugs and Pharmacy
PhA 6275: Federal Regulations of Controlled Substances
PhA 6276: Regulating Pharmaceutical Access and Use
PhA 6277: Ethics in Drug Development Production and Use
PhA 6278: State Regulation of Drugs and Pharmacy
PhA 6279: Pharmaceutical Outcomes and Policy Seminar
PhA 6280: Medicare and Medicaid
PhA 6281: Practices and Procedures of Administrative Agencies
PhA 6286: Pharmaceutical Microeconomics
PhA 6287: Pharmaceutical Health Economics
PhA 6288: Critical Review of Research Methods
PhA 6289: Regulating Clinical Research
PhA 6290: Pharmaceutical Fraud and Abuse
PhA 6291: Pharmaceutical Health Care Systems
PhA 6717: Measurement in Pharmacy Administration Research
PhA 6793: Evidentiary Basis of Pharmaceutical Use
PhA 6796: Study/Design in Pharmaceutical Outcomes & Policy Research
PhA 6798: The Use and Abuse of Statistics in Drug Regulation
PhA 6799: Patient Safety Program Evaluation
PhA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
PhA 6860: Prevention of Pharmaceutical Crimes
PhA 6891: Introduction to Pharmacoepidemiology
PhA 6892: Practices and Procedures of the IRB
PhA 6893: Research Ethics
PhA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
PhA 6937: Topics in Pharmaceutical Administration
PhA 6206: Introduction to Pharmaceutical Microeconomics
PhA 6282: Pharmaceutical Policy Process
PhA 6283: Commercial Applications of Pharmacoeconomics

Pharmaceutics Departmental Courses

PhA 6116: In Vivo and In Vitro Stability of Drugs
PhA 6118: Molecular Diversity
PhA 6125: Pharmacokinetics and Biopharmaceutics
PhA 6170C: Pharmaceutical Product Formulation
PhA 6183: Pharmaceutical Gene Delivery
PhA 6185: Pharmaceutical Drug Development
PhA 6416: Pharmaceutical Analysis I
PhA 6427: Pharmacogenetics of Drug Metabolism
PhA 6440: Seminar in Drug Discovery
PhA 6449: Pharmacogenomics
PhA 6630: Medication Therapy Management: A Hematologic Focus
PhA 6631: Foundations of Medication Therapy Management I
PhA 6632: Foundations of Medication Therapy Management II
PhA 6633: Medication Therapy Management: A Cardiovascular Focus
PhA 6634: Medication Therapy Management: An Endocrine Focus
PhA 6635: Medication Therapy Management: A Renal Focus
PhA 6636: Medication Therapy Management: A Gastrointestinal Focus
PhA 6637: Medication Therapy Management: A Psychiatric Focus
PhA 6638: Medication Therapy Management: A Neurologic Focus
PhA 6639: Medication Therapy Management: A Respiratory Focus
PhA 6894: Introduction to Graduate Studies
PhA 6896: Preclinical Drug Evaluation

Pharmacodynamics Courses

PhA 5531: Neurotoxicology
PhA 6508: Systems Physiology and Pathophysiology I
PhA 6509: Systems Physiology and Pathophysiology II
PhA 6512L: Experiential Research Training in Pharmacodynamics
PhA 6521C: Research Techniques in Pharmacodynamics
PhA 6522L: ICBR Molecular Techniques Laboratory
PhA 6540: Neurochemical Foundation of Pharmacodynamics
PhA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

GMS 6563: Molecular Pharmacology
GMS 6590: Seminar in Pharmacology
GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
GMS 6735: Neuropharmacology
College of Pharmacy Courses

- PHA5171: Pharmaceutical Biotechnology
- PHA6521C: Research Techniques in Pharmacodynamics
- PHA6806: Pharmacoeconomic Modeling
- PHA6910: Supervised Research
- PHA6935: Selected Topics in Pharmacy
- PHA6936: Advanced Topics in Pharmaceutical Sciences
- PHA6938: Research Seminar
- PHA6940: Supervised Teaching
- PHA6971: Research for Master's Thesis
- PHA7979: Advanced Research
- PHA7980: Research for Doctoral Dissertation

Pharmaceutics Department

Chair: H. C. Derendorf.
Graduate Coordinator: A. Palmieri III.

Complete faculty listing by department: Follow this link.

The Department of Pharmaceutics offers the Doctor of Philosophy in pharmaceutical sciences. Pharmaceutics is the scientific endeavor concerned with the design, formulation, evaluation, and use of drug delivery systems. A foundation in physical chemistry, chemistry, mathematics, and in the life sciences, is necessary. Its domain extends from studies of the physiochemical properties of drugs and related molecules to investigations of the mechanisms of physiological processes affecting drug delivery and therapeutic effectiveness. The Department's general focus involves studying the design and evaluation of traditional and novel dosage forms for delivering drug molecules and macromolecules. The design involves physical chemical studies and development of analytical techniques involving spectroscopy and chromatography. Evaluation includes development of sensitive analytical techniques for the drug in biological fluids and subsequent biopharmaceutical and clinical pharmacokinetic studies.

Other

Pharmaceutical Sciences (Pharmaceutics)

College

College of Pharmacy

Department/School

Pharmaceutics Department

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

concentration in Pharmacy

optional second concentration in Clinical and Translational Science
Master of Science in Pharmacy

without a concentration

concentration in Pharmacy

Pharmaceutics Departmental Courses

- PHA 6116: In Vivo and In Vitro Stability of Drugs
- PHA 6118: Molecular Diversity
- PHA 6125: Pharmacokinetics and Biopharmaceutics
- PHA 6170C: Pharmaceutical Product Formulation
- PHA 6183: Pharmaceutical Gene Delivery
- PHA 6185: Pharmaceutical Drug Development
- PHA 6416: Pharmaceutical Analysis I
- PHA 6427: Pharmacogenetics of Drug Metabolism
- PHA 6440: Seminar in Drug Discovery
- PHA 6449: Pharmacogenomics
- PHA 6630: Medication Therapy Management: A Hematologic Focus
- PHA 6631: Foundations of Medication Therapy Management I
- PHA 6632: Foundations of Medication Therapy Management II
- PHA 6633: Medication Therapy Management: A Cardiovascular Focus
- PHA 6634: Medication Therapy Management: An Endocrine Focus
- PHA 6635: Medication Therapy Management: A Renal Focus
- PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA 6637: Medication Therapy Management: A Psychiatric Focus
- PHA 6638: Medication Therapy Management: A Psychiatric Focus
- PHA 6639: Medication Therapy Management: A Respiratory Focus
- PHA 6894: Introduction to Graduate Studies
- PHA 6896: Preclinical Drug Evaluation

Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6952: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control
Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
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- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6290: Pharmaceutical Fraud and Abuse
- PHA 6291: Pharmaceutical Health Care Systems
- PHA 6717: Measurement in Pharmacy Administration Research
- PHA 6793: Evidentiary Basis of Pharmaceutical Use
- PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
- PHA 6798: The Use and Abuse of Statistics in Drug Regulation
- PHA 6799: Patient Safety Program Evaluation
- PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA 6806: Prevention of Pharmaceutical Crimes
- PHA 6891: Introduction to Pharmacoeconomics
- PHA 6892: Practices and Procedures of the IRB
- PHA 6893: Research Ethics
- PHA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
- PHA 6937: Topics in Pharmaceutical Administration
- PHA 6938: Research Seminar
- PHA 6939: Journal Colloquy in Pharmacodynamics
- PHA 6940: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics
- PHA 6206: Introduction to Pharmaceutical Microeconomics
- PHA 6282: Pharmaceutical Policy Process
- PHA 6283: Commercial Applications of Pharmacoeconomics

Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA 5171: Pharmaceutical Biotechnology
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6806: Pharmacoeconomic Modeling
- PHA 6910: Supervised Research
- PHA 6936: Selected Topics in Pharmacy
- PHA 6938: Research Seminar
- PHA 6939: Journal Colloquy in Pharmacodynamics
- PHA 6940: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics
- PHA 6206: Introduction to Pharmaceutical Microeconomics
- PHA 6282: Pharmaceutical Policy Process
- PHA 6283: Commercial Applications of Pharmacoeconomics

Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA 5171: Pharmaceutical Biotechnology
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6806: Pharmacoeconomic Modeling
- PHA 6910: Supervised Research
- PHA 6936: Selected Topics in Pharmacy
- PHA 6938: Research Seminar
Pharmacodynamics Department

Chair: M. Keller-Wood.
Interim Graduate Coordinator: Joanna Peris

Complete faculty listing by department: Follow this link.

The Department of Pharmacodynamics offers the Doctor of Philosophy in the pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the interdisciplinary toxicology concentration (see Interdisciplinary Graduate Studies in this catalog). Pharmacodynamics is an integrated field of study involving pharmacology, physiology, and toxicology in a holistic approach to drug action in living systems. The Department focuses on neuroendocrinology, cardiovascular pharmacology, and neuropharmacology with diverse research interests in aging, hypertension, reproduction, glaucoma, neurotoxicity, and environmental physiology.

An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.

Other

Pharmaceutical Sciences (Pharmacodynamics)

College

College of Pharmacy

Department/School

Pharmacodynamics Department

Pharmacodynamics Programs

The Department of Pharmacodynamics offers the Doctor of Philosophy in the pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the interdisciplinary toxicology concentration (see Interdisciplinary Graduate Studies in this catalog). Pharmacodynamics is an integrated field of study involving pharmacology, physiology, and toxicology in a holistic approach to drug action in living systems. The Department focuses on neuroendocrinology, cardiovascular pharmacology, and neuropharmacology with diverse research interests in aging, hypertension, reproduction, glaucoma, neurotoxicity, and environmental physiology.

An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Pharmacodynamics

optional second concentration in Clinical and Translational Science

Master of Science in Pharmacy

concentration in Pharmacodynamics
Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6952: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6290: Pharmaceutical Fraud and Abuse
- PHA 6291: Pharmaceutical Health Care Systems
• PHA 6717: Measurement in Pharmacy Administration Research
• PHA 6793: Evidence-Based Pharmaceutical Use
• PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
• PHA 6798: The Use and Abuse of Statistics in Drug Regulation
• PHA 6799: Patient Safety Program Evaluation
• PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
• PHA 6892: Prevention of Pharmaceutical Crimes
• PHA 6893: Introduction to Pharmacoepidemiology
• PHA 6898: Practices and Procedures of the IRB
• PHA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
• PHA 6937: Topics in Pharmaceutical Administration
• PHA 6940: Introduction to Pharmaceutical Microeconomics
• PHA 6892: Pharmacological Principles of Drug Discovery
• PHA 6926: Healthcare Informatics
• PHA 6950: Pharmacy Law
• PHA 6951: Ethics in Pharmacy Practice
• PHA 6952: Drug Safety

Pharmaceutics Departmental Courses

• PHA 6116: In Vivo and In Vitro Stability of Drugs
• PHA 6118: Molecular Diversity
• PHA 6125: Pharmacokinetics and Biopharmaceutics
• PHA 6170C: Pharmaceutical Product Formulation
• PHA 6183: Pharmaceutical Gene Delivery
• PHA 6185: Pharmaceutical Drug Development
• PHA 6416: Pharmaceutical Analysis I
• PHA 6427: Pharmacogenetics of Drug Metabolism
• PHA 6440: Seminar in Drug Discovery
• PHA 6449: Pharmacogenomics
• PHA 6630: Medication Therapy Management: A Hematologic Focus
• PHA 6631: Foundations of Medication Therapy Management I
• PHA 6632: Foundations of Medication Therapy Management II
• PHA 6633: Medication Therapy Management: A Cardiovascular Focus
• PHA 6634: Medication Therapy Management: An Endocrine Focus
• PHA 6635: Medication Therapy Management: A Renal Focus
• PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
• PHA 6637: Medication Therapy Management: A Psychiatric Focus
• PHA 6638: Medication Therapy Management: A Neurologic Focus
• PHA 6639: Medication Therapy Management: A Respiratory Focus
• PHA 6894: Introduction to Graduate Studies
• PHA 6898: Preclinical Drug Evaluation

Pharmacology Courses

• GMS 6563: Molecular Pharmacology
• GMS 6590: Seminar in Pharmacology
• GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
• GMS 6735: Neuropharmacology
• GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

• PHA 5171: Pharmaceutical Biotechnology
• PHA 6521C: Research Techniques in Pharmacodynamics
• PHA 6806: Pharmaceutical Economics
• PHA 6910: Supervised Research
• PHA 6935: Selected Topics in Pharmacy
• PHA 6936: Advanced Topics in Pharmaceutical Sciences
• PHA 6938: Research Seminar
• PHA 6940: Supervised Teaching
• PHA 6971: Research for Master's Thesis
• PHA 7979: Advanced Research
• PHA 7980: Research for Doctoral Dissertation

Pharmaceutical Outcomes and Policy Department

Chair: R. Segal
Graduate Coordinator: A. Winterstein

Complete faculty listing by department: Follow this link.

The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree. Complete descriptions of the requirements for these degrees are provided in the Graduate Degrees section of this catalog.
Other

Pharmaceutical Sciences (Pharmaceutical Outcomes and Policy)

College

College of Pharmacy

Department/School

Pharmaceutical Outcomes and Policy Department

Pharmaceutical Outcomes and Policy Program Information

The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree.

Research in the Department emphasizes the epidemiological, socio-behavioral, administrative, regulatory, and economic aspects of drug therapy and pharmaceutical services, including assessment of safety, effectiveness, efficiency and quality aspects of patient-oriented pharmaceutical services and medication use.

The department offers both a research-oriented residential M.S.P. and Ph.D. degree programs as well as an online M.S.P. program. For the research oriented degree programs, graduate studies include core curricula and four specializations in patient safety and program evaluation, pharmacoeconomics, pharmacoepidemiology and social-behavioral research in medication use. Electives and required courses draw from the resources of the entire University. Graduates are prepared for leadership positions in academia, public service, pharmaceutical industry, and health service industry with a focus on the evaluation of drugs and related services.

The online non-thesis M.S.P. program is designed for working professionals, and focuses on pharmaceutical regulation and outcomes. Prior pharmacy experience/knowledge is not required and the program is available to persons located in the United States only. Coursework is delivered in both asynchronous and live, synchronous sessions. Students may choose among six specialty tracks including Pharmacy Regulation & Policy, Applied Pharmacoeconomics, Drug Regulatory Affairs, Clinical Research Regulation in Pharmacy, Patient Safety & Medication Risk Management, and Institutional Pharmacy Leadership.

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Pharmaceutical Outcomes and Policy

optional second concentration in Clinical and Translational Science

Master of Science in Pharmacy

concentration in Medication Therapy Management

Pharmaceutical Outcomes and Policy Courses
• PHA 5270: Health Care and Patient Safety
• PHA 5271: Health Care Risk Management
• PHA 5272: Risk Management, Liability and Compliance
• PHA 6227: Institutional Pharmacy Leadership I
• PHA 6228: Institutional Pharmacy Leadership II
• PHA 6235: Advanced Pharmaceutical Law
• PHA 6236: Health Sciences Liability Law
• PHA 6250: Patient Responsibility in Health Care
• PHA 6264: Pharmacoepidemiology and Patient Safety
• PHA 6269: Pharmaceutical Products and Public Policy
• PHA 6273: Structure, Process, and Outcomes of Regulation
• PHA 6274: Federal Regulations of Drugs and Pharmacy
• PHA 6275: Federal Regulations of Controlled Substances
• PHA 6276: Regulating Pharmaceutical Access and Costs
• PHA 6277: Ethics in Drug Development Production and Use
• PHA 6278: State Regulation of Drugs and Pharmacy
• PHA 6279: Pharmaceutical Outcomes and Policy Seminar
• PHA 6280: Medicare and Medicaid
• PHA 6281: Practices and Procedures of Administrative Agencies
• PHA 6286: Pharmaceutical Microeconomics
• PHA 6287: Pharmaceutical Health Economics
• PHA 6288: Critical Review of Research Methods
• PHA 6289: Regulating Clinical Research
• PHA 6290: Pharmaceutical Fraud and Abuse
• PHA 6291: Pharmaceutical Health Care Systems
• PHA 6717: Measurement in Pharmacy Administration Research
• PHA 6793: Evidentiary Basis of Pharmaceutical Use
• PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
• PHA 6798: The Use and Abuse of Statistics in Drug Regulation
• PHA 6799: Patient Safety Program Evaluation
• PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
• PHA 6860: Prevention of Pharmaceutical Crimes
• PHA 6891: Introduction to Pharmacoepidemiology
• PHA 6892: Practices and Procedures of the IRB
• PHA 6893: Research Ethics
• PHA 6896: Advanced OB/GYN and Pediatric Pharmacoepidemiology
• PHA 6937: Topics in Pharmaceutical Administration
• PHA 6938: Introduction to Pharmaceutical Microeconomics
• PHA 6939: Pharmaceutical Policy Process
• PHA 6940: Pharmaceutical Health Care Systems

Medicinal Chemistry Courses

• PHA 5475: Synthesis of Prodrugs
• PHA 6115: Equilibria, Complexations, and Interactions of Drugs
• PHA 6354: Natural Medicinal Products
• PHA 6356: Structure Determination of Complex Natural Products
• PHA 6357: Herbal & Dietary Supplements
• PHA 6417: Pharmaceutical Analysis II
• PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
• PHA 6432: Fundamentals of Pharmaceutical Chemistry
• PHA 6444: Pharmaceutical Chemistry I
• PHA 6447: Drug Design
• PHA 6448: High Throughput Drug Discovery
• PHA 6471: Synthetic Medicinal Chemistry
• PHA 6534: Toxicology of Chemical Weapons
• PHA 6535: Principles of Nucleotide Activity
• PHA 6543: Pharmaceutical Chemistry II
• PHA 6556: Introduction to Clinical Toxicology
• PHA 6557: Clinical Toxicology I
• PHA 6560: Medicinal Chemistry of Drugs of Abuse
• PHA 6850: Principles of Forensic Science
• PHA 6851: Forensic Analysis of DNA
• PHA 6853: Biological Evidence and Serology
• PHA 6854: Forensic Immunology
• PHA 6855: Forensic Genetics
• PHA 6856: Blood Spatter and Distribution
• PHA 6890: Research Procedures in Medicinal Chemistry
• PHA 6934: Seminar in Medicinal Chemistry
• PHA 6952: Mammalian Molecular Biology
• VME 6602: General Toxicology
• VME 6605: Toxic Substances
• VME 6613: Forensic Toxicology I
• VME 6614: Forensic Toxicology II
• VME 6650: Principles of Mammalian Pharmacology
• VME 6766: Laboratory Quality Assurance/Quality Control
Pharmaceutics Departmental Courses

- PHA 6116: In Vivo and In Vitro Stability of Drugs
- PHA 6118: Molecular Diversity
- PHA 6125: Pharmacokinetics and Biopharmaceutics
- PHA 6170C: Pharmaceutical Product Formulation
- PHA 6183: Pharmaceutical Gene Delivery
- PHA 6185: Pharmaceutical Drug Development
- PHA 6416: Pharmaceutical Analysis I
- PHA 6427: Pharmacogenetics of Drug Metabolism
- PHA 6440: Seminar in Drug Discovery
- PHA 6449: Pharmacogenomics
- PHA 6630: Medication Therapy Management: A Hematologic Focus
- PHA 6631: Foundations of Medication Therapy Management I
- PHA 6632: Foundations of Medication Therapy Management II
- PHA 6633: Medication Therapy Management: A Cardiovascular Focus
- PHA 6634: Medication Therapy Management: An Endocrine Focus
- PHA 6635: Medication Therapy Management: A Renal Focus
- PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA 6637: Medication Therapy Management: A Psychiatric Focus
- PHA 6638: Medication Therapy Management: A Neurologic Focus
- PHA 6639: Medication Therapy Management: A Respiratory Focus
- PHA 6694: Introduction to Graduate Studies
- PHA 6896: Preclinical Drug Evaluation

Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA 5171: Pharmaceutical Biotechnology
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6806: Pharmacoeconomic Modeling
- PHA 6910: Supervised Research
- PHA 6935: Selected Topics in Pharmacy
- PHA 6936: Advanced Topics in Pharmaceutical Sciences
- PHA 6938: Research Seminar
- PHA 6940: Supervised Teaching
- PHA 6971: Research for Master's Thesis
- PHA 7979: Advanced Research
- PHA 7980: Research for Doctoral Dissertation

Pharmacotherapy and Translational Research Department

For a full list of faculty, please follow this link.

Description to be added

Other

Pharmaceutical Sciences (Pharmacotherapy and Translational Research)

Description to be added
Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Clinical Pharmaceutical Sciences

Master of Science in Pharmacy

concentration in Clinical Pharmacy

Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6852: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control
Pharmaceutical Outcomes and Policy Courses

- PHA5270: Health Care and Patient Safety
- PHA5271: Health Care Risk Management
- PHA5272: Risk Management, Liability and Compliance
- PHA6227: Institutional Pharmacy Leadership I
- PHA6228: Institutional Pharmacy Leadership II
- PHA6235: Advanced Pharmaceutical Law
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- PHA6250: Patient Responsibility in Health Care
- PHA6264: Pharmacoepidemiology and Health Technology Assessment
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- PHA6268: Pharmacoepidemiology and Patient Safety
- PHA6269: Pharmaceutical Products and Public Policy
- PHA6273: Structure, Process, and Outcomes of Regulation
- PHA6274: Federal Regulations of Drugs and Pharmacy
- PHA6275: Federal Regulations of Controlled Substances
- PHA6276: Regulating Pharmaceutical Access and Costs
- PHA6277: Ethics in Drug Development Production and Use
- PHA6278: State Regulation of Drugs and Pharmacy
- PHA6279: Pharmaceutical Outcomes and Policy Seminar
- PHA6280: Medicare and Medicaid
- PHA6281: Practices and Procedures of Administrative Agencies
- PHA6286: Pharmaceutical Microeconomics
- PHA6287: Pharmaceutical Health Economics
- PHA6288: Critical Review of Research Methods
- PHA6289: Regulating Clinical Research
- PHA6290: Pharmaceutical Fraud and Abuse
- PHA6291: Pharmaceutical Health Care Systems
- PHA6717: Measurement in Pharmacy Administration Research
- PHA6793: Evidentiary Basis of Pharmaceutical Use
- PHA6796: Study Design in Pharmaceutical Outcomes & Policy Research
- PHA6798: The Use and Abuse of Statistics in Drug Regulation
- PHA6799: Patient Safety Program Evaluation
- PHA6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA6860: Prevention of Pharmaceutical Crimes
- PHA6891: Introduction to Pharmacoepidemiology
- PHA6892: Practices and Procedures of the IRB
- PHA6893: Research Ethics
- PHA6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
- PHA6937: Topics in Pharmaceutical Administration
- PHA6206: Introduction to Pharmaceutical Microeconomics
- PHA6282: Pharmaceutical Policy Process
- PHA6283: Commercial Applications of Pharmacoeconomics

Pharmaceutics Departmental Courses

- PHA6116: In Vivo and In Vitro Stability of Drugs
- PHA6118: Molecular Diversity
- PHA6125: Pharmacokinetics and Biopharmaceutics
- PHA6170C: Pharmaceutical Product Formulation
- PHA6183: Pharmaceutical Gene Delivery
- PHA6185: Pharmaceutical Drug Development
- PHA6416: Pharmacological Analysis I
- PHA6427: Pharmacogenetics of Drug Metabolism
- PHA6440: Seminar in Drug Discovery
- PHA6449: Pharmacogenomics
- PHA6630: Medication Therapy Management: A Hematologic Focus
- PHA6631: Foundations of Medication Therapy Management I
- PHA6632: Foundations of Medication Therapy Management II
- PHA6633: Medication Therapy Management: A Cardiovascular Focus
- PHA6634: Medication Therapy Management: An Endocrine Focus
- PHA6635: Medication Therapy Management: A Renal Focus
- PHA6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA6637: Medication Therapy Management: A Psychiatric Focus
- PHA6638: Medication Therapy Management: A Neurologic Focus
- PHA6639: Medication Therapy Management: A Respiratory Focus
- PHA6894: Introduction to Graduate Studies
- PHA6896: Preclinical Drug Evaluation

Pharmacodynamics Courses

- PHA5531: Neurotoxicology
- PHA6508: Systems Physiology and Pathophysiology I
- PHA6509: Systems Physiology and Pathophysiology II
- PHA6512L: Experiential Research Training in Pharmacodynamics
- PHA6521C: Research Techniques in Pharmacodynamics
PHAR 6522L: ICBR Molecular Techniques Laboratory
PHAR 6540: Neurochemical Foundation of Pharmacodynamics
PHAR 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHAR 5171: Pharmaceutical Biotechnology
- PHAR 6521C: Research Techniques in Pharmacodynamics
- PHAR 6806: Pharmacoeconomic Modeling
- PHAR 6910: Supervised Research
- PHAR 6936: Selected Topics in Pharmacology
- PHAR 6938: Research Seminar
- PHAR 6940: Supervised Teaching
- PHAR 6979: Research for Master's Thesis
- PHAR 6989: Research for Doctoral Dissertation

Departments and Programs within the College of Public Health and Health Professions

College of Public Health and Health Professions

Dear: Michael G. Perri
Executive Associate Dean: Stephanie L. Hanson

Complete faculty listings: Follow this link.

The University of Florida College of Public Health and Health Professions has established a new educational model that focuses on the integration of public health problem-solving and individual patient care. The college's mission is to preserve, promote and improve the health and well-being of populations, communities and individuals. To fulfill this mission, we foster collaborations among public health and the health professions in education, research and service.

For more information, please see our website: http://phhp.ufl.edu

Departments and Programs within the College of Public Health and Health Professions

Public Health (M.P.H.)

College of Public Health and Health Professions Courses

Director and Graduate Coordinator: Sarah L. McKune
Complete faculty listing: Follow this link.

The College of Public Health and Health Professions offers the Master of Public Health degree program through five departments in the college: Behavioral Science and Community Health, Biostatistics, Epidemiology, Environmental and Global Health, and Health Services Research, Management, and Policy Department. This non-thesis program is designed to prepare students to become effective public health practitioners, scientists, and educators.

Students select one of six concentration areas:
- Biostatistics
- Environmental health
Both a 48-credit program for students without terminal health science degrees and a 42-credit program for students with terminal degrees are offered. A combined bachelor's/master of public health program is available, as well as a 15-credit college certificate program. Students interested in collaborative programs may pursue joint M.P.H. and M.D., J.D., Pharm.D., D.P.T, or DMD degrees, or concurrent master's and Ph.D programs. The MPH degree program and the Public Health certificate are available on campus and online. For program descriptions and information on applying, visit the website: [www.mph.ufl.edu](http://www.mph.ufl.edu).

48-credit Master of Public Health: Students who do not hold a terminal degree in a health science discipline are eligible to apply for the 48-credit program. The program provides comprehensive coverage of core public health content and allows selection of a concentration. Students must complete 16 credits of core public health course work, 15-21 credits of concentration core courses, up to 12 credits of elective courses, and 5-8 credits of internship. The course work representing these requirements is described below.

42-credit accelerated Master of Public Health: Students who hold a terminal degree (usually a doctoral degree) in a health science discipline may be eligible for the 42-credit accelerated program. This program requires completion of 16 credits of core public health course work, 21 credits of concentration and elective course work, and a 5-credit internship.

Combined degree program: The College offers a combined degree program to allow qualified undergraduates to earn both a bachelor's degree and the Master of Public Health degree efficiently. Seniors with any undergraduate major are eligible for the combined degree program as long as they have an undergraduate GPA of at least 3.2 and competitive scores on the verbal and quantitative portions of the GRE, and their career interests match the M.P.H. program. Students accepted into the combined degree program complete 15 credits of public health course work while still undergraduates, leaving only 33 credits after admission to graduate school. Students must achieve a B or better in public health courses taken as an undergraduate and be accepted to graduate school to complete the program.

Core Courses: All M.P.H. students take five public health core courses. The core courses in environmental health, epidemiology, public health management and policy, and social and behavioral sciences are taken by all students. The core biostatistics course varies across concentration areas. Students in the biostatistics, environmental health, and epidemiology concentrations must take [PHC 6052: Introduction to Biostatistical Methods](#). All other M.P.H. students must take [PHC 6050: Statistical Methods for Health Sciences Research I](#). In addition, all students must take a 1-credit seminar in contemporary public health issues and 5 to 8 credits of [PHC 6946: Public Health Internship](#).

Internship, major paper, and oral presentation: Each student completes an internship, which provides an opportunity to apply knowledge acquired in the classroom to a real public health problem in a practice setting. The internship is usually completed in the student's final term in the program. Students may engage in many activities during an internship, but each student must have one special project which serves as the basis for a major paper and an oral presentation. The written and oral presentations represent the culmination of the academic experience in the M.P.H. program. Presentations, which are scheduled on Public Health Day near the end of each semester, provide each student with an opportunity to organize and present the details of the special project to faculty, students, and invited guests. Students are expected to display their understanding of their projects in the larger context of public health as a cross-disciplinary field, and in relation to the competencies expected of all M.P.H. graduates. Three faculty members, including the supervisory committee chair, attend each presentation and are responsible for assessing whether the student has successfully demonstrated a broad knowledge of the field of public health and depth in his or her concentration area.

Degrees Offered with a Major of Public Health

Master of Public Health

Master of Public Health - Biostatistics

Master of Public Health - Environmental Health

Master of Public Health - Epidemiology

Master of Public Health - Health Management and Policy

Master of Public Health - Public Health Practice

Master of Public Health - Social and Behavioral Sciences
Public Health Courses

- HMG 6747: Marketing in Hospitality/Tourism
- HSA 6114: U.S. Health Care System
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6010: Data Management and Statistical Computing for Epidemiology
- PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6052: Introduction to Biostatistical Methods
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6055: Biostatistical Computing Using R
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6370: Public Health Biology
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6711: Measurement in Epidemiology and Outcomes Research
- PHC 6716: Survey Research Methods
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 6905: Independent Study
- PHC 6913: Biostatistics Project
- PHC 6930: Integrated Public Health Seminar
- PHC 6946: Public Health Internship
- PHC 6950: Seminar in Contemporary Public Health Issues
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7056: Analysis of Longitudinal Data
- PHC 7066: Large Sample Theory
- PHC 7980: Research for Doctoral Dissertation
- STA 6177: Applied Survival Analysis
- STA 6208: Basic Design and Analysis of Experiments
- STA 6208: Basic Design and Analysis of Experiments

Statistics Courses

Master of Public Health with a Concentration in Biostatistics

The contribution of biostatisticians is far reaching and includes both core public health research and consultation with other health professionals. The biostatistics concentration is designed primarily for students with a previous graduate degree (particularly in the health sciences) who want to obtain a solid background in quantitative and analytical methods for public health research. The course work exposes students to methodology typically used to analyze different types of public health data and gives them opportunities to apply these methodologies themselves.

Graduates of the M.P.H. program with a concentration in biostatistics return to their careers with an improved understanding of quantitative methods for public health research. This increased knowledge will facilitate their own research programs and will enhance their ability to critically read the literature in their field. The biostatistics concentration requires completion of 6 concentration core courses: PHC 6053 Regression Methods for the Health and Life Sciences, PHC 6000 Epidemiology Research Methods I, PHC 6080 SAS for Public Health Data, PHC 6081 SAS for Public Health Analysis, and PHC 6055 Biostatistical Computing Using R. Remaining courses include the public health internship (PHC 6946) and electives in statistics and public health. Visit the biostatistics concentration website for the most up-to-date information about course options: http://mph.ufl.edu/programs/master-of-public-health/biostatistics.

See the department Biostatistics website for information about other programs offered by the department: http://biostat.ufl.edu/.

Master of Public Health with a Concentration in Environmental Health

Professionals trained in environmental health study the impact of our surroundings on our health. They understand how environmental risk factors can cause diseases like asthma, cancer, and food poisoning. Environmental health professionals make up approximately half of public health personnel and the field accounts for about half of public health expenditures. Students interested in environmental health typically have a background in biological or physical sciences, engineering, nursing, medicine, and veterinary medicine. Prior experience in chemistry, biology, statistics, and Microsoft Excel software is desirable. Please note the prerequisites for Environmental Health courses and speak with the instructor if you have not successfully completed the prerequisites. The following courses are required for all students pursuing the environmental health concentration: VME 6602, VME 6607, PHC 6702, and PHC 6316. Students may also choose from elective course work listed on the department website below. Environmental health students complete their programs with an internship (PHC 6946) and electives on a wide variety of environmental health and public health topics.

Visit the environmental health concentration website for the most up-to-date information about course options: http://mph.ufl.edu/programs/master-of-public-health/environmental-health. And visit the Website of the Department of Environmental and Global Health for information about other academic programs and activities in the department: http://egh.phhp.ufl.edu.

Environmental Health Courses

- EES 5245: Water Quality Analysis
Master of Public Health with a Concentration in Epidemiology

Epidemiology focuses on the study of the distribution and determinants of health in populations and communities. It is the scientific foundation of public health research that seeks to reduce risk factors and improve health. The discipline also contributes to public health practice and policy, and research in other health-related fields such as medicine and pharmacy. This concentration area is designed to train professionals to apply the principles and methods of epidemiological investigation in a broad range of settings. The required concentration core courses in epidemiology are PHC 6000, PHC 6002, PHC 6003, PHC 6011, and PHC 6053. Epidemiology concentration students complete their programs with an internship (PHC 6946) and electives in epidemiology and public health.

Additional detail and options for epidemiology elective course work is at the website: http://mph.ufl.edu/programs/master-of-public-health/epidemiology. Please also visit the website of the Department of Epidemiology for up-to-date information about other epidemiology programs and activities: http://epidemiology.phhp.ufl.edu.

Epidemiology Courses

- PHC 6000: Epidemiology Methods I
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6011: Epidemiology Methods II
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6405: Theoretical Foundations of Public Health
- PHC 6912: Special Project: Independent Research
- PHC 6938: Oral and Craniofacial Epidemiology
- PHC 6946: Public Health Internship

Master of Public Health with a Concentration in Public Health Management and Policy (PHMP)

This concentration focuses on the structure and administration of health organizations and the policies that impact health programs and reimbursement of health services. The concentration encompasses two of the major roles of leaders in public health. Essential skills for managing a health agency or organization include accounting, financial management, human resource management, strategic and program planning, operations research, economics, and monitoring outcome measures. Development, analysis, interpretation, and evaluation of government policies require analytical skills and social skills, as well as a deep understanding of politics.

The PHMP concentration requires six core courses: HSA 5174, HSA 6115, HSA 6152, PHC 6104, PHC 6421, and PHC 6103. In addition, students take two elective courses in one of three areas of specialization:

- Public health management
- Public policy
- Pharmaceutical use and policy.

The PHMP students complete their programs with an internship (PHC 6946) and public health elective courses.

Visit the public health management and policy concentration website for the most up-to-date information about course options: http://mph.ufl.edu/programs/oncampusprograms/concentrations-2/managementpolicy.

The website of Department of Health Services Research, Management, and Policy provides additional information about activities and other academic programs in the department: http://hsrmp.phhp.ufl.edu.

Public Health Management and Policy Courses

- HSA 5174: Fundamentals of Health Care Finance
- HSA 6115: Introduction to Management of Health Services Organizations
- HSA 6152: Overview of U.S. Health Policy
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6421: Public Health Law and Ethics

Master of Public Health with a Concentration in Public Health Practice

This concentration provides the opportunity to develop breadth in public health by taking coursework in two, three, or four of the core public health concentrations. Such breadth is often required of professionals who assume positions of leadership in public health. It is available to students in joint and concurrent degree programs, medical and other health scientists, and working professionals. Public Health Practice is the only M.P.H. concentration available online.
The campus curriculum for this concentration follows the same model as the other concentrations. Students pursuing public health practice begin their programs with the 5 core courses required of all MPH students. Instead of a specified set of concentration core courses, however, these students may choose 2 or more courses from advanced course options in two to four of the other concentrations. Students complete their degree with a 5 to 8 credit internship. All students in this concentration must hold a prior health professional degree or be enrolled in a joint or concurrent graduate program. To be eligible for the accelerated option, applicants must hold a terminal degree in a health or health-related field.

The online Public Health Practice curriculum begins with the 5 core courses and then offers two or more courses in epidemiology, environmental health, public health management and policy and social and behavioral sciences. Students complete their degree with a 5 to 8 credit internship. Online students are not available to pursue the MPH on campus in Gainesville, either due to employment or geographic distance.

Master of Public Health with a Concentration in Social and Behavioral Sciences

The social and behavioral sciences concentration is based on the assumption that health and health behavior are influenced by multiple psychological, behavioral, social, and cultural factors. Central to addressing health problems and eliminating health disparities and inequalities, these factors must be understood and addressed using a framework that explores multiple levels (individual, interpersonal, organizational, community, and population) and the interactions among them. Through classroom instruction, research, and field practice, MPH students who concentrate in social and behavioral sciences explore the unique issues faced by diverse groups and populations and acquire skills to achieve social and behavioral change. Students in the social and behavioral sciences concentration are required to take five courses: PHC 6251 (Assessment and Surveillance in Public Health), PHC 6146 (Public Health Program Planning and Evaluation), PHC 6700 (Social and Behavioral Research Methods), PHC 6195 (Public Health Information for Diverse Populations), and PHC 6405 (Theoretical Foundations of Public Health). In addition, they may choose two courses from ten concentration electives (e.g., PHC 6762, PHC 6441). Social and behavioral science students complete their programs with an internship (PHC 6946) and elective courses in public health or related fields.

Visit the social and behavioral science concentration website for the most up-to-date information about course options: [http://mph.ufl.edu/programs/master-of-public-health/socialbehavioralsciences](http://mph.ufl.edu/programs/master-of-public-health/socialbehavioralsciences).

The website of the Department of Behavioral Science and Community Health provides additional information about activities and other academic programs in the department: [http://bsch.phhp.ufl.edu](http://bsch.phhp.ufl.edu).

Social and Behavioral Sciences Courses

- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6441: Health Disparities in the United States
- PHC 6700: Social and Behavioral Research Methods
- PHC 6762: International Public Health
- PHC 6937: Special Topics in Public Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
• PHC 6421: Public Health Law and Ethics
• PHC 6441: Health Disparities in the United States
• PHC 6445: Global Public Health and Development II
• PHC 6447: Ecology of HIV/AIDS in the Rural South
• PHC 6512: Environmental Management of Vector-Borne Diseases
• PHC 6515: Introduction to Entomology/Zoonotic Diseases and Food Safety
• PHC 6519: Zoonotic Diseases in Humans and Animals
• PHC 6520: Foodborne Diseases
• PHC 6530: Public Health Issues of Mothers and Children
• PHC 6543: Community Practice of Behavioral Health Risk Prevention
• PHC 6544: Health Behavior Interventions in Practice
• PHC 6561: Public Health Laboratory Techniques
• PHC 6565: Health Promotion and Disease Prevention
• PHC 6566: Interventions for Public Health
• PHC 6607: Critical Issues in Public Health
• PHC 6700: Social and Behavioral Research Methods
• PHC 6702: Exposure Measurement and Assessment
• PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
• PHC 6762: International Public Health
• PHC 6905: Independent Study
• PHC 6917: Supervised Research Project
• PHC 6921: Seminar in Contemporary Public Health Issues
• PHC 6931: Seminars in Public Health
• PHC 6937: Special Topics in Public Health
• PHC 6945: Public Health Practicum
• PHC 6946: Public Health Internship
• PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
• PHC 7038: Psychiatric Epidemiology
• PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
• PHC 7727: Grant Writing for Population Health Research
• PHC 7752: Seminar in Instrument Development for Public Health
• PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
• PHC 7907: Social and Behavioral Science Journal Club
• PHC 7979: Advanced Research
• PHC 7980: Research for Doctoral Dissertation
• PHT 5156: Exercise Physiology
• PHT 6125C: Concepts in Clinical Biomechanics
• PHT 6127C: Control of Gait and Posture
• PHT 6167C: Applied Neuropsychology for Physical Therapy
• PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
• PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
• PHT 6615L: Research Instrumentation in Physical Therapy
• PHT 6718: Neuroplasticity: A Foundation for Neurorhabilitation
• RSD 6110: Rehabilitation Science Theory and Application I
• RSD 6112: Rehabilitation Science Theory and Application II
• RSD 6114: Rehabilitation in the United Kingdom
• RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
• RSD 6700: Rasch Measurement: Introduction and Application
• RSD 6705: Research Methods in Rehabilitation
• RSD 6706: Scientific Writing for the Rehabilitation Professional
• RSD 6900: College Classroom: Teaching Process and Practice
• RSD 6905: Individual Work
• RSD 6910: Supervised Research
• RSD 6930: Special Topics in Rehabilitation Science
• RSD 6940: Supervised Teaching
• RSD 7979: Advanced Research
• RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
• RCS 6066: Rehabilitation Issues in Human Growth and Development
• RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
• RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
• RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
• RCS 6412: Rehabilitation Counseling Theory and Practice
• RCS 6470: Human Sexuality and Disability
• RCS 6601: Forensic Rehabilitation Consultation I
• RCS 6602: Forensic Rehabilitation Consultation II
• RCS 6625: Community Counseling and Case Management
• RCS 6841: Applied Case Management and Consultation in Rehabilitation Counseling
• RCS 6842: Rehabilitation Research
• RCS 6870: Ethical, Legal, and Professional Issues in Rehabilitation
• RCS 6801: Rehabilitation Counseling Practicum
• RCS 6805: Individual Work
• RCS 6910: Supervised Research
• RCS 6931: Special Topics
• RCS 6940: Supervised Teaching
• RCS 6945: Advanced Rehabilitation Counseling Practicum
• RCS 6971: Research for Master's Degree

Public Health (Ph.D.)

College
Degrees Offered with a Major in Public Health

Doctor of Philosophy

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/Aids in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6931: Seminar in Contemporary Public Health Issues
- PHC 6933: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
Rehabilitation Science

College

College of Public Health and Health Professions

Rehabilitation Science Program Information

Director: David D. Fuller  
Graduate Coordinator: Ellen Esparolini  
Admissions Coordinator: Amy Ladendorf

Complete faculty listing by department: Follow this link.

The interdisciplinary Ph.D. program in rehabilitation science is offered through the College of Public Health and Health Professions. It is designed to prepare rehabilitation scholars. Students are given the opportunity to develop skills in teaching, research, service leadership, and interdisciplinary teamwork. Students work closely with their faculty mentor within the broad categories of Movement Science, Disability Science, and Communication and Swallowing Science. On successful completion of the program, graduates typically take positions in research universities and research centers. Requirements for the Ph.D. degree are provided elsewhere in this catalog.

Admissions decisions are determined by an interdisciplinary admissions committee. The program is a minimum of 90 credit hours of study beyond the Bachelor's degree. The curriculum includes 25 graduate credits in core rehabilitation courses (rehabilitation science theory, research, and teaching) required of all students; 50 credits in specialty areas; and 15 credits of dissertation research. The 50 credits of specialty courses includes 18 credits from one (or a combination) of the three major emphases in rehabilitation mentioned above. The remaining 32 credit hours may be electives, or 30 credits may be transferred in from a master's degree program (with the approval of the supervisory committee. Specialty course work must be chosen by the student with supervisory committee input and approval.

For more information, please see our website: http://rehabsci.phhp.ufl.edu.
Degrees Offered with a Major in Rehabilitation Science

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Rehabilitation Sciences Courses

- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuropasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6940: Supervised Teaching
- RSD 7970: Advanced Research
- RSD 7980: Research for Doctoral Dissertation
- SPA 5101: Speech Pathology Language Disorder
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6117: Science of Singing
- SPA 6217: Vocal Health and Habilitation
- SPA 6311: Medical Audiology
- SPA 6312: Advanced Audiology and Neuro-Otology
- SPA 6340: Amplification I
- SPA 6341: Amplification II
- SPA 6342: Amplification III
- SPA 6436: Issues in Autism Spectrum Disorders
- SPA 6568: Clinical Evaluation in Medical Speech-Language Pathology
- SPA 6581: Special Clinical
- SPA 6830: Communication Disorders in Medically Complex Pediatric Populations
- SPA 7102C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
- SPA 7306: Audiologic Assessment in a Medical Setting
- SPA 7306: Audiologic Assessment in a Medical Setting
- SPA 7391: Business and Professional Issues in Audiology
- SPA 7415: Neurolinguistics of Adult Language Disorders
- SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
- SPA 7543: Audiology Research Project
- SPA 7537: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
- SPA 7545: Graduate Practicum in Audiology
- SPA 7546: Clinical I: Practicum in Medical Speech and Language Pathology
- SPA 7547: I: Practicum in Advanced Medical Speech-Language Pathology
- SPA 7548: Clinical Externship

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6805: Independent Study
- PHC 6817: Supervised Research Project
- PHC 6818: Seminar in Contemporary Public Health Issues
- PHC 6831: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- RHT 5156: Exercise Physiology
- RHT 6125C: Concepts in Clinical Biomechanics
- RHT 6127C: Control of Gait and Posture
- RHT 6127C: Applied Neurophysiology for Physical Therapy
- RHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- RHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- RHT 6615L: Research Instrumentation in Physical Therapy
- RHT 6718: Neuropsychology: A Foundation for Neuromodulation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
Behavioral Science and Community Health Department

Chair: B. Curbow
Complete faculty listing by department: Follow this link.

The Department of Behavioral Science & Community Health (BSCH) is one of nine academic departments housed in the School of Public Health and Health Professions at the University of Florida. This department offers a Doctor of Philosophy (PhD) degree (SBS track). For more information about the program, please visit the link below.

Public Health (Ph.D. - Social and Behavioral Sciences)

College

College of Public Health and Health Professions

Department/School

Behavioral Science and Community Health Department

Behavioral Science and Community Health Program Information

Social & Behavioral Sciences

The PhD in Public Health -Social and Behavioral Sciences (SBS) Track is targeted to individuals who wish to develop advanced knowledge and skills in the social and behavioral sciences theories and methods used in public health. Training is designed for those who desire public health careers in research, academics, government, or related health organizations. A prior graduate degree in public health or a related field is strongly preferred.

The program is focused upon the assumption that health and health behavior are impacted by multiple psychological, behavioral, social, and cultural factors. Central to addressing health problems and eliminating health disparities and inequalities, these factors must be understood and addressed at multiple social-ecological levels (individual, interpersonal, organizational, community, and population).

PhD students who concentrate in social and behavioral sciences explore the unique issues faced by diverse groups and populations and acquire skills to achieve social and behavioral change.

Contact
Dr. Giselle Carnaby (nee Mann), Program Director
gmann@phhp.ufl.edu
Phone: 352-273-6745 ext. 36497; ext. 36164 (lab)
Office: HPNP 4172; DG-140 (lab)
For more information, please visit http://sbs.phhp.ufl.edu/
Degrees Offered with a Major in Public Health

Doctor of Philosophy

concentration in Social and Behavioral Sciences

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6148: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6321: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundational Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6901: Seminar in Contemporary Public Health Issues
Biostatistics Department

College of Public Health and Health Professions
College of Medicine

Interim Chair: Samuel Wu
Graduate Coordinator: Babette Brumback

Complete faculty listing by department: [Follow this link](#).

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

**Doctor of Philosophy**

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics), which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to:

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals

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[University of Florida > 2014-2015 Graduate Catalog](#)
• Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website http://biostat.ufl.edu/education/phd-in-biostatistics/.

Master of Science
The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website http://biostat.ufl.edu/education/ms-in-biostatistics/.

Other

Biostatistics (PHHP)

College

College of Public Health and Health Professions

College of Medicine

Department

Biostatistics Department

Biostatistics Program

Doctor of Philosophy
The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

• Conduct independent research in the development of new biostatistical methodology
• Engage in successful collaborations with investigators in new quantitative fields
• Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
• Write collaborative papers for peer-reviewed subject matter journals
• Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website http://biostat.ufl.edu/education/phd-in-biostatistics/.

Master of Science
The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website http://biostat.ufl.edu/education/ms-in-biostatistics/.

Degrees

Doctor of Philosophy

Master of Science
Biostatistics Departmental Courses

- GMS 6818: Design and Conduct Clinical Trials I
- GMS 6819: Design and Conduct Clinical Trials II
- GMS 6827: Advanced Clinical Trial Methods
- GMS 6841: Design and Analysis of Translational Research in Biomedical Sciences
- GMS 6861: Applied Biostatistics I
- GMS 6862: Applied Biostatistics II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6020: Clinical Trial Methods
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6050C: Biostatistical Methods I
- PHC 6051: Biostatistical Methods II
- PHC 6052: Introduction to Biostatistical Methods
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6055: Biostatistical Computing Using R
- PHC 6063: Biostatistical Consulting
- PHC 6080: SAS for Public Health - Data
- PHC 6081: SAS for Public Health - Analysis
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6937: Special Topics in Public Health
- PHC 6946: Public Health Internship
- PHC 7013: Bias in Observational Research
- PHC 7056: Analysis of Longitudinal Data
- PHC 7066: Large Sample Theory
- PHC 7925: Biostatistics Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- STA 5223: Applied Sample Survey Methods
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 5503: Categorical Data Methods
- STA 5701: Applied Multivariate Methods
- STA 5715: Applied Survival Analysis
- STA 6092: Applied Statistical Practice
- STA 6166: Statistical Methods in Research I
- STA 7249: Generalized Linear Models
- STA 7346: Statistical Inference

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
Clinical and Health Psychology Department

College of Public Health and Health Professions
The Department of Clinical and Health Psychology is a unit of the College of Public Health and Health Professions. The department's programs are its doctoral clinical psychology studies leading to the Ph.D. degree in psychology, an American Psychological Association accredited doctoral internship program, and postdoctoral studies and research. Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

The clinical psychology doctoral curriculum adheres to the scientist-practitioner model of education and training. Program strengths include research, education, and professional training in health care psychology, with organized areas of concentration in clinical health psychology, clinical child/pediatric psychology, neuropsychology, neuromodulation and clinical neuroscience, and emotion neuroscience/psychopharmacology. Education and training experiences are also available in rural psychology. Interested students can apply for acceptance into the Public Health Program and obtain dual M.P.H./Ph.D. degrees.

Progress in the program is determined by departmental policies which are consistent with American Psychological Association accreditation standards. The curriculum has been continuously accredited by the American Psychological Association since 1953.

Admission to the Department is through appropriate application to the Department's admission committee. A bachelor's degree is generally adequate preparation for graduate admission. It should include undergraduate courses in both experimental psychology and statistics, along with at least three courses from the following psychology areas: developmental, learning, perception, personality, physiological, and social.

For more information, please see the program page below and our website: [http://chp.phhp.ufl.edu](http://chp.phhp.ufl.edu).

### Other

**Psychology (Clinical and Health Psychology - PHHP)**

**College**

College of Public Health and Health Professions

**Department/School**

Clinical and Health Psychology, Department

**Psychology (Clinical and Health Psychology) Program Information**

The department of Clinical and Health Psychology is an academic and professional unit in the College of Public Health and Health Professions at the Health Science Center on the University of Florida campus in Gainesville. The doctoral program in clinical psychology has been accredited by the American Psychological Association since 1953 and adheres to the Scientist-Practitioner Model of education and training. The Clinical Psychology Doctoral program is unique in the country in that it is housed in an independent department of Clinical and Health Psychology in a major academic health science setting along with an APA accredited internship. These features foster program strengths in research, teaching and professional training in health care psychology.

To accommodate the broad range of career trajectories possible within Scientist-Practitioner education and training, the program offers a Scientist-Practitioner Emphasis and a Clinical Researcher Emphasis.

The Scientist-Practitioner Emphasis allows the student to obtain broad clinical, academic, and research training that readsies them for careers anywhere along the science-practice continuum. The student obtains focused research mentorship in a faculty member's laboratory and obtains broad training in clinical assessment and intervention both in and outside of their designated area of concentration.

The Clinical Researcher Emphasis is designed to provide the interested student with more intensive mentor-based training for purposes of preparing for a research career. The Clinical Researcher Emphasis is designed for students who are clearly focused on a research career and therefore want an increased opportunity to perform mentored empirical work. This emphasis focuses on the acquisition of research skills, training in scientific methods and technologies to better understand behavior problems, psychopathology and psychological adjustment to illness and wellness, and to develop empirically validated assessment and treatment procedures. The primary goal of the Clinical Researcher emphasis is to train psychologists for academic settings and other employment venues in which research productivity and innovation is a major job expectancy. In comparison to the scientist-practitioner emphasis, more time is dedicated to research (less time is spent in supervised practicum with the general faculty), and advanced clinical training is focused on patient populations and methods in the student’s area of research interest. The Clinical Researcher emphasis follows a “mentorship” model in which the faculty mentor is the student’s overall guide and supervisor, and the student’s primary research training is accomplished in his/her laboratory.

Students can elect the Clinical Researcher emphasis in the first or second year of study, based on their commitment to a clinical research career and the agreement of a faculty mentor. Students can apply for admission consideration to the Scientist-Practitioner emphasis, the Clinical Researcher emphasis, or both (see Application Procedures).

The Doctoral Program provides the student with training in the concepts, tools, roles, and functions of the clinical psychologist. The overall goals of the graduate program are to prepare the student to:

1. investigate meaningful, empirically testable questions in the quest for understanding a behavioral process, a patient’s problem, or a professional issue;
2. function as a professional psychologist;
3. practice competently in the applied areas of psychological assessment/diagnosis, intervention/therapy, and consultation; and
4. contribute to the advancement of psychological knowledge through research or other creative scholarly activity.

Through a combination of general and specialized experiences in the classroom, laboratory, and clinic students develop knowledge and skills as scientist-practitioners. Attitudes are developed toward the practice of psychology and toward related professions which enable effective personal interaction and participation in the interdisciplinary approach to problems of research and practice. As students progress in the program, they develop professional identity through acceptance of increased responsibility for professional decisions, through the execution of significant research projects, and through their contributions to the understanding of psychological problems and processes.

For more information please see our website: [http://chp.phhp.ufl.edu](http://chp.phhp.ufl.edu).
Degrees

Doctor of Philosophy

concentration in Clinical and Health Psychology

optional second concentration in Clinical and Translational Science

concentration in Clinical and Translational Science

Master of Arts

Master of Science

Clinical and Health Psychology Departmental Courses

- CLP 5316: Health Psychology
- CLP 5426: Introduction to Neuropsychology
- CLP 6304: Psychological Foundations of Clinical Psychology I
- CLP 6307: Human Higher Cortical Functioning
- CLP 6308: Psychological Foundations of Clinical Psychology II
- CLP 6309: Psychological Foundations of Clinical Psychology III
- CLP 6344C: Lifespan Foundations of Behavioral Health and Illness I
- CLP 6345: Lifespan Foundations of Behavioral Health and Illness II
- CLP 6375: Introduction to Clinical Psychology
- CLP 6407: Psychological Treatment I
- CLP 6417: Psychological Treatment II
- CLP 6425: Seminar in Clinical Neuropsychology
- CLP 6430: Clinical Psychological Assessment
- CLP 6434C: Clinical Psychology Assessment I
- CLP 6435C: Clinical Psychology Assessment II
- CLP 6446C: Psychological Assessment of Children
- CLP 6447C: Psychological Assessment of Adults
- CLP 6476: Lifespan Psychopathology
- CLP 6497: Psychopathological Disturbances
- CLP 6528C: Measurement, Research Design, and Statistical Analysis in Clinical Psychology II
- CLP 6529: Applied Multivariate Methods in Psychology
- CLP 6905: Individual Work
- CLP 6910: Supervised Research
- CLP 6940: Supervised Teaching
- CLP 6943: Core Practicum in Clinical Psychology
- CLP 6945: Advanced Practicum in Neuropsychology
- CLP 6946: Advanced Practicum in Applied Medical Psychology
- CLP 6947: Practicum in Intervention
- CLP 6948: Advanced Practicum in Clinical Child Psychology
- CLP 6971: Research for Master's Thesis
- CLP 7317: Advanced Health Psychology and Behavior Medicine
- CLP 7404C: Special Issues, Methods, and Techniques in Psychological Treatment
- CLP 7427C: Neuropsychological Assessment of Children
- CLP 7428C: Neuropsychological Assessment of Adults
- CLP 7934: Special Topics in Clinical Psychology
- CLP 7949: Internship
- CLP 7979: Advanced Research
- CLP 7980: Research for Doctoral Dissertation
- DEP 6216: Psychological Disturbances of Children
- GEY 6306: Interpersonal Communication Within the Aging Network
- GEY 7408: Psychotherapy with Older Adults
College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/Aids in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology: Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6565: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar I: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neurophysiology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuropsychology: A Foundation for Neuropsychiatry
Environmental and Global Health Department

Chair: G. C. Gray
Graduate Studies Program Assistant: N. Burke

Faculty listing: Follow this link

The Department of Environmental and Global Health focuses upon environmental factors that impact human health. Department faculty, scientists, and students employ numerous disciplines in studying these environmental factors: virology, bacteriology, parasitology, entomology, toxicology, epidemiology, water sciences, veterinary health, environmental engineering, aerosol biology, wildlife health, etc. Research work often involves international travel and collaboration. A central theme for the department is interdisciplinary thinking called One Health which reflects the collaborations necessary to tackle public health's most difficult problems. Faculty, students and staff often perform research in the laboratories in the Emerging Pathogens Institute, the Center for Environmental and Human Toxicology, or the Aquatic Pathobiology Laboratory.

The Department of Environmental and Global Health offers graduate work leading to the degrees of Doctor of Philosophy, Master of Health Science, and Master of Public Health.

Other

Environmental and Global Health (M.H.S. - One Health)

College

College of Public Health and Health Professions

Department

Environmental and Global Health Department

Degrees Offered With a Major in Environmental and Global Health

Master of Health Science

concentration in One Health
Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology: Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6951: Seminar in Contemporary Public Health Issues
- PHC 6953: Seminars in Public Health
- PHC 6954: Public Health Practicum
- PHC 6964: Public Health Internship
- PHC 7000: Epidemiology Seminar I: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7567: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
Public Health (Ph.D. - Environmental and Global Health)

College

College of Public Health and Health Professions

Department/School

Environmental and Global Health

Degrees Offered With a Major in Public Health

Doctor of Philosophy

concentration in Environmental Health
Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
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- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6931: Seminar in Contemporary Public Health Issues
- PHC 6932: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
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<th>Course Code</th>
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<tr>
<td>PHC 7901</td>
<td>Epidemiology Literature Review and Critique (Journal Club)</td>
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<td>PHC 7907</td>
<td>Social and Behavioral Science Journal Club</td>
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<td>PHC 7979</td>
<td>Advanced Research</td>
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<td>PHC 7980</td>
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<td>PHT 5156</td>
<td>Exercise Physiology</td>
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<td>PHT 6125C</td>
<td>Concepts in Clinical Biomechanics</td>
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<td>PHT 6127C</td>
<td>Control of Gait and Posture</td>
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<td>PHT 6167C</td>
<td>Applied Neurophysiology for Physical Therapy</td>
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<td>PHT 6236C</td>
<td>Neurological Dysfunction as Applied to Physical Therapy</td>
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<td>PHT 6316</td>
<td>Neurological Aspects of Orthopedic Rehabilitation</td>
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<td>PHT 6718</td>
<td>Neuroplasticity: A Foundation for Neurorehabilitation</td>
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<td>Rehabilitation Science Theory and Application I</td>
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<td>RSD 6114</td>
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<td>RSD 6400</td>
<td>Models and Principles of Motor Learning and Control: Application in Rehabilitation Science</td>
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<td>College Classroom: Teaching Process and Practice</td>
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<td>RCS 6066</td>
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<td>RCS 6080</td>
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<td>RCS 6602</td>
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<td>RCS 6641</td>
<td>Applied Case Management and Consultation in Rehabilitation Counseling</td>
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<td>RCS 6740</td>
<td>Rehabilitation Research</td>
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<td>RCS 6780</td>
<td>Ethical, Legal, and Professional Issues in Rehabilitation</td>
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<td>RCS 6801</td>
<td>Rehabilitation Counseling Practicum</td>
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<tr>
<td>RCS 6825</td>
<td>Internship in Rehabilitation Counseling</td>
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<td>RCS 6905</td>
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<td>RCS 6910</td>
<td>Supervised Research</td>
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<td>Special Topics</td>
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<td>RCS 6945</td>
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<td>Research for Master's Degree</td>
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Public Health (Ph.D. - One Health)

College

College of Public Health and Health Professions

Environmental and Global Health Department

Environmental and Global Health Department

Degrees Offered With a Major in Public Health

Doctor of Philosophy

centration in One Health
Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy/ Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6931: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Pracicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7597: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: [http://epidemiology.phhp.ufl.edu](http://epidemiology.phhp.ufl.edu).

### Other

#### Epidemiology (PHHP)

**College**

[College of Public Health and Health Professions](http://epidemiology.phhp.ufl.edu)

**Department**

[College of Public Health and Health Professions](http://epidemiology.phhp.ufl.edu)
Epidemiology Department

Epidemiology Program Information

The **Ph.D. in Epidemiology program** is in the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The program requires a minimum of 90 semester credits beyond the bachelor's degree. All students must complete a minimum of 9 credits in Epidemiology foundation course work, at least 36 credits of epidemiology core courses, 6 credits of statistics electives, 18 credits of epidemiology electives, 15 credits of general electives, and 12 credits of dissertation research. Students must also complete at least two mentored teaching experiences. All entering students who do not hold MPH or equivalent degrees are also required by the College of Public Health and Health Professions to complete an Introduction to Public Health course.

Students in the Ph.D. program in Epidemiology are admitted to work with a research mentor on that mentor's project, and that research mentor funds the student. Other funding sources are available such as the Graduate School and the Department. The core course work is designed to incorporate competencies recommended in the report of the 2002 workshop on doctoral education in epidemiology from the American College of Epidemiology and the Association of Schools and Programs of Public Health, and criteria for applied epidemiology competencies. The overall outcomes expected of all graduates are as follows:

1. Apply epidemiological methods to address critical and/or emerging public health issues through the use of:
   - Appropriate epidemiological research designs
   - Advanced statistical analysis methods for health studies
   - Data structures and measurement methods for health research
   - Biological, behavioral and social theory applied to the understanding and prevention of contemporary threats to health and well-being
   - Depth of knowledge in an area of specialization
2. Assimilate the history, philosophy, and ethical principles of epidemiology into current research
3. Develop grant proposals and manage research projects
4. Write scientific papers for publication in peer-reviewed journals, and communicate research results to scientists, policy makers, and the public
5. Compete successfully for research and teaching positions in academic institutions, federal or state agencies, or private institutions.

Details of the Ph.D. in Epidemiology program and application information are available at our website: [http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2](http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2).

The **Master of Science in Epidemiology** degree is offered by the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The 36 credit program prepares students for careers in the public health arena that are focused on the surveillance and prevention of illnesses among diverse populations around the world. Students are trained in the foundational aspects of epidemiology including person, place and time, risk and protective factors, and the social determinants of health. Areas of focus include: chronic disease, infectious disease, geriatric, environmental, psychiatric, social, cancer and maternal and child health epidemiology.

Graduates of the M.S. in Epidemiology program are trained to:

- Apply surveillance, assessment, evaluation, and other foundational epidemiological research designs to areas of interest,
- Choose appropriate measurement and analytic methods to study health and disease in a population,
- Utilize biological, behavioral and social theory to understand how to prevent and intervene to promote the public health.

The program consists of required coursework and the successful completion of a thesis. The thesis is required to demonstrate skill in independent inquiry and investigation, under the tutelage of a mentor. Students may complete the course in three semesters with 36 credits.

More program information, including specific course requirements and elective options, is described at the program website: [http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2](http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2).

Degrees Offered with a Major in Epidemiology

**Doctor of Philosophy**

without a concentration

**concentration in Clinical and Translational Science**

**Master of Science**

Epidemiology (PHHP/COM) Departmental Courses
• GMS 6820: Advanced Epidemiology Methods
• PHC 6008: Cardiovascular Epidemiology
• PHC 6009: Biology and Epidemiology of HIV/AIDS
• PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
• PHC 6034: Epidemic Investigation
• PHC 6070: Epidemiology of Aging
• PHC 6517: Public Health Concepts in Infectious Diseases
• PHC 6711: Measurement in Epidemiology and Outcomes Research
• PHC 6937: Special Topics in Public Health
• PHC 6938: Oral and Craniofacial Epidemiology
• PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
• PHC 7007: Cancer Epidemiology
• PHC 7038: Psychiatric Epidemiology
• PHC 7065: Critical Skills in Epidemiological Data Management
• PHC 7427: Ethics in Population Science
• PHC 7727: Grant Writing for Population Health Research
• PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
• PHC 7902: Epidemiology Supervised Research Writing Circle
• PHC 7910: International Field Epidemiology
• PHC 7916: National Field Epidemiology
• PHC 7934: Seminar I: Epidemiology Past, Present, and Future
• PHC 7979: Advanced Research
• PHC 7980: Research for Doctoral Dissertation

College of Public Health and Health Professions Courses

• HSC 5938: Special Topics
• HSC 6905: Independent Study
• HSC 6939: Special Topics
• HSC 6940: Supervised Teaching
• PHC 6000: Epidemiology Methods I
• PHC 6001: Principles of Epidemiology in Public Health
• PHC 6002: Epidemiology of Infectious Diseases
• PHC 6003: Epidemiology of Chronic Diseases and Disability
• PHC 6009: Biology and Epidemiology of HIV/AIDS
• PHC 6011: Epidemiology Methods II
• PHC 6016: Social Epidemiology in Public Health
• PHC 6036: Environmental Infectious Diseases: A Molecular Approach
• PHC 6050: Statistical Methods for Health Sciences Research I
• PHC 6102: Introduction to Public Health Administrative Systems
• PHC 6103: Systems Thinking for Public Health
• PHC 6104: Evidence-Based Management of Public Health Programs
• PHC 6146: Public Health Program Planning and Evaluation
• PHC 6153: Public Policy and Aging
• PHC 6183: Disaster Preparedness and Emergency Response
• PHC 6194: Spatial Epidemiology
• PHC 6195: Health information for Diverse Populations: Theory & Methods
• PHC 6220: Overview of Long-Term Care
• PHC 6251: Assessment and Surveillance in Public Health
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• PHC 6309: Environmental Justice Issues in Public Health
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• PHC 6317: Risk Communication for Public Health Practice
• PHC 6346: Occupational and Environmental Health Among Agriculture Workers
• PHC 6370: Public Health Biology
• PHC 6403: Adolescence, Risk Taking and Health
• PHC 6404: Gender, Sexuality, and Health
• PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
• PHC 6413: Critical Incidents and Violence in Communities
• PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
• PHC 6419: Biomedical and Psychological Aspects of Very Late Life
• PHC 6421: Public Health Law and Ethics
• PHC 6441: Health Disparities in the United States
• PHC 6445: Global Public Health and Development II
• PHC 6447: Ecology of HIV/AIDS in the Rural South
• PHC 6512: Environmental Management of Vector-Borne Diseases
• PHC 6515: Introduction to Entomology-Zoonotic Diseases and Food Safety
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• PHC 6561: Public Health Laboratory Techniques
• PHC 6585: Health Promotion and Disease Prevention
• PHC 6586: Interventions for Public Health
• PHC 6607: Critical Issues in Public Health
• PHC 6700: Social and Behavioral Research Methods
• PHC 6702: Exposure Measurement and Assessment
Health Services Research, Management, and Policy Department

Chair: Arch G. Mainous, III
Graduate Coordinator: Patricia Van Wert

Complete faculty listing: Follow this link.

The Department of Health Services Research, Management, and Policy offers degree programs at both the master's and doctoral level. The Master of Health Administration (M.H.A.) prepares individuals for management positions in the health care field. The Department also participates in the Master of Public Health (M.P.H.) degree by offering a concentration in Public Health Management and Policy (more information available here).

At the doctoral level, the Department offers the Ph.D. degree in Health Services Research. This full-time program prepares graduates to investigate and evaluate the complexities of health care systems in the U.S. and elsewhere. Health services research is a multidisciplinary field that examines the delivery, organization, financing, and outcomes of health care services.

Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below and our website: http://hsrmp.phhp.ufl.edu.

Other
Health Administration

College

College of Public Health and Health Professions

Department/School

Health Services Research, Management, and Policy Department

Health Administration Program Information

The Master of Health Administration (M.H.A.) is a two-year, lock-step program with a summer internship between the first and second years. Small class size permits individual attention and guidance from faculty members. The program prepares qualified individuals motivated by a social mission and responsibility to the community for various management positions in the health services industry. Organizations seek individuals who have the ability to solve business problems and build strategic relationships in a climate of continuous change.

The UF M.H.A. program develops engaged early health care careerists to use evidence-based strategies to improve healthcare quality, affordability, and access. We provide students with fundamental knowledge using a cohort model in a campus-based setting that emphasizes experiential learning and data-driven problem solving both in the classroom and in the practice environment. Students will develop proficiency to detect, analyze, manage and respond to critical administrative issues in both provider and non-provider healthcare organizations. Our program embraces ethical conduct and professionalism, diversity and inclusion, practitioner involvement and team-based learning. Faculty inform practice with research and service to the community.

Applicants from any undergraduate major are considered. For more information about our program and details about the MBA/MHA dual degree, please see our website: [http://hsrmp.phhp.ufl.edu/academic-programs/master-of-health-administration](http://hsrmp.phhp.ufl.edu/academic-programs/master-of-health-administration).

Degrees

Master of Health Administration

Health Administration Program Courses

- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6177: Advanced Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6196: Health Services Operations Management
- HSA6198: Information Management in Health Administration
- HSA6342: Human Resource Management for Health Services Managers
- HSA6385: Performance Management for Health Care Managers
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6436: Health Economics
- HSA6855: Internship in Health Administration
- HSA6905: Individual Study in Health Administration
- HSA6939: Capstone Seminar in Health Administration

Health Services Research, Management, and Policy Departmental Courses

- HSA5103: Introduction to the U.S. Health Care System
- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6177: Advanced Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6436: Health Economics
- HSA6855: Internship in Health Administration
- HSA6905: Individual Study in Health Administration
- HSA6939: Capstone Seminar in Health Administration
HSA 6179: Introduction to Health Care Finance
HSA 6188: Strategic Management in Health Administration
HSA 6196: Health Services Operations Management
HSA 6197: Information Management in Health Administration
HSA 6342: Human Resource Management for Health Services Managers
HSA 6385: Performance Management for Health Care Managers
HSA 6427: Legal and Ethical Issues in Health Administration
HSA 6436: Health Economics
HSA 6855: Internship in Health Administration
HSA 6858: Internship in Health Services Research
HSA 6878: Eternship in Legal Aspects of Health Services Administration
HSA 6905: Individual Study in Health Administration
HSA 6910: Supervised Research
HSA 6911: Research Seminar in Health Services Research
HSA 6930: Special Topics in Health Services Administration
HSA 6935: Seminar in Health Administration
HSA 6939: Capstone Seminar in Health Administration
HSA 6940: Supervised Teaching
HSA 6946: Internship in Public Health Management and Policy
HSA 7106: Seminar in Health Care Access and Utilization
HSA 7116: Health Services Organizational Research
HSA 7157: Research Foundations of Health Policy
HSA 7414: Society, Health, and Medical Care
HSA 7437: Advanced Health Economics
HSA 7707: Health Services Research Methods I
HSA 7708: Health Services Research Methods II
HSA 7759: Quality and Outcomes in Health Services Research
HSA 7905: Advanced Individual Study in Health Services Administration
HSA 7936: Seminar in Health Care Costs and Financing
HSA 7938: Advanced Seminar in Health Services Research
HSA 7979: Advanced Research
HSA 7980: Research for Doctoral Dissertation
PHC 6313: Environmental Health Concepts in Public Health

College of Public Health and Health Professions Courses

HSC 5938: Special Topics
HSC 6905: Independent Study
HSC 6939: Special Topics
HSC 6940: Supervised Teaching
PHC 6000: Epidemiology Methods I
PHC 6001: Principles of Epidemiology in Public Health
PHC 6002: Epidemiology of Infectious Diseases
PHC 6003: Epidemiology of Chronic Diseases and Disability
PHC 6009: Biology and Epidemiology of HIV/AIDS
PHC 6011: Epidemiology Methods II
PHC 6016: Social Epidemiology in Public Health
PHC 6036: Environmental Infectious Diseases: A Molecular Approach
PHC 6050: Statistical Methods for Health Sciences Research I
PHC 6102: Introduction to Public Health Administrative Systems
PHC 6103: Systems Thinking for Public Health
PHC 6104: Evidence-Based Management of Public Health Programs
PHC 6148: Public Health Program Planning and Evaluation
PHC 6153: Public Policy and Aging
PHC 6183: Disaster Preparedness and Emergency Response
PHC 6194: Spatial Epidemiology
PHC 6195: Health Information for Diverse Populations: Theory & Methods
PHC 6220: Overview of Long-Term Care
PHC 6251: Assessment and Surveillance in Public Health
PHC 6301: Aquatic Systems and Environmental Health
PHC 6309: Environmental Justice Issues in Public Health
PHC 6312: Water Quality and Human Health
PHC 6313: Environmental Health Concepts in Public Health
PHC 6316: Health, Risk, and Crisis Communication
PHC 6317: Risk Communication for Public Health Practice
PHC 6346: Occupational and Environmental Health Among Agriculture Workers
PHC 6370: Public Health Biology
PHC 6403: Adolescence, Risk Taking and Health
PHC 6404: Gender, Sexuality, and Health
PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
PHC 6413: Critical Incidents and Violence in Communities
PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
PHC 6419: Biomedical and Psychological Aspects of Very Late Life
PHC 6421: Public Health Law and Ethics
PHC 6441: Health Disparities in the United States
PHC 6445: Global Public Health and Development II
PHC 6447: Ecology of HIV/AIDS in the Rural South
PHC 6512: Environmental Management of Vector-Borne Diseases
PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
PHC 6519: Zoonotic Diseases in Humans and Animals
PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6918: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neuropsychology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6940: Supervised Teaching
- RSD 7979: Advanced Research
- RSD 7980: Research for Doctoral Dissertation
- RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
- RCS 6066: Rehabilitation Issues in Human Growth and Development
- RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
- RCS 6100: Vocational and Lifestyle Assessment in Rehabilitation Counseling
- RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
- RCS 6412: Rehabilitation Counseling Theory and Practice
- RCS 6470: Human Sexuality and Disability
- RCS 6601: Forensic Rehabilitation Consultation I
- RCS 6602: Forensic Rehabilitation Consultation II
- RCS 6625: Community Counseling and Case Management
- RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
- RCS 6740: Rehabilitation Research
- RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
- RCS 6801: Rehabilitation Counseling Practicum
- RCS 6825: Internship in Rehabilitation Counseling
- RCS 6905: Individual Work
- RCS 6910: Supervised Research
- RCS 6931: Special Topics
- RCS 6940: Supervised Teaching
- RCS 6945: Advanced Rehabilitation Counseling Practicum
- RCS 6971: Research for Master's Degree

Health Services Research

College

College of Public Health and Health Professions

Department/School
Health Services Research Program Information

The Department of Health Services Research, Management and Policy offers a doctoral degree in Health Services Research. Health services research is a multidisciplinary field of inquiry, both basic and applied, that examines the use, costs, quality, accessibility, delivery, organization, financing, and outcomes of healthcare services. The objective is to increase knowledge and understanding of the structure and processes of the healthcare system, and to assess subsequent effects on individuals and populations. Health services research draws on a variety of disciplines, and integrates their conceptual frameworks and methods to provide new ways of studying and understanding the health care system.

The Ph.D. Program in Health Services Research prepares individuals to conduct inquiry that will inform government officials, corporate leaders, clinicians, health plan managers, and others making decisions about complex health-related problems and issues. Students in the Ph.D. Program in Health Services Research learn to apply research methods and scientific knowledge to the study of health services organizations and systems.

Graduates of the Ph.D. Program in Health Services Research will find career opportunities in academic, private sector, and public service settings. For example, some graduates will combine research interests with a teaching career and accept academic appointments in a wide range of health-related departments in the nation's colleges and universities. Other graduates will pursue health services research in the context of healthcare delivery and choose employment opportunities with hospitals and health systems, managed care companies, the pharmaceutical industry and consulting firms. Finally, graduates may pursue careers in government or other public service entities (such as private foundations), whose programs are increasingly dependent upon the findings and methodologies of health services research.

For more details about our program, please see our website: [http://hsrmp.phhp.ufl.edu/academic-programs/ph-d-in-health-services-research](http://hsrmp.phhp.ufl.edu/academic-programs/ph-d-in-health-services-research).

Degrees

Doctor of Philosophy

Health Services Research Program Courses

- HSA6910: Supervised Research
- HSA6911: Research Seminar in Health Services Research
- HSA6930: Special Topics in Health Services Administration
- HSA6940: Supervised Teaching
- HSA7106: Seminar in Health Care Access and Utilization
- HSA7116: Health Services Organizational Research
- HSA7157: Research Foundations of Health Policy
- HSA7414: Society, Health, and Medical Care
- HSA7437: Advanced Health Economics
- HSA7707: Health Services Research Methods I
- HSA7708: Health Services Research Methods II
- HSA7759: Quality and Outcomes in Health Services Research
- HSA7905: Advanced Individual Study in Health Services Research
- HSA7936: Seminar in Health Care Costs and Financing
- HSA7938: Advanced Seminar in Health Services Research
- HSA7979: Advanced Research
- HSA7980: Research for Doctoral Dissertation

Health Services Research, Management, and Policy Departmental Courses

- HSA5103: Introduction to the U.S. Health Care System
- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6175: Health Care Financial Management
- HSA6177: Advanced Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6196: Health Services Operations Management
- HSA6197: Information Management in Health Administration
- HSA6198: Information Management in Health Administration
- HSA6342: Human Resource Management for Health Services Managers
- HSA6385: Performance Management for Health Care Managers
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6436: Health Economics
HSA 6855: Internship in Health Administration
HSA 6858: Internship in Health Services Research
HSA 6878: Externship in Legal Aspects of Health Services Administration
HSA 6905: Individual Study in Health Administration
HSA 6910: Supervised Research
HSA 6911: Research Seminar in Health Services Research
HSA 6930: Special Topics in Health Services Administration
HSA 6935: Seminar in Health Administration
HSA 6939: Capstone Seminar in Health Administration
HSA 6940: Supervised Teaching
HSA 6946: Internship in Public Health Management and Policy
HSA 7106: Seminar in Health Care Access and Utilization
HSA 7116: Health Services Organizational Research
HSA 7157: Research Foundations of Health Policy
HSA 7414: Society, Health, and Medical Care
HSA 7437: Advanced Health Economics
HSA 7707: Health Services Research Methods I
HSA 7708: Health Services Research Methods II
HSA 7759: Quality and Outcomes in Health Services Research
HSA 7905: Advanced Individual Study in Health Services Research
HSA 7936: Seminar in Health Care Costs and Financing
HSA 7938: Advanced Seminar in Health Services Research
HSA 7979: Advanced Research
HSA 7980: Research for Doctoral Dissertation
PHC 6313: Environmental Health Concepts in Public Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
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- PHC 6413: Critical Incidents and Violence in Communities
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- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
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- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
The Department of Occupational Therapy offers graduate programs in occupational therapy leading to the Master of Health Science (M.H.S.) degree (on-campus nonthesis and thesis options and distance learning nonthesis option) and the entry-level Master of Occupational Therapy (M.O.T.) degree. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

**Master of Health Science:** This program is designed for students who have earned an undergraduate degree in Occupational therapy. The thesis option requires four semesters of coursework and a formal research thesis, while the nonthesis option requires three semesters of coursework and a research project. The program emphasizes research and advanced theories related to occupational therapy practice. Preparation for teaching, administrative, and other occupational therapy roles is supplemented through elective courses. A coherent series of elective courses related to occupational therapy must be approved by the supervisory committee chairperson before the second semester of work.

In addition to the requirements of the Graduate School, admission requires the candidate to have completed a curriculum in occupational therapy accredited by the American Occupational Therapy Association or by the World Federation of Occupational Therapists.

The distance learning degree option for the Master of Health Science is specifically intended to meet the needs of the working professional. The nonthesis program is designed to improve the knowledge and skills of working occupational therapists for practice in a complex and challenging health care system. It provides preparation for new practice areas, leadership roles, and independent practice and is delivered through the Internet. In addition to the departmental requirements listed above, applicants to the distance learning program must have basic personal knowledge and skills of working occupational therapists for practice in a complex and challenging health care system. It provides preparation for new practice areas, leadership roles, and

**Occupational Therapy Department**

**Chair:** W. C. Mann.  
**Graduate Coordinator:** C. A. Velozo, J.J. Foss.

*Complete faculty listing by department: Follow this link.*

The Department of Occupational Therapy offers graduate programs in occupational therapy leading to the Master of Health Science (M.H.S.) degree (on-campus nonthesis and thesis options and distance learning nonthesis option) and the entry-level Master of Occupational Therapy (M.O.T.) degree. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

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The distance learning degree option for the Master of Health Science is specifically intended to meet the needs of the working professional. The nonthesis program is designed to improve the knowledge and skills of working occupational therapists for practice in a complex and challenging health care system. It provides preparation for new practice areas, leadership roles, and independent practice and is delivered through the Internet. In addition to the departmental requirements listed above, applicants to the distance learning program must have basic personal
Master of Occupational Therapy: This entry-level degree program is designed for students who do not have an undergraduate degree in occupational therapy. The program provides students with a holistic perspective, including an understanding of the philosophical and theoretical bases for practice in the current health care environment. The M.O.T. program provides a strong background in theory, assessment, and therapeutic interventions. Before their professional preparation in the M.O.T. program, students receive a liberal education in their pre-professional baccalaureate studies, including several courses specifically focused for students planning to enter the M.O.T. program. Students may enroll in courses in the Bachelor of Health Science degree program at the bachelor’s level, or they may complete these courses on a postbaccalaureate level before starting the M.O.T. program. Students are only admitted into the M.O.T. program in summer term and graduate at the end of the fall term after 1.33 years of full-time study (5 semesters) and 58 credits.

Admission requirements include completion of an undergraduate degree and the prerequisite course work. Three letters of reference and a letter of application are required by the Department. Additional information is available at [http://www.phhp.ufl.edu/ot/](http://www.phhp.ufl.edu/ot/) and [http://gradschool.rgp.ufl.edu](http://gradschool.rgp.ufl.edu) or by telephone (352)273-6817.

This program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association. The address for ACOTE is 4720 Montgomery Lane, Box 31220, Bethesda, MD, 20814-1220. The phone number is (301) 652-2632. Graduates of the program are eligible to sit for the national certification exam administered by the National Board for Certification in Occupational Therapy (NBCOT). The website address of NBCOT is [www.nbcot.org](http://www.nbcot.org).

Other

Occupational Therapy

Degrees

Master of Health Science

Master of Occupational Therapy

Occupational Therapy Courses

- OTH 5002: Foundations of Occupational Therapy
College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6938: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6006: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6532: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
Speech, Language and Hearing Sciences Department

Chair : Scott K. Griffiths
Graduate Coordinators: Kenneth J. Logan and Alice Holmes

Graduate programs in the Department lead to Master of Arts and Doctor of Philosophy degrees in Communication Sciences and Disorders and to the Doctor of Audiology degree. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate specializations and programs in speech-language pathology and audiology are accredited by the Council on Academic Accreditation/American Speech-Language-Hearing Association.

The Doctor of Audiology (Au.D.) Program in the Department of Speech, Language, and Hearing Sciences is a four-year graduate degree. Graduate students take course work in theoretical and applied audiological sciences and research. There are no specific undergraduate courses required for admission to the Au.D. degree program, although applicants with a strong science background are encouraged to apply. Graduates of this program are eligible for the Certificate of Clinical Competence in Audiology (CCC-A) administered by the American Speech-Language-Hearing Association, Board Certification in Audiology administered by the American Academy of Audiology, and for state licensure in audiology. For more information, contact Alice Holmes, Ph.D. (aholmes@ufl.edu).

The Ph.D. Program in Communication Sciences and Disorders provides a state-of-the-art education in research practices in speech-language pathology and audiology with a strong interdisciplinary focus. Our goal is to prepare the next generation of researchers who are specialized in basic and/or applied science that relates to a range of speech, language, hearing, and
swallowing functions. The program is designed to develop researchers who are skilled at independently designing and conducting original research that adds to the body of knowledge in the field. Students are individually mentored and pursue individually designed programs of study tailored to their interests and needs, which incorporate training in appropriate adjacent fields such as engineering, dentistry, gerontology, linguistics, psychology, medicine and special education. For more information, contact Lori Altmann, Ph.D. (laltmann@ufl.edu).

The Master of Arts (MA) Program offers comprehensive academic training and clinical experience for students who are interested in a career in speech-language pathology. The five-semester program culminates in the completion of either a clinical externship or a Master's thesis, and it provides graduates with a solid foundation for obtaining employment in a variety of work settings. Students have the opportunity to complete clinical practica at sites within the University of Florida's Health Science Center and at other medical, rehabilitative, and educational facilities on or near the campus. These sites allow students to gain experience with providing clinical services to a range of patient populations.

Applicants to the Master's program must demonstrate successful completion of pre-requisite coursework in both normal bases of communication and introductory concepts in communication disorders. Additional information about these pre-requisites is available on the Department website. Graduates of the program are eligible for the Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP) from the American Speech-Language-Hearing Association as well as state licensure in speech-language pathology. For more information, contact Kenneth J. Logan, Ph.D. (klogan@ufl.edu).

The Department of Speech, Language, and Hearing Sciences is committed to providing its students with a high-quality educational experience that will prepare them for rewarding employment in the areas of speech-language pathology and audiology, as well as an eagerness for life-long learning and professional development. The department strives to enroll a diverse group of students who possess both high ethical standards and strong academic skills. The application deadlines are January 15 for fall admission to the Ph.D. program, and February 1 for fall admission to the Master's and Au.D. programs.

For more information, please see the program pages below and our website: [http://slhs.phhp.ufl.edu](http://slhs.phhp.ufl.edu).

**Other**

**Audiology**

**College**

College of Public Health and Health Professions

**Department/School**

Speech, Language and Hearing Sciences Department

**Degrees Offered with a Major in Audiology**

**Doctor of Audiology**

**Speech, Language and Hearing Sciences Departmental Courses**

- ASL 5406: Manual Communication with the Hearing Impaired
- LAE 6505: Applied Preschool Language Disorders: Diagnosis and Treatment
- LIN 5741: Applied English Grammar
- SPA 5051: Clinical Observation in Audiology
- SPA 5102: Auditory Anatomy and Physiology
- SPA 5128: Speech Perception
- SPA 5204: Phonological Disorders
- SPA 5211: Voice Disorders
- SPA 5226: Principles of Speech Pathology, Stuttering
- SPA 5245: Communicative Disorders Related to Cleft Palate
- SPA 5254: Neuropsychiatric Disorders
- SPA 5304: Principles of Audiological Evaluation
- SPA 5315: Peripheral and Central Auditory Disorders
- SPA 5401: Speech Pathology Language Disorder
- SPA 5405: Language Disorders II
- SPA 5553: Instrumentation and Diagnosis in Speech-Language Pathology
- SPA 5563: Psychosocial Aspects of Hearing Loss
- SPA 5646: Speech and Language of the Deaf and Hard of Hearing
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6010: Basic Auditory Sciences
- SPA 6117: Science of Singing
- SPA 6133L: Hearing Aid Analysis Laboratory
- SPA 6207: Applied Phonological Disorders: Diagnosis and Treatment
- SPA 6211: Applied Voice Disorders: Diagnosis and Treatment
- SPA 6217: Vocal Health and Habilitation
- SPA 6229: Applied Fluency Disorders: Diagnosis and Treatment
- SPA 6233: Speech Motor Control Disorders
- SPA 6270: Auditory Processing Disorders
- SPA 6805: Introduction to Graduate Research
- SPA 6005: Pediatric Audiology
• SPA 6311: Medical Audiology
• SPA 6312: Advanced Audiology and Neuro-Otology
• SPA 6317: Vestibular Disorders
• SPA 6323: Audiologic Rehabilitation for Adults
• SPA 6324: Audiologic Rehabilitation for Children
• SPA 6340: Amplification I
• SPA 6341: Amplification II
• SPA 6342: Amplification III
• SPA 6390: Proseminar: Speech-Language Pathology and Audiology
• SPA 6410: Adult Language Disorders
• SPA 6416: Applied Neurogenic Disorders: Diagnosis and Treatment
• SPA 6430: Applied Developmental Disorders: Diagnosis and Treatment in Speech and Language
• SPA 6436: Issues in Autism Spectrum Disorders
• SPA 6506: Clinical Clerkship in Audiology
• SPA 6507: Applied Augmentative and Alternative Communication
• SPA 6521: Practicum in Speech-Language Diagnostics: UFSHC
• SPA 6524: Practicum in Speech-Language Therapy: UFSHC
• SPA 6531: Clinical Practice in Hearing Assessment
• SPA 6533: Clinical Practice in Aural Rehabilitation
• SPA 6599: Alternative and Augmentative Communication
• SPA 6604: Communication and Aging
• SPA 6665: Seminar in Dysphagia
• SPA 6668: Clinical Evaluation in Medical Speech-Language Pathology
• SPA 6670: Seminar: Professional Aspects of Speech-Language Pathology
• SPA 6681: Special Clinical
• SPA 66830: Communication Disorders in Medically Complex Pediatric Populations
• SPA 66905: Individual Study
• SPA 66910: Supervised Research
• SPA 66930: Proseminar in Speech-Language Pathology and Audiology
• SPA 66935: Applied Reading Disabilities: Diagnosis and Treatment
• SPA 66936: Special Topics
• SPA 66940: Supervised Teaching
• SPA 66942: Externship in Speech-Language Pathology
• SPA 66971: Research for Master's Thesis
• SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
• SPA 7306: Audiologic Assessment in a Medical Setting
• SPA 7318: Clinical Auditory Electrophysiology
• SPA 7319: Balance Disorders: Evaluation and Treatment
• SPA 7325: Audiologic Rehabilitation
• SPA 7343: Cochlear Implants and Assistive Devices
• SPA 7348: Principles of Amplification
• SPA 7353: Environmental Hearing Conservation
• SPA 7354: Seminar in Audiology: Hearing Conservation and Noise Control
• SPA 7391: Business and Professional Issues in Audiology
• SPA 7415: Neuralinguistics of Adult Language Disorders
• SPA 7500: Public School Practicum
• SPA 7523: Practicum in Speech Pathology in a Medical/Dental Setting
• SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
• SPA 7566: Counseling Individuals with Hearing Losses
• SPA 7833: Audiology Research Project
• SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
• SPA 7945: Graduate Practicum in Audiology
• SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology
• SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology
• SPA 7958: Clinical Externship
• SPA 7979: Advanced Research
• SPA 7980: Research for Doctoral Dissertation

College of Public Health and Health Professions Courses

• HSC 5938: Special Topics
• HSC 6905: Independent Study
• HSC 6939: Special Topics
• HSC 6940: Supervised Teaching
• PHC 6000: Epidemiology Methods I
• PHC 6001: Principles of Epidemiology in Public Health
• PHC 6002: Epidemiology of Infectious Diseases
• PHC 6003: Epidemiology of Chronic Diseases and Disability
• PHC 6009: Biology and Epidemiology of HIV/AIDS
• PHC 6011: Epidemiology Methods II
• PHC 6016: Social Epidemiology in Public Health
• PHC 6036: Environmental Infectious Diseases: A Molecular Approach
• PHC 6050: Statistical Methods for Health Sciences Research I
• PHC 6102: Introduction to Public Health Administrative Systems
• PHC 6103: Systems Thinking for Public Health
• PHC 6104: Evidence-Based Management of Public Health Programs
• PHC 6146: Public Health Program Planning and Evaluation
• PHC 6153: Public Policy and Aging
• PHC 6183: Disaster Preparedness and Emergency Response
• PHC 6194: Spatial Epidemiology
• PHC 6195: Health Information for Diverse Populations: Theory & Methods
• PHC 6220: Overview of Long-Term Care
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHC 6251</td>
<td>Assessment and Surveillance in Public Health</td>
</tr>
<tr>
<td>PHC 6301</td>
<td>Aquatic Systems and Environmental Health</td>
</tr>
<tr>
<td>PHC 6309</td>
<td>Environmental Justice Issues in Public Health</td>
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<tr>
<td>PHC 6312</td>
<td>Water Quality and Human Health</td>
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<tr>
<td>PHC 6313</td>
<td>Environmental Health Concepts in Public Health</td>
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<tr>
<td>PHC 6316</td>
<td>Health, Risk, and Crisis Communication</td>
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<tr>
<td>PHC 6317</td>
<td>Risk Communication for Public Health Practice</td>
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<tr>
<td>PHC 6346</td>
<td>Occupational and Environmental Health Among Agriculture Workers</td>
</tr>
<tr>
<td>PHC 6370</td>
<td>Public Health Biology</td>
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<tr>
<td>PHC 6403</td>
<td>Adolescence, Risk Taking and Health</td>
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<td>PHC 6404</td>
<td>Gender, Sexuality, and Health</td>
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<tr>
<td>PHC 6410</td>
<td>Psychological, Behavioral, and Social Issues in Public Health</td>
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<tr>
<td>PHC 6413</td>
<td>Critical Incidents and Violence in Communitities</td>
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<tr>
<td>PHC 6418</td>
<td>Foundations in Aging and Public Health Policy and Epidemiology</td>
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<td>PHC 6419</td>
<td>Biomedical and Psychological Aspects of Very Late Life</td>
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<td>PHC 6421</td>
<td>Public Health Law and Ethics</td>
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<td>PHC 6441</td>
<td>Health Disparities in the United States</td>
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<td>PHC 6445</td>
<td>Global Public Health and Development II</td>
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<td>PHC 6447</td>
<td>Ecology of HIV/AIDS in the Rural South</td>
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<td>PHC 6512</td>
<td>Environmental Management of Vector-Borne Diseases</td>
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<td>PHC 6515</td>
<td>Introduction to Entomology: Zoonotic Diseases and Food Safety</td>
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<tr>
<td>PHC 6519</td>
<td>Zoonotic Diseases in Humans and Animals</td>
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<td>PHC 6520</td>
<td>Foodborne Diseases</td>
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<tr>
<td>PHC 6530</td>
<td>Public Health Issues of Mothers and Children</td>
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<tr>
<td>PHC 6543</td>
<td>Community Practice of Behavioral Health Risk Prevention</td>
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<td>PHC 6544</td>
<td>Health Behavior Interventions in Practice</td>
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<tr>
<td>PHC 6561</td>
<td>Public Health Laboratory Techniques</td>
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<td>PHC 6565</td>
<td>Health Promotion and Disease Prevention</td>
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<td>PHC 6566</td>
<td>Interventions for Public Health</td>
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<td>PHC 6607</td>
<td>Critical Issues in Public Health</td>
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<td>PHC 6700</td>
<td>Social and Behavioral Research Methods</td>
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<td>PHC 6702</td>
<td>Exposure Measurement and Assessment</td>
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<tr>
<td>PHC 6706</td>
<td>Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective</td>
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<td>PHC 6762</td>
<td>International Public Health</td>
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<td>PHC 6905</td>
<td>Independent Study</td>
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<td>PHC 6917</td>
<td>Supervised Research Project</td>
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<td>PHC 6901</td>
<td>Seminar in Contemporary Public Health Issues</td>
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<td>PHC 6931</td>
<td>Seminars in Public Health</td>
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<td>PHC 6937</td>
<td>Special Topics in Public Health</td>
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<td>PHC 6945</td>
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<td>PHC 6946</td>
<td>Public Health Internship</td>
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<td>PHC 7000</td>
<td>Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods</td>
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<td>PHC 7038</td>
<td>Psychiatric Epidemiology</td>
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<tr>
<td>PHC 7587</td>
<td>Theory Development and Testing in Behavioral &amp; Community Public Health</td>
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<td>PHC 7727</td>
<td>Grant Writing for Population Health Research</td>
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<td>PHC 7752</td>
<td>Seminar in Instrument Development for Public Health</td>
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<td>PHC 7901</td>
<td>Epidemiology Literature Review and Critique (Journal Club)</td>
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<td>PHC 7907</td>
<td>Social and Behavioral Science Journal Club</td>
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<td>PHC 7979</td>
<td>Advanced Research</td>
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<td>RHT 5156</td>
<td>Exercise Physiology</td>
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<td>RHT 6125C</td>
<td>Concepts in Clinical Biomechanics</td>
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<tr>
<td>RHT 6127C</td>
<td>Control of Gait and Posture</td>
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<td>RHT 6167C</td>
<td>Applied Neurophysiology for Physical Therapy</td>
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<td>RHT 6236C</td>
<td>Neurological Dysfunction as Applied to Physical Therapy</td>
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<tr>
<td>RHT 6316</td>
<td>Neurological Aspects of Orthopedic Rehabilitation</td>
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<tr>
<td>RHT 6613L</td>
<td>Research Instrumentation in Physical Therapy</td>
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<tr>
<td>RHT 6718</td>
<td>Neuroplastics: A Foundation for Neurorehabilitation</td>
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<td>RSD 6110</td>
<td>Rehabilitation Science Theory and Application I</td>
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<td>RSD 6112</td>
<td>Rehabilitation Science Theory and Application II</td>
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<td>RSD 6114</td>
<td>Rehabilitation in the United Kingdom</td>
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<td>RSD 6400</td>
<td>Models and Principles of Motor Learning and Control: Application in Rehabilitation Science</td>
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<td>RSD 6700</td>
<td>Rasch Measurement: Introduction and Application</td>
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<td>RSD 6705</td>
<td>Research Methods in Rehabilitation</td>
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<td>RSD 6706</td>
<td>Scientific Writing for the Rehabilitation Professional</td>
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<td>RSD 6900</td>
<td>College Classroom: Teaching Process and Practice</td>
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<td>Individual Work</td>
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<td>Supervised Research</td>
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<td>Special Topics in Rehabilitation Science</td>
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<td>Supervised Teaching</td>
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<td>RSD 7979</td>
<td>Advanced Research</td>
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<td>RCS 5245</td>
<td>Psychosocial and Cultural Foundations of Rehabilitation Counseling</td>
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<td>RCS 6066</td>
<td>Rehabilitation Issues in Human Growth and Development</td>
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<td>Medical and Psychosocial Aspects of Rehabilitation Counseling</td>
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<td>RCS 6242C</td>
<td>Vocational and Lifestyle Assessment in Rehabilitation Counseling</td>
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<td>RCS 6255C</td>
<td>Individual Evaluation and Assessment in Rehabilitation Counseling</td>
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<td>RCS 6412</td>
<td>Rehabilitation Counseling Theory and Practice</td>
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<td>RCS 6470</td>
<td>Human Sexuality and Disability</td>
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<td>RCS 6601</td>
<td>Forensic Rehabilitation Consultation I</td>
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<tr>
<td>RCS 6602</td>
<td>Forensic Rehabilitation Consultation II</td>
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<tr>
<td>RCS 6625</td>
<td>Community Counseling and Case Management</td>
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<tr>
<td>RCS 6641</td>
<td>Applied Case Management and Consultation in Rehabilitation Counseling</td>
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<td>RCS 6740</td>
<td>Rehabilitation Research</td>
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<tr>
<td>RCS 6790</td>
<td>Ethical, Legal, and Professional Issues in Rehabilitation</td>
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</table>
Communication Sciences and Disorders

College

College of Public Health and Health Professions

Department/School

Speech, Language and Hearing Sciences Department

Degrees Offered with a Major in Communication Sciences and Disorders

Doctor of Philosophy

Master of Arts

Speech, Language and Hearing Sciences Departmental Courses

- ASL 5406: Manual Communication with the Hearing Impaired
- LAE 6505: Applied Preschool Language Disorders: Diagnosis and Treatment
- LIN 5741: Applied English Grammar
- SPA 5051: Clinical Observation in Audiology
- SPA 5102: Auditory Anatomy and Physiology
- SPA 5126: Speech Perception
- SPA 5204: Phonological Disorders
- SPA 5211: Voice Disorders
- SPA 5225: Principles of Speech Pathology: Stuttering
- SPA 5245: Communicative Disorders Related to Cleft Palate
- SPA 5254: Neuropsychological Language Disorders
- SPA 5304: Principles of Audiological Evaluation
- SPA 5315: Peripheral and Central Auditory Disorders
- SPA 5401: Speech Pathology Language Disorder
- SPA 5405: Language Disorders II
- SPA 5553: Instrumentation and Diagnosis in Speech-Language Pathology
- SPA 5563: Psychosocial Aspects of Hearing Loss
- SPA 5646: Speech and Language of the Deaf and Hard of Hearing
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6010: Basic Auditory Sciences
- SPA 6117: Science of Singing
- SPA 6133L: Hearing Aid Analysis Laboratory
- SPA 6207: Applied Phonological Disorders: Diagnosis and Treatment
- SPA 6211: Applied Voice Disorders: Diagnosis and Treatment
- SPA 6217: Vocal Health and Habilitation
- SPA 6229: Applied Fluency Disorders: Diagnosis and Treatment
- SPA 6233: Speech Motor Control Disorders
- SPA 6270: Auditory Processing Disorders
- SPA 6805: Introduction to Graduate Research
- SPA 6305: Pediatric Audiology
- SPA 6311: Medical Audiology
- SPA 6312: Advanced Audiology and Neuro-Otology
- SPA 6317: Vestibular Disorders
- SPA 6323: Audiolinguistic Rehabilitation for Adults
- SPA 6324: Audiologic Rehabilitation for Children
- SPA 6340: Amplification I
- SPA 6341: Amplification II
- SPA 6342: Amplification III
• SPA 6300: Proseminar: Speech-Language Pathology and Audiology
• SPA 6410: Adult Language Disorders
• SPA 6416: Applied Neurogenic Disorders: Diagnosis and Treatment
• SPA 6430: Applied Developmental Disorders: Diagnosis and Treatment in Speech and Language
• SPA 6436: Issues in Autism Spectrum Disorders
• SPA 6506: Clinical Clerkship in Audiology
• SPA 6507: Applied Augmentative and Alternative Communication
• SPA 6521: Practicum in Speech-Language Diagnostics: UFSHC
• SPA 6524: Practicum in Speech-Language Therapy: UFSHC
• SPA 6531: Clinical Practice in Hearing Assessment
• SPA 6533: Clinical Practice in Aural Rehabilitation
• SPA 6559: Alternative and Augmentative Communication
• SPA 6564: Communication and Aging
• SPA 6565: Seminar in Dysphagia
• SPA 6568: Clinical Evaluation in Medical Speech-Language Pathology
• SPA 6570: Seminar: Professional Aspects of Speech-Language Pathology
• SPA 6581: Special Clinical
• SPA 6830: Communication Disorders in Medically Complex Pediatric Populations
• SPA 6905: Individual Study
• SPA 6910: Supervised Research
• SPA 6930: Proseminar in Speech-Language Pathology and Audiology
• SPA 6935: Applied Reading Disabilities: Diagnosis and Treatment
• SPA 6936: Special Topics
• SPA 6940: Supervised Teaching
• SPA 6942: Edemship in Speech-Language Pathology
• SPA 6971: Research for Master’s Thesis
• SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
• SPA 7306: Audiologic Assessment in a Medical Setting
• SPA 7319: Balance Disorders: Evaluation and Treatment
• SPA 7325: Audiologic Rehabilitation
• SPA 7343: Cochlear Implants and Assistive Devices
• SPA 7348: Principles of Amplification
• SPA 7353: Environmental Hearing Conservation
• SPA 7354: Seminar in Audiology: Hearing Conservation and Noise Control
• SPA 7391: Business and Professional Issues in Audiology
• SPA 7415: Neurolinguistics of Adult Language Disorders
• SPA 7500: Public School Practicum
• SPA 7523: Practicum in Speech Pathology in a Medical/Dental Setting
• SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
• SPA 7566: Counseling Individuals with Hearing Losses
• SPA 7833: Audiology Research Project
• SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
• SPA 7945: Graduate Practicum in Audiology
• SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology
• SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology
• SPA 7958: Clinical Edemship
• SPA 7979: Advanced Research
• SPA 7980: Research for Doctoral Dissertation

College of Public Health and Health Professions Courses

• HSC 5938: Special Topics
• HSC 6905: Independent Study
• HSC 6908: Special Topics
• HSC 6940: Supervised Teaching
• PHC 6000: Epidemiology Methods I
• PHC 6001: Principles of Epidemiology in Public Health
• PHC 6002: Epidemiology of Infectious Diseases
• PHC 6003: Epidemiology of Chronic Diseases and Disability
• PHC 6009: Biology and Epidemiology of HIV/AIDS
• PHC 6011: Epidemiology Methods II
• PHC 6016: Social Epidemiology in Public Health
• PHC 6036: Environmental Infectious Diseases: A Molecular Approach
• PHC 6050: Statistical Methods for Health Sciences Research I
• PHC 6102: Introduction to Public Health Administrative Systems
• PHC 6103: Systems Thinking for Public Health
• PHC 6104: Evidence-Based Management of Public Health Programs
• PHC 6146: Public Health Program Planning and Evaluation
• PHC 6153: Public Policy and Aging
• PHC 6183: Disaster Preparedness and Emergency Response
• PHC 6194: Spatial Epidemiology
• PHC 6195: Health information for Diverse Populations: Theory & Methods
• PHC 6220: Overview of Long-Term Care
• PHC 6251: Assessment and Surveillance in Public Health
• PHC 6301: Aquatic Systems and Environmental Health
• PHC 6309: Environmental Justice Issues in Public Health
• PHC 6312: Water Quality and Human Health
• PHC 6313: Environmental Health Concepts in Public Health
• PHC 6316: Health, Risk, and Crisis Communication
• PHC 6317: Risk Communication for Public Health Practice
• PHC 6346: Occupational and Environmental Health Among Agriculture Workers
Departments and Programs within the College of the Arts

College of the Arts

Dean: L. Lavelli
Complete faculty listings: Follow this link.

The arts program at UF began in the 1920s to serve the state of Florida's needs. Meeting these needs over the past 80 years has propelled the college to excel on a national and international level and has defined its mission to provide instruction for students seeking professional careers in the arts. In addition to providing rich educational experiences and programs in the arts, the college brings national and international recognition to the university through the high-level professionalism associated with the faculty and alumni, and the competence of students and graduates.

For more information about the College of the Arts, please see our website: http://www.arts.ufl.edu

Departments and Programs within the College of the Arts

Other

Arts in Medicine

College

Arts in Medicine Program Information

Center for Arts in Medicine Director: Jill Sonke
Center for Arts in Medicine Graduate Advisor: Dylan Klempner

The Center for Arts in Medicine is committed to advancing research, education, and practice in the arts in healthcare, locally and globally. The Center offers an online Master of Arts in Arts in Medicine. Minimum requirements for the degree are available in the Graduate Degrees section of this catalog.

Prerequisites and Requirements: Admission to the MA in Arts in Medicine program program requires a bachelor's degree in an arts, health, or related field of study, a GRE exam score or previous graduate degree, and completion of the Introduction to the Arts in Healthcare course at UF, or completion of an Arts in Healthcare Summer Intensive, or a minimum of one year of professional experience as an artist or administrator in the field of Arts in Medicine. Requirements of the degree include completion of 35 credits of coursework with a 3.0 or higher GPA.

Commitment of time: The MA in Arts in Medicine is designed to be completed in two years when students are enrolled in one class at a time (with one 8-week semester with two courses). Students should expect to dedicate 16 hours per week to each 8-week 3-credit hour course.

For more information, please see our website: http://www.arts.ufl.edu/cam

Degrees Offered with a Major in Arts in Medicine

Master of Arts

Arts in Medicine Courses

Core Curriculum

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- PHC 6104: Evidence-Based Management of Public Health Programs

Practicum

- HUM6358: Arts in Medicine Capstone Proposal
Electives

- ANG6930: Special Topics in Anthropology
- GMS 6822: Measuring and Analyzing Health Outcomes II
- HSA6114: U.S. Health Care System
- HUM6930: Special Topics in Fine Arts
- MVV 6651: Vocal Pedagogy
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- THE 6905: Individual Study

College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6354: Arts in Medicine Graduate Practicum
- HUM6359: Arts in Medicine Capstone Proposal
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management

School of Art and Art History

College of the Arts

Director: Richard C. Heipp
Graduate Coordinator: Patrick Grigsby

Complete faculty listing Follow this link.

The School of Art and Art History offers the M.F.A. degree in art with specializations in art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. The school also offers Master of Arts degrees in art education, art history, and museology (museum studies) and the Doctor of Philosophy degree in art history. Requirements for these degrees can be found in the Graduate Degrees section of this catalog, and information about each of these graduate programs can be found at the links below.

For more information, please see our website: http://www.arts.ufl.edu/welcome/art

Other

Art

College

College of the Arts

Department/School

School of Art and Art History

Art Program

Master of Fine Arts degree: The school offers the M.F.A. degree in art with specializations in art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. Enrollment is competitive and limited. Candidates for admission should have adequate undergraduate training in art. Deficiencies may be corrected before beginning graduate study. Applicants must submit a portfolio for admission consideration (for comprehensive admission information: http://www.arts.ufl.edu/programs/grad.aspx). A minimum of 3 years residency is normally needed to complete the requirements for this degree, which for studio students culminates with an M.F.A. exhibition.

The M.F.A. requires a minimum of 60 credit hours: 24 hours must be in an area of specialization. Normal course requirements include:

- 12 hours of studio electives outside the area of specialization
- 6 hours of art history electives
- 3 hours of outside SA+AH electives (research/discipline appropriate)
- 6 hours of electives
- 6 hours of individual project or thesis research.
Although the M.F.A. is a thesis degree, students usually produce a creative project in lieu of thesis. Students should see the graduate program adviser for the School's requirements for the creative project.

Degrees Offered with a Major in Art

Master of Fine Arts

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5667: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6292: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism. Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
- ARH 6496: Modern Art Seminar
- ARH 6596: Chinese Art Seminar
- ARH 6597: African Art Seminar
- ARH 6654: Pre-Columbian Art Seminar
- ARH 6666: Colonial Latin American Art Seminar
- ARH 6694: Nineteenth-Century Art--Seminar
- ARH 6696: American Art Seminar
- ARH 6797: Museum Education
- ARH 6836: Exhibitions Seminar
- ARH 6895: Collections Management Seminar
- ARH 6900: Independent Study in Museology
- ARH 6910: Supervised Research
- ARH 6911: Advanced Study
- ARH 6914: Independent Study in Ancient Art History
- ARH 6915: Independent Study in Medieval Art History
- ARH 6916: Independent Study in Renaissance and Baroque Art History
- ARH 6917: Independent Study in Modern Art History
- ARH 6918: Independent Study in Non-Western Art History
- ARH 6930: Special Topics in Museology
- ARH 6938: Seminar in Museum Studies
- ARH 6941: Supervised Internship
- ARH 6946: Museum Practicum
- ARH 6948: Gallery Practicum
- ARH 6971: Research for Master's Thesis
- ARH 7979: Advanced Research
- ARH 7980: Research for Doctoral Dissertation
- ART 5674C: Digital Fabrication
- ART 5905C: Directed Study
- ART 5930C: Special Topics
- ART 6410C: Printmaking Seminar: Mastering Process and Content
- ART 6411C: Printmaking Seminar: Transformation and Change
- ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
- ART 6413C: Printmaking Seminar: Interdisciplinary Studio
- ART 6971C: Advanced Experiments in Digital Art
College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6942: Arts in Medicine Graduate Practicum
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management

Art Education

College of the Arts

Department/School

School of Art and Art History

Art Education Program

Master of Arts degree in Art Education: The School offers the M.A. in art education. In addition to meeting requirements of the Graduate School for admission, prospective students should:

- Hold a degree in studio art, art history, design, or art education
- Send up to 10 images of original works of art (on CD or in slide form) and a research paper, article, or other sample of academic writing
- Official transcripts from all colleges/universities previously attended
- Statement of professional goals for attending graduate school and earning a M.A. degree in art education
- Current Curriculum Vitae or Resume
- Submit three current letters of recommendation.

The M.A. in art education requires a minimum of 36 credit hours. ARE 6049, ARE 6148, and ARE 6641 are required. The basic plan of study includes 3 credits of an approved art education elective; 9 credits in studio courses; 3 credits in art history; 6 credits in art history, studio, art education, or education electives; 3 credits of ARE 6746; and 3 credits of ARE 6971 or ARE 6973. To be admitted to candidacy, students must pass a comprehensive examination at the beginning of the second year. The program culminates in an oral examination on the thesis or project in lieu of thesis.

Degrees Offered with a Major in Art Education

Master of Arts
School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5665: Indigenous American Art
- ARH 5667: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6292: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism, Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
- ARH 6496: Modern Art Seminar
- ARH 6596: Chinese Art Seminar
- ARH 6597: African Art Seminar
- ARH 6654: Pre-Columbian Art Seminar
- ARH 6666: Colonial Latin American Art Seminar
- ARH 6694: Nineteenth-Century Art–Seminar
- ARH 6696: American Art Seminar
- ARH 6797: Museum Education
- ARH 6836: Exhibitions Seminar
- ARH 6895: Collections Management Seminar
- ARH 6900: Independent Study in Museology
- ARH 6910: Supervised Research
- ARH 6911: Advanced Study
- ARH 6914: Independent Study in Ancient Art History
- ARH 6915: Independent Study in Medieval Art History
- ARH 6916: Independent Study in Renaissance and Baroque Art History
- ARH 6917: Independent Study in Modern Art History
- ARH 6918: Independent Study in Non-Western Art History
- ARH 6930: Special Topics in Museology
- ARH 6938: Seminar in Museum Studies
- ARH 6941: Supervised Internship
- ARH 6946: Museum Practicum
- ARH 6948: Gallery Practicum
- ARH 6971: Research for Master's Thesis
- ARH 7979: Advanced Research
- ARH 7980: Research for Doctoral Dissertation
- ART 5674C: Digital Fabrication
- ART 5905C: Directed Study
- ART 5930C: Special Topics
- ART 6410C: Printmaking Seminar: Mastering Process and Content
- ART 6411C: Printmaking Seminar: Transformation and Change
- ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
- ART 6413C: Printmaking Seminar: Interdisciplinary Studio
- ART 6671C: Advanced Experiments in Digital Art
- ART 6672: Hypermedia
- ART 6673C: Video Art
- ART 6675C: Digital Art and Animation
- ART 6691: Digital Art Studio
- ART 6794C: Vessel Aesthetic 1
- ART 6795C: Vessel Aesthetic 2
- ART 6797C: Ceramic Sculpture 2
- ART 6835C: Research in Methods and Materials of the Artist
- ART 6940C: Reactive Environments
- ART 6987: Professional Practices for the Visual Artist
- ART 6910C: Supervised Research
- ART 6925C: Art + Technology Workshop
- ART 6926C: Advanced Study I
- ART 6927C: Advanced Study II
- ART 6928C: Advanced Study III
- ART 6941C: Advanced Study IV
Art History Program

Master of Arts and Doctor of Philosophy degrees in Art History: The School offers graduate programs leading to the M.A. and Ph.D. degrees. For complete details of the M.A. and Ph.D. degree requirements, see the Director of Graduate Studies—Art History. Art History students may participate in courses offered by the State University System's programs in Paris, London, and Florence. Other study-abroad programs may be approved by the director of graduate studies.

For the M.A. degree, the School offers areas of emphasis in Ancient, Medieval, Renaissance/Baroque, Modern, and non-Western art history (including African, Asian, and Oceanic). A minimum of 36 credit hours is required: ARH 5816 (3 credits), 27 hours of course work, and ARH 6971 (6 credits). Required course work includes a minimum of 15 hours with 5 different art history Graduate Faculty (at least 12 hours of this course work must be graduate-level seminars). Nine credits may be taken in related areas with the graduate program adviser's approval. Reading proficiency in a foreign language appropriate to the major area of study must be demonstrated before thesis research is begun. Language courses cannot apply toward degree credit.

For the Ph.D. degree, the School offers the same areas of specialization as for the M.A. degree. Up to 30 credits from the M.A. degree may apply toward the 90 credit Ph.D. degree. A program of 60 credit hours beyond the M.A. degree is required. Core courses will consist of a minimum of 30 hours in art history:

- 18 hours in a primary area (5000-level or above)
- 9 hours in a secondary area (5000-level or above)
- 3 hours of theory/methodology of art history (if ARH 5816 or its equivalent has not been taken as part of the M.A.)
- An additional 12 hours of outside electives taken in other schools or departments are required in a discipline(s) related to the primary area of study
- Finally, 27 hours of dissertation research and writing is required.

By the end of the second semester or equivalent full-time study, students should form their supervisory committee that must include a minimum of four Graduate Faculty members; one of whom must agree to serve as primary dissertation adviser and supervisory committee chair. The supervisory committee will also act as the qualifying examination committee. Normally students will take the qualifying examination during the spring term of the third year in residence. The examination is both written and oral. It will cover the major and minor art history areas of emphasis as well as the student's preliminary formulation of a dissertation topic and provisional statement of the approaches to that topic as expressed in the dissertation prospectus. On successful completion of the qualifying examination, the approval by the supervisory committee of the dissertation prospectus, and fulfilling all other course and language requirements, the student makes formal application for a change of status to Ph.D. candidacy. Normally, a student will be expected to present the completed dissertation and defend it at an oral defense conducted by the supervisory committee by the end of the sixth year in the program. For Ph.D. students, reading knowledge of two research languages other than English must be demonstrated by the end of the second year of course work, or by the end of the first semester in the case of transfer students. Language courses are not applicable toward degree credit.

Degrees Offered with a Major in Art History

Doctor of Philosophy

Master of Arts
School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6336: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5667: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6292: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism: Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
- ARH 6496: Modern Art Seminar
- ARH 6596: Chinese Art Seminar
- ARH 6597: African Art Seminar
- ARH 6654: Pre-Columbian Art Seminar
- ARH 6666: Colonial Latin American Art Seminar
- ARH 6694: Nineteenth-Century Art–Seminar
- ARH 6696: American Art Seminar
- ARH 6797: Museum Education
- ARH 6836: Exhibitions Seminar
- ARH 6895: Collections Management Seminar
- ARH 6900: Independent Study in Museology
- ARH 6910: Supervised Research
- ARH 6911: Advanced Study
- ARH 6914: Independent Study in Ancient Art History
- ARH 6915: Independent Study in Medieval Art History
- ARH 6916: Independent Study in Renaissance and Baroque Art History
- ARH 6917: Independent Study in Modern Art History
- ARH 6918: Independent Study in Non-Western Art History
- ARH 6930: Special Topics in Museology
- ARH 6938: Seminar in Museum Studies
- ARH 6941: Supervised Internship
- ARH 6946: Museum Practicum
- ARH 6948: Gallery Practicum
- ARH 6971: Research for Master's Thesis
- ARH 7979: Advanced Research
- ARH 7980: Research for Doctoral Dissertation
- ART 5674C: Digital Fabrication
- ART 5905C: Directed Study
- ART 5930C: Special Topics
- ART 6410C: Printmaking Seminar: Mastering Process and Content
- ART 6411C: Printmaking Seminar: Transformation and Change
- ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
- ART 6413C: Printmaking Seminar: Interdisciplinary Studio
- ART 6671C: Advanced Experiments in Digital Art
- ART 6672: Hypermedia
- ART 6673C: Video Art
- ART 6675C: Digital Art and Animation
- ART 6691: Digital Art Studio
- ART 6794C: Vessel Aesthetic 1
- ART 6795C: Vessel Aesthetic 2
- ART 6797C: Ceramic Sculpture 2
- ART 6835C: Research in Methods and Materials of the Artist
- ART 6849C: Reactive Environments
- ART 6897: Professional Practices for the Visual Artist
- ART 6910C: Supervised Research
- ART 6925C: Art + Technology Workshop
College of the Arts Courses

- ART 6926C: Advanced Study I
- ART 6927C: Advanced Study II
- ART 6928C: Advanced Study III
- ART 6929C: Advanced Study IV
- ART 6933: Area Methods: Rotating Topics
- ART 6971: Research for Master's Thesis
- ART 6973C: Individual Project
- DIG 6746C: Graduate Seminar in Sensors and Electronics
- IDC 6505C: Programming for Artists

HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
HUM 5595: Arts in Medicine in Practice
HUM 6340: Arts Advocacy and Public Policy
HUM 6353: Arts in Medicine Professional Seminar
HUM 6354: Arts in Medicine Advanced Professional Seminar
HUM 6358: Arts in Medicine Capstone Proposal
HUM 6359: Arts in Medicine Capstone
HUM 6942: Arts in Medicine Graduate Practicum
HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Museology

Museum Program Information

Master of Arts degree in Museology (Museum Studies): The School offers this interdisciplinary program that consists of both academic and practical work. The curriculum allows students to do graduate work in a disciplinary emphasis (art history, anthropology, history, education, or the natural sciences, for example) and at the same time complete a concentrated study in professional museum practice. The M.A. degree in museology requires 48 credit hours including:

- 15 credits of museum studies courses (museology seminar, 3 credits; collections management, 3 credits; museum education, 3 credits; exhibitions, 3 credits; special topics, 3 credits)
- 15 graduate credits in a disciplinary focus
- 6 credits of internship
- 6 credits of electives
- 6 credits of individual credit.

Several on-campus sites provide the program with laboratories for training students in museum work, including the University Galleries, Harn Museum of Art, Florida Museum of Natural History, and the gallery at the Reitz Union. Students must complete a 6-credit internship of at least 320 hours at an approved museum. In this experience, students undertake specific projects in which they gain first-hand experience in museum work. The Harn Museum of Art or the Florida Museum of Natural History may be able to oversee a few interns, but students are encouraged to apply for internships at other U.S. institutions or abroad.

A project-in-lieu-of-thesis (or thesis) is selected, researched, and carried out under the direction of a supervisory committee.

Degrees Offered with a Major in Museology

Master of Arts

- concentration in Historic Preservation
- without a concentration
School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5667: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6292: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism. Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
- ARH 6496: Modern Art Seminar
- ARH 6596: Chinese Art Seminar
- ARH 6597: African Art Seminar
- ARH 6654: Pre-Columbian Art Seminar
- ARH 6666: Colonial Latin American Art Seminar
- ARH 6894: Nineteenth-Century Art–Seminar
- ARH 6896: American Art Seminar
- ARH 6797: Museum Education
- ARH 6836: Exhibitions Seminar
- ARH 6895: Collections Management Seminar
- ARH 6900: Independent Study in Museology
- ARH 6910: Supervised Research
- ARH 6911: Advanced Study
- ARH 6914: Independent Study in Ancient Art History
- ARH 6915: Independent Study in Medieval Art History
- ARH 6916: Independent Study in Renaissance and Baroque Art History
- ARH 6917: Independent Study in Modern Art History
- ARH 6918: Independent Study in Non-Western Art History
- ARH 6930: Special Topics in Museology
- ARH 6938: Seminar in Museum Studies
- ARH 6941: Supervised Internship
- ARH 6946: Museum Practicum
- ARH 6948: Gallery Practicum
- ARH 6971: Research for Master's Thesis
- ARH 7979: Advanced Research
- ARH 7980: Research for Doctoral Dissertation
- ART 5674C: Digital Fabrication
- ART 5905C: Directed Study
- ART 6930C: Special Topics
- ART 6410C: Printmaking Seminar: Mastering Process and Content
- ART 6411C: Printmaking Seminar: Transformation and Change
- ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
- ART 6413C: Printmaking Seminar: Interdisciplinary Studio
- ART 6671C: Advanced Experiments in Digital Art
- ART 6672: Hypermedia
- ART 6673C: Video Art
- ART 6675C: Digital Art and Animation
- ART 6691: Digital Art Studio
- ART 6794C: Vessel Aesthetic 1
- ART 6795C: Vessel Aesthetic 2
- ART 6797C: Ceramic Sculpture 2
- ART 6835C: Research in Methods and Materials of the Artist
- ART 6849C: Reactive Environments
- ART 6897: Professional Practices for the Visual Artist
- ART 6910C: Supervised Research
- ART 6925C: Art + Technology Workshop
- ART 6926C: Advanced Study I
College of the Arts Courses

- ART 6927C: Advanced Study II
- ART 6928C: Advanced Study III
- ART 6929C: Advanced Study IV
- ART 6933: Area Methods: Rotating Topics
- ART 6971: Research for Master's Thesis
- ART 6973C: Individual Project
- DIG 6746C: Graduate Seminar in Sensors and Electronics
- IDC 6505C: Programming for Artists

Digital Worlds Institute

College of the Arts

Director: James C. Oliverio
Graduate Coordinator: Marko Suvajdzic

Complete faculty listing: Follow this link.

The Digital Worlds Institute exists to nurture leading edge education between the arts, communications, engineering and the sciences, utilizing advanced media systems and digital culture. By bringing together the diverse talents of University of Florida faculty, students, and staff in a multifaceted collaborative environment, the Institute serves as a platform for interdisciplinary research and teaching that would not have occurred within the confines of any one college or department. Through the use of interactive tools and technologies, the Institute promotes transdisciplinary creativity across classrooms, continents and cultures.

For more information, please see the program page below and our website: http://www.digitalworlds.ufl.edu.

Other

Digital Arts and Sciences (Arts)

College

Digital Worlds Institute

Department/School

Digital Worlds Institute

Digital Arts and Sciences (Arts) Program Information

The Master of Arts in Digital Arts & Sciences (DAS) degree seeks to allow students from diverse academic backgrounds the opportunity to develop fluency in the technologies, design practices and collaborative interdisciplinary teamwork increasingly required by the media, communications and entertainment industries. Graduates holding the M.A. in DAS degree would typically seek employment in the creative services sector, applying digital techniques and technologies in a variety of professions. Opportunities range from traditional cinema to interactive games; from broadcast media to online international networks to emergent industries.

Although this is a thesis degree, students usually produce a creative project in lieu of thesis. Students should see the graduate coordinator for the requirements for the creative project, which are also provided in the DAS Student Handbook.

Students seeking admission are expected to have an undergraduate background including:

- A degree in one of the fine arts or liberal arts
- A body of work that demonstrates accomplishment in the intended area
- A body of work that can clearly be enhanced with skills to be acquired in the DAS program.

Deficiencies may be corrected before beginning graduate study. In addition to appropriate academic credentials and prior scholastic achievement, admission into the program requires a well-constructed Statement of Purpose and media-related support material (i.e. samples of design, programming, video, web, writing, etc.) that demonstrates both prior interest and/or achievement
in New Media/Digital Arts & Sciences.

Degrees Offered with a Major in Digital Arts and Sciences

Master of Arts

Digital Worlds Departmental Courses

- DIG 5555C: Digital Media Projection Design I
- DIG 5931C: Special Topics
- DIG 6027C: Interactive Storytelling
- DIG 6028: Roots of Digital Culture
- DIG 6050C: Entertainment Technology
- DIG 6125C: Digital Design & Visualization
- DIG 6126C: Interaction Design
- DIG 6256C: Audio Design For Digital Production
- DIG 6358C: APPLIED 3D MODELING
- DIG 6556C: Digital Media Projection Design II
- DIG 6589C: Digital Portfolio
- DIG 6719: Videogame Theory and Analysis
- DIG 6744C: Movement, Media and Machines
- DIG 6746C: Graduate Seminar in Sensors and Electronics
- DIG 6751C: Protocols for Multimedia Interfaces
- DIG 6788C: Digital Production & Game Design
- DIG 6840C: Interdisciplinary Research Seminar in Digital Arts & Sciences
- DIG 6850C: Digital Arts & Sciences Convergence
- DIG 6906: Independent Study - Graduate Level
- DIG 6950C: Digital Performance Production
- DIG 6971: Research for Master's Thesis
- DIG 6973: Capstone Project in Lieu of Thesis
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers

College of the Arts Courses

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Music Department

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Music Department

College of the Arts

Director: J. A. Duff.
Graduate Coordinator: L. S. Odom.

Complete faculty listing by department: Follow this link.

The School of Music offers programs leading to the Master of Music degree in music and music education. Program concentrations in music include choral conducting, composition, instrumental conducting, musicology, ethnomusicology, music theory, performance, and sacred music. In addition, the School of Music offers the Doctor of Philosophy degree in music and in music education.

The Ph.D. program in music education emphasizes college music teaching. The Ph.D. program in music includes concentrations in:

- Music history and literature, with options in traditional musicology and ethnomusicology
- Composition, with options in acoustic and electroacoustic specialization

All Ph.D. students are encouraged to find opportunities to teach and lecture in their specializations; and with the assistance of their principal professors, to prepare papers, workshops, and clinics for presentation at professional conferences, in the public schools, and at colleges and universities. Students also are encouraged to publish their research in appropriate journals. Minimum requirements for the M.M. and Ph.D. degrees are given in the General Information section of this catalog. The week before classes begin, students must take placement examinations in music history and in music theory. Students wanting to study privately in a performance studio must be auditioned and accepted by the appropriate area faculty. Voice students must demonstrate appropriate skills in language and diction. All deficiencies must be remedied.

For more information, please see the program pages below and our website: http://www.arts.ufl.edu/welcome/music.
Music Program Information

The Master of Music (M.M.) degree is offered in music or music education. The music program offers the following concentrations: choral conducting, composition, electronic music, ethnomusicology, instrumental conducting, music education, music history and literature, music theory, performance, and sacred music. The M.M. degree prepares students for careers as teachers in studios, schools, and universities; performers; music historians; music critics; church musicians; composers; conductors; and accompanists.

For more information, please see our website: http://www.arts.ufl.edu/welcome/music

Degrees Offered with a Major in Music

Doctor of Philosophy

without a concentration

concentration in Composition

concentration in Music History and Literature

Master of Music

without a concentration

concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

centration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

centration in Electronic Music

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Ethnomusicology
concentration in Ethnomusicology

optional second concentration in Choral Conducting
optional second concentration in Composition
optional second concentration in Electronic Music
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Sacred Music
optional second concentration in Piano Pedagogy
optional second concentration in Music Education

concentration in Instrumental Conducting

optional second concentration in Composition
optional second concentration in Choral Conducting
optional second concentration in Music History and Literature
optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Sacred Music
optional second concentration in Piano Pedagogy
optional second concentration in Music Education
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

concentration in Music Education

optional second concentration in Composition
optional second concentration in Choral Conducting
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Sacred Music

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Music History and Literature

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Music Theory

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Performance

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory
optional second concentration in Sacred Music

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Sacred Music

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Music Departmental Courses

- DIG 6288: Music and Sound Design for Digital Media
- MUC 5315: Introduction to Electroacoustic Music
- MUC 6444: Composition of Electronic Music
- MUC 6445: Electroacoustic Music Composition: Digital I
- MUC 6446: Electroacoustic Music Composition—Digital II
- MUC 6900: Secondary Graduate Composition
- MUC 6930: Graduate Composition
- MUC 6932: Composition Seminar
- MUC 7447: Advanced Seminar in Electroacoustic Music
- MUC 7931: Advanced Graduate Composition
- MUC 7938: Seminar in Digital Sound Processing, Control, and Composition
- MUE 6080: Historical and Philosophical Foundations of Music Education
- MUE 6385: Music in Higher Education
- MUE 6399: Creative Thinking in Music
- MUE 6444: Materials and Methods of String Class Teaching
- MUE 6497: Public School Orchestral Literature
- MUE 6647: Trends in Teaching and Learning Music
- MUE 6696: Technology Assisted Music Learning
- MUE 6747: Assessing Music Learning
- MUE 6785: Research in Music Education
- MUE 6790: Capstone Project for Music Education
- MUE 6931: Instructional Design in Music Education
- MUE 7746: Measurement and Evaluation of Music
- MUE 7938: Music Education Seminar
- MUG 6105: Graduate Conducting
- MUG 7105: Advanced Graduate Conducting
- MJH 5219: Graduate Music History Review
- MJH 5505: Introduction to Ethnomusicology
- MJH 5684: Introduction to Historical Musicology
- MJH 6526: American Vernacular Music
- MJH 6545: The Guitar in Latin American Culture
- MJH 6548: Seminar in Caribbean Music
- MJH 6549: Seminar in Brazilian Music
MUH 6635: Seminar in American Music
MUH 6665: History of Opera
MUH 6671: Seminar in Renaissance Music
MUH 6672: Seminar in Baroque Music
MUH 6673: Seminar in Classical Music
MUH 6674: Seminar in Nineteenth-Century Music
MUH 6675: Seminar in Twentieth-Century Music
MUH 6931: Nationalism in Music
MUH 6935: Special Topics in Music History
MUH 7411: Medieval and Renaissance Notation
MUH 7938: Musicology Seminar
MUL 6435: String Literature
MUL 6486: Piano Literature
MUL 6495: Graduate Organ Literature
MUL 6555: Survey of Wind Literature
MUL 6565: Chamber Music Literature
MUL 6645: Choral Literature
MUN 6010: Graduate Ensemble
MUN 6125: Concert Band
MUN 6135: Symphonic Band
MUN 6145: Symphonic Wind Ensemble
MUN 6215: University Orchestra
MUN 6315: University Choir
MUN 6325: Women's Chorale
MUN 6335: Men's Glee Club
MUN 6445: Percussion Ensemble
MUN 6495: Steel Drum Ensemble
MUN 6496: World Music Ensemble
MUN 6497: New Music Ensemble
MUN 6715: Jazz Band
MUR 6206: Survey of Hymnody
MUR 6705: Sacred Music Literature
MUS 5911: Directed Study
MUS 6685: Psychology of Music
MUS 6716: Methods of Musical Research and Bibliography
MUS 6905: Projects and Problems
MUS 6910: Supervised Research
MUS 6940: Supervised Teaching
MUS 6971: Research for Master's Thesis
MUS 6973: Individual Project
MUS 7656: Teaching Music and the Creative Process
MUS 7905: Projects and Problems
MUS 7970: Advanced Research
MUS 7980: Research for Doctoral Dissertation
MUT 6051: Graduate Music Theory Review
MUT 6445: Advanced Counterpoint
MUT 6531: Figured Bass and Continuo Performance
MUT 6565: Late Nineteenth- and Twentieth-Century Styles
MUT 6576: Contemporary Styles
MUT 6617: Approaches to Theoretical Analysis in Music Education
MUT 6624: Seminar in Set Theory
MUT 6627: Seminar in Reductive Analysis
MUT 6629: Analytical Techniques
MUT 6751: Pedagogy of Music Theory
MUT 6936: Music Theory Seminar
MUT 7316: Advanced Orchestration
MUT 7585: Seminar in Musical Style
MUT 7760: History of Music Theory
MKK 5158: Improvisational Keyboard Skills and Related Technology
MKK 6605: Organ Pedagogy
MKK 6651: Piano Pedagogy
MKK 6661: Advanced Piano Pedagogy
MO 6250: Secondary Music Performance
MO 6460: Music Performance
MO 7460: Music Performance
MPS 6651: String Pedagogy I
MV 6651: Vocal Pedagogy

College of the Arts Courses

HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
HUM 5595: Arts in Medicine in Practice
HUM 6340: Arts Advocacy and Public Policy
HUM 6353: Arts in Medicine Professional Seminar
HUM 6354: Arts in Medicine Advanced Professional Seminar
HUM 6358: Arts in Medicine Capstone Proposal
HUM 6359: Arts in Medicine Capstone
HUM 6942: Arts in Medicine Graduate Practicum
HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Music Education
College

College of the Arts

Department/School

Music Department

Music Education Program Information

The Master of Music (M.M.) degree is offered in music or music education. The music education program offers the following concentrations: choral conducting, composition, electronic music, ethnomusicology, instrumental conducting, music history and literature, music theory, performance, and piano pedagogy. The M.M. degree prepares students for careers as teachers in studios, schools, and universities; performers; music historians; music critics; church musicians; composers; conductors; and accompanists.

For more information, please see our website: http://www.arts.ufl.edu/welcome/music

Degrees Offered with a Major in Music Education

Doctor of Philosophy

Master of Music

Without a Concentration

Concentration in Choral Conducting

- optional second concentration in Piano Pedagogy
- optional second concentration in Composition
- optional second concentration in Instrumental Conducting
- optional second concentration in Music History and Literature
- optional second concentration in Music Theory
- optional second concentration in Performance
- optional second concentration in Electronic Music
- optional second concentration in Ethnomusicology

Concentration in Composition

- optional second concentration in Choral Conducting
optional second concentration in Piano Pedagogy

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Electronic Music

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Ethnomusicology

Concentration in Ethnomusicology

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Piano Pedagogy

Concentration in Instrumental Conducting

optional second concentration in Piano Pedagogy
optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Music History and Literature

optional second concentration in Choral Conducting

optional second concentration in Piano Pedagogy

optional second concentration in Instrumental Conducting

optional second concentration in Composition

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Music Theory

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Piano Pedagogy

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Performance

optional second concentration in Choral Conducting
optional second concentration in **Piano Pedagogy**

optional second concentration in **Instrumental Conducting**

optional second concentration in **Music History and Literature**

optional second concentration in **Composition**

optional second concentration in **Performance**

optional second concentration in **Electronic Music**

optional second concentration in **Ethnomusicology**

**Concentration in Piano Pedagogy**

optional second concentration in **Choral Conducting**

optional second concentration in **Composition**

optional second concentration in **Instrumental Conducting**

optional second concentration in **Music History and Literature**

optional second concentration in **Music Theory**

optional second concentration in **Performance**

optional second concentration in **Electronic Music**

optional second concentration in **Ethnomusicology**

**College of the Arts Courses**

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6942: Arts in Medicine Graduate Practicum
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management

**Music Departmental Courses**

- DIG6288: Music and Sound Design for Digital Media
- MUC5315: Introduction to Electroacoustic Music
- MUC6444: Composition of Electronic Music
- MUC6445: Electroacoustic Music Composition: Digital I
- MUC6446: Electroacoustic Music Composition—Digital II
- MUC6900: Secondary Graduate Composition
- MUC6930: Graduate Composition
- MUC6932: Composition Seminar
- MUC7447: Advanced Seminar in Electroacoustic Music
- MUC7931: Advanced Graduate Composition
- MUC7938: Seminar in Digital Sound Processing, Control, and Composition
- MJE6080: Historical and Philosophical Foundations of Music Education
- MJE6385: Music in Higher Education
- MJE6399: Creative Thinking in Music
- MJE6444: Materials and Methods of String Class Teaching
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<td>MUE 6647</td>
<td>Trends in Teaching and Learning Music</td>
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<td>MUE 6696</td>
<td>Technology Assisted Music Learning</td>
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<td>Assessing Music Learning</td>
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<td>MJH 6671</td>
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<td>Men's Glee Club</td>
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<td>World Music Ensemble</td>
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<td>Survey of Hymnody</td>
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<td>Methods of Musical Research and Bibliography</td>
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<td>MUS 6940</td>
<td>Supervised Teaching</td>
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<td>MUS 7656</td>
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<td>MV 6651</td>
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</tbody>
</table>
School of Theatre and Dance

Director: J. Dickey
Graduate Performance Program Coordinator: Ralf Remshardt
Graduate Design Program Coordinator: S. Kaye

Complete faculty listing by department: Follow this link.

The graduate program offered by the School of Theatre and Dance leads to the degree of Master of Fine Arts in Theatre. Minimum requirements for this degree are given in the General Information section of this catalog.

The M.F.A. degree prepares students for professional entry in acting, production, or teaching. Placement in the M.F.A. program is determined by audition/portfolio review, academic credentials, and personal interview. Candidates for admission should have adequate training in theatre. Deficiencies may be corrected before beginning graduate study.

The program emphasizes the study and practice of theatre as an art and discipline. Students of acting and design study concepts of theatre together while working in their areas of specialization. Focus is on the collaboration and synthesis of theatre artistry. Each incoming class is composed of approximately 12 to 18 students in acting and all design areas.

The student's artistic and academic progress will be reviewed at the end of each semester. The School of Theatre Handbook gives details on the form and focus of each review. This information is online at http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp.

During the final year of study, each student must successfully complete the comprehensive examination and oral defense. The project in lieu of thesis includes research, analysis, rehearsal process, and evaluation. Development and execution of the project includes public performance (acting or design). The written document and oral defense of the project which follow must demonstrate the ability to communicate the creative process.

Graduate acting students audition for all departmental productions.

Other

Theatre

College

College of the Arts

Department/School

School of Theatre and Dance

Degrees Offered with a Major in Theatre

Master of Fine Arts

College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6942: Arts in Medicine Graduate Practicum
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management

Theatre and Dance Departmental Courses

- ARC 6670: Lighting Design Seminar
- DAN 6436: Laban Movement Analysis
- DAA 6757: Pilates Technique for the Dancer
- DAA 6905: Graduate Dance Project
- DAN 6949: Dance Clinical Practice
Departments and Programs within the College of Veterinary Medicine

College of Veterinary Medicine

Dean: G. F. Hoffsis

Complete faculty listings: Follow this link.

The UF College of Veterinary Medicine is the state's only veterinary college. UF's College of Veterinary Medicine offers comprehensive services to the public through teaching, research, extension and state-of-the-art patient care.

For more information, please see our website: http://www.vetmed.ufl.edu

Departments and Programs within the College of Veterinary Medicine

College of Veterinary Medicine Courses

Other

Veterinary Medical Sciences

College

College of Veterinary Medicine
Veterinary Medical Sciences Program

Chair: C. Risco
Graduate Coordinator (Large Animals): I. Larkin
Graduate Coordinator (Small Animals): D. Lewis

Complete faculty listing by department: Follow this link.

The College of Veterinary Medicine offers graduate study leading to the Master of Science and Doctor of Philosophy degrees in veterinary medical sciences. The College also offers certification and a nonthesis concentration in forensic toxicology via web-based distance education. Minimum requirements for the Master of Science and Doctor of Philosophy degrees are described in the Graduate Degrees section of this catalog.

The program provides extensive training in basic and applied research for qualified students with a baccalaureate degree or a D.V.M. or equivalent degree. Applicants are expected to have a background in the biological sciences, mathematics, chemistry, and physics. Particular attention is paid to the advanced education of veterinarians, those interested solely in research, and those interested in combining their graduate study with residency training in a clinical specialty. The College offers three areas of specialization within the veterinary medical sciences program:

Large and Small Animal Clinical Sciences: Physiology, endocrinology, aquatic animal health, fish diseases, gastroenterology, immunology, vision sciences, perinatology, reproductive biology, pharmacokinetics, veterinary sports medicine, and wildlife and zoological medicine (I. Larkin and D. Lewis Graduate Coordinators).

Physiological Sciences: Comparative anatomy, physiology, pharmacology, biochemistry, neurobiology, nutrition, reproductive biology, and toxicology (R. Johnson, Graduate Coordinator).

Infectious Diseases and Experimental Pathology: Bacteriology, parasitology, virology, immunopathology, molecular mechanisms of disease and host defense, epidemiology, and veterinary public health (M.T. Long, Graduate Coordinator).

The College participates in the interdisciplinary specialization in toxicology, in cooperation with other departments and colleges in both the Health Science Center and the Institute of Food and Agricultural Sciences and with the Center for Environmental and Human Toxicology (see the Toxicology description under Interdisciplinary Graduate Studies).

The following courses in related areas are acceptable for graduate major credit in veterinary medical sciences: Physiological Sciences: ANS 6704, ANS 6751, BCH 5413, BCH 6206, BCH 6415, BCH 6740, BMS 6510, GMS 6400C, GMS 6735, GMS 7706C, GMS 7743. Infectious Diseases and Experimental Pathology: BCH 5413, BCH 6415, BMS 603, GMS 5304C, GMS 6140, GMS 6152, GMS 6330, GMS 6332, GMS 6333, GMS 6381, GMS 6382, GMS 6421, STA 6308, STA 6166, STA 6178. Large and Small Animal Clinical Sciences: all of the above.

Degrees Offered with a Major in Veterinary Medical Sciences

Doctor of Philosophy

without a concentration

concentration in Animal Molecular and Cellular Biology

concentration in Clinical and Translational Science

concentration in Toxicology

Master of Science

without a concentration

concentration in Forensic Toxicology
concentration in Shelter Medicine

concentration in Veterinary Forensic Sciences

Courses

- GMS 6070: Sensory and Motor Systems
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
- GMS 6312: Clinical Chemistry and Toxicology
- GMS 6313: Clinical Chemistry and Toxicology: A Rotation
- GMS 6393: Seminar in Clinical Chemistry
- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6116: In Vivo and In Vitro Stability of Drugs
- PHA 6118: Molecular Diversity
- PHA 6125: Pharmacokinetics and Biopharmaceutics
- PHA 6170C: Pharmaceutical Product Formulation
- PHA 6183: Pharmaceutical Gene Delivery
- PHA 6185: Pharmaceutical Drug Development
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6291: Pharmaceutical Health Care Systems
- PHA 6416: Pharmaceutical Analysis I
- PHA 6417: Pharmaceutical Analysis II
- PHA 6427: Pharmacogenetics of Drug Metabolism
- PHA 6440: Seminar in Drug Discovery
- PHA 6717: Measurement in Pharmacy Administration Research
- PHA 6793: Evidentiary Basis of Pharmaceutical Use
- PHA 6796: Study/Design in Pharmaceutical Outcomes & Policy Research
- PHA 6798: The Use and Abuse of Statistics in Drug Regulation
- PHA 6799: Patient Safety Program Evaluation
- PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA 6806: Introduction to Pharmacoepidemiology
- PHA 6892: Practices and Procedures of the IRB
- PHA 6893: Research Ethics
- PHA 6894: Introduction to Graduate Studies
- PHA 6896: Preclinical Drug Evaluation
- PHA 6937: Topics in Pharmaceutical Administration
- PHC 6107: Introduction to Veterinary Public Health
- VME 5162C: Avian Diseases
- VME 5244: Physiology: Organ Systems
- VME 6008: Care of Aquatic Megavertebrates
- VME 6010: Aquatic Animal Conservation Issues
- VME 6011: Introduction to Aquatic Wildlife Health Issues
- VME 6017: Mammalian Health & Conservation
- VME 6051: Cruelty to Animals and Interpersonal Violence
- VME 6052: Animal Crime Scene Processing
- VME 6054: Scientific and Legal Principles of Forensic Evidence
- VME 6056: Animal Law
- VME 6076C: Andrology
- VME 6135: Diseases of Laboratory Animals I
- VME 6136: Diseases of Laboratory Animals II
- VME 6186: Advanced Topics in Disease Pathogenesis
- VME 6421: Biology and Molecular Biology of Avian Viruses
- VME 6430C: Contemporary Issues in Small Animal Surgery
- VME 6464: Molecular Pathogenesis
- VME 6505: Autoimmunity
- VME 6570: Wildlife Conservation and Forensic Science
- VME 6571: Forensic Applied Animal Behavior
- VME 6572: Forensic Aspects of Agricultural Animal Welfare
- VME 6573: Wildlife Forensic Genetics
- VME 6575: Veterinary Forensic Medicine
- VME 6576: Veterinary Forensic Pathology
- VME 6577: Veterinary Forensic Pathology in Practice
- VME 6578: Forensic Veterinary Osteology
- VME 6579: Veterinary Forensic Radiology and Imaging
- VME 6602: General Toxicology
- VME 6603: Advanced Toxicology
- VME 6604: Literature Survey in Toxicology
- VME 6605: Toxic Substances
- VME 6606: Ecological Risk Assessment
- VME 6607: Human Health Risk Assessment
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6615: Veterinary Forensic Toxicology
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control
- VME 6767: Issues in the Responsible Conduct of Research
- VME 6771: Veterinary Epidemiologic Research
- VME 6906: Problems in Veterinary Medical Sciences
- VME 6910: Supervised Research
- VME 6931: Seminar in Veterinary Medical Sciences
- VME 6932: Seminar in Physiological Sciences
- VME 6933: Seminar in Infectious Diseases and Experimental Pathology
- VME 6934: Topics in Veterinary Medical Sciences
- VME 6936: Seminar in Pathophysiology
- VME 6938: Topics in Aquatic Animal Health
- VME 6940: Supervised Teaching
- VME 6971: Research for Master's Thesis
- VME 7979: Advanced Research
- VME 7980: Research for Doctoral Dissertation
- WIS 5325C: Impact of Diseases on Wildlife Population

College of Pharmacy Courses

- PHA 5171: Pharmaceutical Biotechnology
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6806: Pharmacoeconomic Modeling
- PHA 6910: Supervised Research
- PHA 6935: Selected Topics in Pharmacy
- PHA 6936: Advanced Topics in Pharmaceutical Sciences
- PHA 6938: Research Seminar
- PHA 6940: Supervised Teaching
- PHA 6971: Research for Master's Thesis
- PHA 7979: Advanced Research
- PHA 7980: Research for Doctoral Dissertation

Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

Animal Molecular and Cellular Biology Department
Other

Animal Molecular and Cellular Biology

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine

Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
- Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program’s website at http://www.animal.ufl.edu/amcb/

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5905: Individual Study
- ALS 6046: Grant Writing
- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
- ANS 6666L: Molecular and Cellular Research Methods
- ANS 6702: Lactation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
- ANS 6716: Thermal Physiology
- ANS 6707: Growth Physiology of Farm Animals
- ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
- ANS 6715: Gastrointestinal and Feed Microbiology
- ANS 6716: Physiology in Farm Animals
- ANS 6718: Nutritional Physiology of Domestic Animals
Departments and Programs within the Levin College of Law

Fredric G. Levin College of Law

Dear: R. Jerry II

Complete faculty listings: Follow this link.

The University of Florida Levin College of Law has a longstanding tradition of producing national leaders, including current American Bar Association President Stephen Zack, and is one of the nation's best values in legal education.

For more information, please see our website: http://www.law.ufl.edu

Departments and Programs within Levin College of Law

Levin College of Law Courses

Comparative Law Department

Director and Graduate Coordinator: P.A. Malavet.

Complete faculty listing by department: Follow this link.

The LLM. in Comparative Law degree is designed for graduates of foreign law schools who want to enhance their understanding of the American legal system and the English common law system from which it evolved. Requirements for this degree are given in the General Information section of this catalog.
The program begins with Introduction to American Law, a 4-credit summer course that gives students a foundation in the American legal process. It also helps students acclimate to the College of Law and the University community before the start of the academic year. During the fall and spring terms, and with the director's approval, students choose their remaining 22 credits from more than 100 Juris Doctor and LL.M. in Taxation courses and seminars. For admission information consult the College of Law Prospectus or write to the Comparative Law Office P.O. Box 117643, University of Florida, Gainesville, FL 32611-7643 USA.

Other

Comparative Law

College

Fredric G. Levin College of Law

Department/School

Comparative Law Department

Degrees Offered with a Major in Comparative Law

Master of Laws in Comparative Law

without a concentration

concentration in Tropical Conservation and Development

Courses

- LAW 7801: Introduction to the Legal System of the United States for LL.M in Comparative Law, Part II
- LAW 7805: Legal Writing and Research for LL.M in Comparative Law
- LAW 7906: Directed Research for LL.M in Comparative Law
- LAW 7952: Introduction to the Legal System of the United States for LLM in Comparative Law, Part I

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions
- LAW 7604: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
- LAW 7614: U.S. International Tax I
- LAW 7615: U.S. International Tax II
- LAW 7617: Partnership Taxation
- LAW 7623: Taxation of Gratuitous Transfers
- LAW 7625: Income Taxation of Trusts and Estates
- LAW 7626: Estate Planning
- LAW 7632: Deferred Compensation
- LAW 7633: TaxExempt Organizations
- LAW 7640: Civil Tax Procedure
- LAW 7641: Procedures in TaxFraud Cases
- LAW 7650: State and Local Taxation
- LAW 7660: TaxPolicy
- LAW 7680: Comparative Taxation
- LAW 7682: Income Tax Treaties
- LAW 7683: Transfer Pricing
Environmental and Land Use Law Department

Director and Graduate Coordinator: Christine A. Klein

Complete faculty listing by department: Follow this link.

Florida's sensitive, varied and beautiful natural environment makes the University of Florida a natural choice for students who want to focus on the national and global issues of land use and environmental law. Florida provides a perfect setting to study first-hand the efforts to reconcile growth and conservation.

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

For more information, please see the program page below and our website: http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law.

Other

Environmental and Land Use Law

College

Fredric G. Levin College of Law

Department/School

Environmental and Land Use Law Department

Environmental and Land Use Law Program Information

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

Students admitted to the program work with the LL.M. Program Director to design an individual course of study tailored to their particular interests. In addition to a broad range of academic courses, UF Law offers a wealth of environmental skills and field courses such as the Conservation Clinic, Environmental Dispute Resolution and Wetlands & Watersheds. LL.M. students may also apply for a seat in the spring break field course (previous offerings have included Sustainable Development in Belize, Central America, and Ocean and Coastal Law in Marineland, Florida); the South Florida Everglades field course offered in May (course availability varies) and the Summer Environmental Law Study Abroad Program in Costa Rica.

The program also capitalizes on the many outstanding programs at the University of Florida in disciplines related to environmental and land use law practice, including wildlife ecology, environmental engineering, urban and regional planning, and interdisciplinary ecology. The UF LL.M. program is unique in requiring that 6 of the 26 required credit hours must be from relevant graduate level courses that have substantial non-law content and are offered outside the law school or jointly by the law school and another department. In addition to completing required coursework, LL.M. candidates must complete a written project in connection with a seminar or the Conservation Clinic.

Six credit hours of coursework in graduate-level courses listed outside the law school or jointly listed by the law school and another department and approved by the LL.M. Program Director are required. For elective courses, please visit http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law/degree-requirements.

For more information about the Environmental and Land Use Law Program, please see our website: http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law, or contact:

University of Florida
Levin College of Law
P.O. Box 117625
Gainesville, FL 32611-7625
Phone: 352-273-0777
Email: elulp@law.ufl.edu

Degrees Offered with a Major in Environmental and Land Use Law

Master of Laws in Environmental and Land Use Law

Courses
Taxation Department

Chair and Graduate Coordinator: M. K. Friel.

Complete faculty listing by department: #Follow this link#

Graduate study in the field of taxation leading to the Master of Laws in Taxation degree or to the Master of Laws in International Tax degree is available in the College of Law.

Applicants for admission to the Graduate School for these degrees must hold a law degree from an accredited law school or in the case of international students, from a recognized foreign university but need not submit scores on the Graduate Record Examination. For further information concerning admission consult the #Graduate Tax Program Catalog#, or write the Tax Office, 320 Holland Law Center.

Other

International Taxation

College

Fredric G. Levin College of Law

Department/School

Taxation Department

Degrees Offered with a Major in International Taxation

Master of Laws in International Taxation

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions
- LAW 7604: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
- LAW 7614: U.S. International Tax I
- LAW 7615: U.S. International Tax II
- LAW 7617: Partnership Taxation
- LAW 7623: Taxation of Gratuitous Transfers
- LAW 7625: Income Taxation of Trusts and Estates
- LAW 7626: Estate Planning
- LAW 7632: Deferred Compensation
- LAW 7633: Tax-Exempt Organizations
- LAW 7640: Civil Tax Procedure
- LAW 7641: Procedures in Tax Fraud Cases
- LAW 7650: State and Local Taxation
- LAW 7660: Tax Policy
- LAW 7680: Comparative Taxation
- LAW 7682: Income Tax Treaties
- LAW 7683: Transfer Pricing
- LAW 7905: Independent Study
- LAW 7910: Supervised Research
- LAW 7911: Federal Tax Research
- LAW 7931: Current Federal Tax Problems

Taxation
College

Fredric G. Levin College of Law

Department/School

Taxation Department

Degrees Offered with a Major in Taxation

Master of Laws in Taxation

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions
- LAW 7604: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
- LAW 7614: U.S. International Tax I
- LAW 7615: U.S. International Tax II
- LAW 7617: Partnership Taxation
- LAW 7623: Taxation of Gratuitous Transfers
- LAW 7625: Income Taxation of Trusts and Estates
- LAW 7626: Estate Planning
- LAW 7632: Deferred Compensation
- LAW 7633: Tax Exempt Organizations
- LAW 7640: Civil Tax Procedure
- LAW 7641: Procedures in Tax Fraud Cases
- LAW 7650: State and Local Taxation
- LAW 7660: Tax Policy
- LAW 7680: Comparative Taxation
- LAW 7682: Income Tax Treaties
- LAW 7683: Transfer Pricing
- LAW 7905: Independent Study
- LAW 7910: Supervised Research
- LAW 7911: Federal Tax Research
- LAW 7931: Current Federal Tax Problems

Departments and Programs within Warrington College of Business Administration

Warrington College of Business Administration

Dear: Jamie Kraft

Complete faculty listings: Follow this link.

Graduate degrees offered by the Warrington College of Business Administration are the Doctor of Philosophy with major programs in business administration and in economics; the Master of Arts with major programs in economics, in international business, and in business administration with concentrations in insurance and marketing; and the Master of Science with major programs in Information Systems and Operations Management (with a concentration in supply chain management), in finance, in management, in real estate, and in business administration, including concentrations in entrepreneurship, insurance, marketing and retail; the Master of Business Administration; and the Master of Accounting. Fields of concentration and requirements for the M.B.A. are given under Graduate Degrees of this catalog, as well as admission and degree requirements for the Ph.D., M.A., and M.S. degrees.

Master of Arts: The M.A. degree with a major in international business is designed to provide students with quantitative and application skills to be used in an international business setting. The program provides practical training with a brief study trip to a major international city, where students are required to participate actively in business tours and lectures. The students also have the opportunity to gain credits for the degree by studying at one or more foreign universities for a period of 2 weeks to 8 months.

Master of Science: The M.S. degree with a major in management targets students from nonbusiness backgrounds who would like to gain "core" business knowledge and application skills. Requirements span the traditional business disciplines to produce a sound knowledge base for students seeking a solid business foundation. Students are required to take such courses as accounting, finance, economics, entrepreneurship, management, marketing, organizational behavior, and statistics. Typical positions for graduates include managers, consultants, and analysts.

Doctor of Philosophy: For the Ph.D. in business administration, students must have a concentration in one of the following

- Accounting
- Information Systems and Operation Management
Specific requirements for the various departments and specialties are given in the Graduate Degrees section in this catalog. (Requirements for the Ph.D. degree in economics are described under the Economics section of the catalog.) All candidates for the Ph.D. in business administration must satisfy the following general requirements:

Breadth requirement: All applicants for Ph.D. in the business administration program are expected to have completed prior business-related course work at either the advanced undergraduate or graduate level. Students entering without prior work are required to take a minimum of three graduate courses in at least two fields other than their chosen area of concentration. Most often, the appropriate courses will be found in the M.B.A. first-year core; the particular courses to be taken by a student will be decided in consultation with the student's academic adviser. After a student enters the Ph.D. program, the courses taken to satisfy the breadth requirement must be taken in the College of Business Administration.

Research foundations requirement: All students must complete a six-course research skills sequence that prepares them for scholarly research in their chosen area of concentration. Research foundations are defined as essential methodological tools (e.g., statistics, quantitative analysis) and/or substantive content domains (e.g., psychology, economics) outside the student's major field that are considered essential to conducting high quality research in the chosen field. The specific research skills required by each area of concentration can be found in the field descriptions in this Catalog.

Other requirements include satisfactory completion of graduate course work in the major field of concentration, as well as one or two minor fields designed to add depth to the student's research training. Minors are selected by the student in consultation with his or her advisory committee, and may be within or outside the College of Business Administration. Other requirements for the Ph.D. are given in the Graduate Degrees section of this catalog.

Departments and Programs within Warrington College of Business Administration

Warrington College of Business Courses

Other

Business Administration (M.A.)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Master of Arts

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6815: Accounting Regulation
- ACG 6885: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
• TAX 6105: Corporate Taxation
• TAX 6115: Advanced Corporate Taxation
• TAX 6205: Partnership Taxation
• TAX 6526: International Taxation
• TAX 6728: Executive Tax Planning
• TAX 6877: State and Local Taxation

Economics Departmental Courses

• ECO 5715: Open Economy Macroeconomics
• ECO 6075: Economics/Consumer Education
• ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
• ECO 6409: Game Theory Applied to Business Decisions
• ECO 6716: International Macroeconomics
• ECO 6906: Individual Work in Economics
• ECO 6910: Supervised Research
• ECO 6936: Special Topics
• ECO 6940: Supervised Teaching
• ECO 6957: International Studies in Economics
• ECO 6971: Research for Master's Thesis
• ECO 7113: Information Economics
• ECO 7115: Microeconomics Theory
• ECO 7118: Markets and Institutions
• ECO 7119: Information, Incentives, and Agency Theory
• ECO 7120: General Equilibrium and Welfare Economics
• ECO 7206: Macroeconomic Theory I
• ECO 7272: Economic Growth I
• ECO 7404: Game Theory for Economists
• ECO 7405: Mathematical Economics: Game Theory
• ECO 7406: Dynamic Economics: Theory and Applications
• ECO 7408: Mathematical Methods and Applications to Economics
• ECO 7415: Statistical Methods in Economics
• ECO 7424: Econometric Models and Methods
• ECO 7426: Econometric Methods I
• ECO 7427: Econometric Methods II
• ECO 7452: Best Empirical Practices in Economics
• ECO 7516: Tax Theory and Public Policy
• ECO 7525: Welfare Economics and the Second Best
• ECO 7534: Empirical Public Economics I
• ECO 7535: Empirical Public Economics II
• ECO 7536: Theoretical Public Economics
• ECO 7706: Theory of International Trade
• ECO 7707: International Economic Relations
• ECO 7925: Research Skills Workshop
• ECO 7938: Advanced Economics Seminar
• ECO 7979: Advanced Research
• ECO 7980: Research for Doctoral Dissertation
• ECP 5415: Antitrust Policy and Managerial Decisions
• ECP 5702: Managerial Economics
• ECP 5705: Economics of Business Decisions
• ECP 6417: Public Policy and Social Control
• ECP 6701: Competitive Strategies in Expanding Markets
• ECP 6708: Cases in Competitive Strategy
• ECP 6407: Economics for Managing Information for Electronic Commerce
• ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
• ECP 7408: Empirical Industrial Organization
• ECP 7418: Economics of Regulation
• ECP 7419: Current Research in Regulation
• HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

• ENT 5275: Family Business Management
• ENT 6006: Entrepreneurship
• ENT 6008: Entrepreneurial Opportunity
• ENT 6016: Venture Analysis
• ENT 6115: Business Plan Formation
• ENT 6416: Venture Finance
• ENT 6506: Social Entrepreneurship
• ENT 6616: Creativity in Entrepreneurship
• ENT 6905: Individual Work in Entrepreneurship
• ENT 6930: Special Topics
• ENT 6933: Entrepreneurship Lecture Series
• ENT 6946: Entrepreneurial Consulting Project
• ENT 6950: Integrated Technology Ventures
• ENT 6957: International Studies in Entrepreneurship
• FIN 5405: Business Financial Management
• FIN 5437: Finance I: Asset Valuation, Risk, and Return
• FIN 5439: Finance II: Capital Structure and Risk Management Issues
FIN 6108: Personal Financial Management
FIN 6246: Money and Capital Markets
FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6436: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6625: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics in Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7806: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary/Mortgage Markets and Institutions
REE 6208: Secondary/Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
MAN 6107: Motivation in Organizational Setting
MAN 6128: Management Skills and Personal Development
MAN 6149: Developing Leadership Skills
MAN 6257: Power and Politics in Organizations
MAN 6266: Managing Groups and Teams in Organizations
MAN 6286: Managing Strategic Processes and Change in Organizations
MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management
MAN 6331: Compensation in Organizations
MAN 6351: Training and Development in Organizations
MAN 6365: Organizational Staffing
MAN 6366: Organizational Staffing
MAN 6385: Strategic Human Resource Management
MAN 6446: Negotiations
MAN 6447: Art and Science of Negotiation
MAN 6537: Managing Technology in Organizations
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

MAR 5805: Problems and Methods in Marketing Management
MAR 5806: Problems and Methods in Marketing Management
MAR 6157: International Marketing
MAR 6158: International Marketing
MAR 6237: The Art and Science of Pricing
MAR 6256: Strategy and Tactics of Pricing
MAR 6335: Building and Managing Brand Equity
MAR 6456: Business-to-Business Marketing
MAR 6508: Customer Analysis
MAR 6646: Marketing Research for Managerial Decision Making
MAR 6648: Marketing Research for Managerial Decision Making
MAR 6722: Web-Based Marketing
MAR 6725: Introduction to Electronic Commerce
MAR 6816: Advanced Marketing Management (MBA)
MAR 6818: Advanced Marketing Management
MAR 6833: Product Development and Management
MAR 6834: Marketing of Science and Technology
MAR 6835: Marketing of Science and Technology
MAR 6837: Consumer-Centered Product Design
MAR 6861: Customer Relationship Management
MAR 6862: Customer Relationship Management
MAR 6905: Individual Work
MAR 6910: Supervised Research
MAR 6930: Special Topics in Marketing
MAR 6940: Supervised Teaching
MAR 6957: International Studies in Marketing
MAR 6971: Research for Master's Thesis
MAR 6973: Project in Lieu of Thesis
MAR 7507: Perspectives on Consumer Behavior
MAR 7588: Consumer Information Processing and Decision Making
MAR 7589: Judgment and Decision Making
MAR 7626: Multivariate Statistical Methods in Marketing
MAR 7636: Research Methods in Marketing
MAR 7666: Marketing Decision Models
MAR 7778: Marketing Literature
MAR 7925: Workshop in Marketing Research
MAR 7979: Advanced Research
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Business Administration (M.B.A)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Master of Business Administration

General

concentration in Competitive Strategy

concentration in Entrepreneurship

concentration in Finance

concentration in Global Management

concentration in Graham-Buffett Security Analysis

concentration in Human Resource Management
concentration in Information Systems and Operations Management

concentration in International Studies

concentration in Latin American Business

concentration in Management

concentration in Marketing

concentration in Real Estate

concentration in Sports Administration

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6891: International Auditing
- ACG 6897: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6625: International Finance
FIN 6635: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7806: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary/Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
ISM 6223: Business Telecom Strategy and Applications II
ISM 6224: Business Telecom Strategy and Applications III
ISM 6226: Business Telecom Strategy and Applications
ISM 6263: Business Objects I
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
Business Administration (M.S.)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Master of Science

without a concentration

concentration in Retailing

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6891: International Auditing
- ACG 6897: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation
Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 617: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6606: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6805: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics in Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7846: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6396: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 5022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Special Topics
- MAN 5114: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6288: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management  
MAN 6331: Compensation in Organizations  
MAN 6351: Training and Development in Organizations  
MAN 6365: Organizational Staffing  
MAN 6366: Organizational Staffing  
MAN 6385: Strategic Human Resource Management  
MAN 6446: Negotiations  
MAN 6447: Art and Science of Negotiation  
MAN 6537: Managing Technology in Organizations  
MAN 6627: Cross Cultural Negotiation  
MAN 6635: International Aspects of Human Resource Management  
MAN 6636: Global Strategic Management  
MAN 6637: Global Strategic Management  
MAN 6721: Business Policy  
MAN 6724: Strategic Management  
MAN 6905: Individual Work in Management  
MAN 6910: Supervised Research  
MAN 6930: Special Topics  
MAN 6940: Supervised Teaching  
MAN 6957: International Studies in Management  
MAN 6958: International Study Program  
MAN 6973: Project in Lieu of Thesis  
MAN 7108: Seminar in Research Concepts and Methods in Management  
MAN 7109: Seminar in Motivation and Attitudes  
MAN 7146: Seminar in Leadership  
MAN 7207: Seminar on Foundations of Organizational Theory  
MAN 7208: Seminar in Contemporary Approaches to Organizations  
MAN 7267: Seminar on Groups and Teams Research  
MAN 7275: Organizational Behavior  
MAN 7328: Seminar on Staffing and Selection  
MAN 7778: Seminar in Strategic Adaptation to Environment  
MAN 7779: Strategic Processes and Structure in Organizations  
MAN 7953: Seminar in Management  
MAN 7979: Advanced Research  
MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

MAR 5805: Problems and Methods in Marketing Management  
MAR 5806: Problems and Methods in Marketing Management  
MAR 6157: International Marketing  
MAR 6158: International Marketing  
MAR 6237: The Art and Science of Pricing  
MAR 6256: Strategy and Tactics of Pricing  
MAR 6335: Building and Managing Brand Equity  
MAR 6456: Business-to-Business Marketing  
MAR 6508: Customer Analysis  
MAR 6646: Marketing Research for Managerial Decision Making  
MAR 6648: Marketing Research for Managerial Decision Making  
MAR 6722: Web-Based Marketing  
MAR 6725: Introduction to Electronic Commerce  
MAR 6816: Advanced Marketing Management (MBA)  
MAR 6818: Advanced Marketing Management  
MAR 6833: Product Development and Management  
MAR 6834: Marketing of Science and Technology  
MAR 6835: Marketing of Science and Technology  
MAR 6837: Consumer-Centered Product Design  
MAR 6861: Customer Relationship Management  
MAR 6862: Customer Relationship Management  
MAR 6905: Individual Work  
MAR 6910: Supervised Research  
MAR 6930: Special Topics in Marketing  
MAR 6940: Supervised Teaching  
MAR 6957: International Studies in Marketing  
MAR 6971: Research for Master's Thesis  
MAR 6973: Project in Lieu of Thesis  
MAR 7507: Perspectives on Consumer Behavior  
MAR 7588: Consumer Information Processing and Decision Making  
MAR 7589: Judgment and Decision Making  
MAR 7626: Multivariate Statistical Methods in Marketing  
MAR 7636: Research Methods in Marketing  
MAR 7666: Marketing Decision Models  
MAR 7786: Marketing Literature  
MAR 7925: Workshop in Marketing Research  
MAR 7979: Advanced Research  
MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses
Business Administration (Ph.D.)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6265: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Macroeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6807: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization/Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6906: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6625: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary/Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6936: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
ISM 6223: Business Telecom Strategy and Applications II
ISM 6224: Business Telecom Strategy and Applications III
ISM 6226: Business Telecom Strategy and Applications
ISM 6236: Business Objects
ISM 6239: Business Objects II
ISM 6257: Intermediate Business Programming
ISM 6258: Advanced Business Programming
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6126: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
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- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
MAN 6447: Art and Science of Negotiation
MAN 6537: Managing Technology in Organizations
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
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MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

MAR 5805: Problems and Methods in Marketing Management
MAR 5806: Problems and Methods in Marketing Management
MAR 6157: International Marketing
MAR 6158: International Marketing
MAR 6237: The Art and Science of Pricing
MAR 6256: Strategy and Tactics of Pricing
MAR 6335: Building and Managing Brand Equity
MAR 6456: Business-to-Business Marketing
MAR 6508: Customer Analysis
MAR 6646: Marketing Research for Managerial Decision Making
MAR 6648: Marketing Research for Managerial Decision Making
MAR 6722: Web-Based Marketing
MAR 6725: Introduction to Electronic Commerce
MAR 6816: Advanced Marketing Management (MBA)
MAR 6818: Advanced Marketing Management
MAR 6833: Product Development and Management
MAR 6834: Marketing of Science and Technology
MAR 6835: Marketing of Science and Technology
MAR 6837: Consumer-Centered Product Design
MAR 6861: Customer Relationship Management
MAR 6862: Customer Relationship Management
MAR 6905: Individual Work
MAR 6910: Supervised Research
MAR 6930: Special Topics in Marketing
MAR 6940: Supervised Teaching
MAR 6957: International Studies in Marketing
MAR 6971: Research for Master's Thesis
MAR 6973: Project in Lieu of Thesis
MAR 7507: Perspectives on Consumer Behavior
MAR 7588: Consumer Information Processing and Decision Making
MAR 7589: Judgment and Decision Making
MAR 7626: Multivariate Statistical Methods in Marketing
MAR 7636: Research Methods in Marketing
MAR 7836: Marketing Decision Models
MAR 7886: Marketing Literature
MAR 7925: Workshop in Marketing Research
MAR 7979: Advanced Research
MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

GEB 5212: Professional Writing in Business
GEB 5215: Professional Communication in Business
GEB 5217: Executive Communication
GEB 5225: Advanced Business Writing
GEB 5529: Foundations Review
GEB 6229: Professional Communication for Accountants
GEB 6365: International Business
Fisher School of Accounting

Warrington College of Business Administration

Director: Gary A. McGill
Graduate Coordinators: Dominique DeSantiago, Stephen Asare
Complete faculty listing by department: Follow this link.

As a professional school in a major public research university, the Fisher School of Accounting (FSOA) is committed to scholarly research, teaching, and service to advance knowledge and prepare future leaders for business, professional, and academic careers.

The Fisher School of Accounting offers graduate work leading to the Master of Accounting (M.Acc.) degree with a major in accounting, and the Ph.D. degree with a major in business administration and an accounting concentration. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below, or visit our website: http://warrington.ufl.edu/accounting.

Other Accounting

College

Accounting Department/School

Fisher School of Accounting

Accounting Program Information

Master of Accounting: Three variations of the Master of Accounting degree program are available. These allow students to select one of three tracks: Audit, Tax, and Generalist. Minimum admission requirements include an acceptable score on the Graduate Management Admission Test (GMAT), with a minimum score of 550 and completion of essays with a minimum score of 4. International students must submit a satisfactory score on the following: TOEFL (Test of English as a Foreign Language: paper-based=570, internet-based=86). Additional information, including minimum GPA standards for admission, may be viewed at http://warrington.ufl.edu/accounting/academics/macc.

Combined degree program: The recommended curriculum to prepare for a professional career in accounting is the 3/2 five-year program with a joint awarding of the Bachelor of Science in Accounting and Master of Accounting degrees upon completion of the 150-hour program. The entry point into the 3/2 program is the beginning of the senior year.

Traditional Master of Accounting program: Students who have already completed an undergraduate degree in accounting may enter the 1-year M.Acc. degree program which requires satisfactory completion of 34 hours of course work. A minimum of 28 credits must be in graduate-level courses; a minimum of 20 credits must be in graduate-level accounting courses. The remaining credits are selected from recommended elective courses that vary by area of specialization. Students are cautioned to seek early advisement, since many graduate courses are offered only once a year.

J.D./M.Acc. program: A joint program leading to the Juris Doctor and Master of Accounting degrees is offered by the Fisher School of Accounting and Levin College of Law. Specific details for the M.Acc., J.D./M.Acc., and Ph.D. programs are available at http://warrington.ufl.edu/accounting/academics/jd-macc.

Degrees Offered with a Major in Accounting

Master of Accounting

Accounting Departmental Courses

• ACG 5005: Financial Accounting
• ACG 5065: Financial and Managerial Accounting
Business Administration (Accounting)

College

Warrington College of Business Administration

Department/School

Fisher School of Accounting

Business Administration (Accounting) Program Information

The Ph.D. program offers a broad-based interdisciplinary training that prepares students to conduct both empirical and analytical research. The curriculum consists of course work of four types: the major field, a breadth requirement, a research foundation requirement, and a minor or supporting field. In addition, students must demonstrate competence in conducting research and teaching, and must complete a dissertation on an accounting topic.

The major field in accounting consists of at least 18 credit hours of course work including research analysis, archival research, analytical research, experimental research, readings, and a research project. The breadth requirement consists of at least 13 credit hours of course work including microeconomic theory, corporate finance theory, game theory, asset pricing, and information economics. The research foundation requirement consists of at least 12 hours of graduate course work in mathematical economics, statistics, or econometrics. The minor or supporting field requirement is met by completing a minimum of 12 hours of graduate course work in the selected field.

Students demonstrate competency in conducting research by completing a research project in the summers of the first and second year. The teaching competence is demonstrated by completing at least 1 hour (but no more than 5 hours) of supervised teaching, and by teaching for at least 2 semesters. Admission requirements include a history of academic excellence, adequate score on the GMAT (the average score of recently admitted applicants is 690 for GMAT), competence in written and spoken English (TOEFL Internet-Based test (iBT) required for applicants whose native language is not English), appreciation of accounting issues, and institutional and math competency. The school requires a total score of 91, including a minimum of 26 on the speaking section.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy
concentration in Accounting

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practises in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6816: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6598: Introduction to Computational Methods & Derivative Pricing
- FIN 6606: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
Information Systems and Operations Management Departmental Courses

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<th>Course Title</th>
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<td>ISM6485</td>
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<td>ISM6486</td>
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<td>ISM6487</td>
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<td>ISM6942</td>
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<td>ISM7166</td>
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<td>QMB6359</td>
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<td>QMB6756</td>
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Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cybertlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics

Marketing Departmental Courses

- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 5267: Motivation in Organizational Setting
- MAN 5268: Management Skills and Personal Development
- MAN 5269: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6268: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6356: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
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MAR 7979: Advanced Research
MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Economics Department

Chair: R. D. Blair
Graduate Coordinator: S. M. Slutsky.
Complete faculty listing: Follow this link.

The department offers the Master of Arts (thesis and nonthesis option) and Doctor of Philosophy degrees in economics with specializations in econometrics, economic theory, industrial organization, international economics, monetary economics, and public finance.

M.A. requirements: A minimum of 36 credits of course work is required for the M.A. with and without thesis. A minimum of six credits of the research course ECO 6971 may be included for a master's degree with thesis. The following core courses are required: ECO 7408 and ECO 7404 or equivalent, ECO 7412 or equivalent, ECO 7115, and ECO 7206.

Ph.D. requirements: Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) an acceptable score on the GRE, and (c) for nonnative speakers of English, an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=-213, paper=-550, web=-80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

All core courses must be completed in the first year. In addition, students must complete courses in three fields of specializations and pass qualifying examinations in two of those fields.

Complete descriptions of the minimum requirements for the M.A. and Ph.D. degrees are provided elsewhere in this catalog.

Other
Economics

College

Warrington College of Business Administration

Department/School

Economics Department

Degrees Offered with a Major in Economics

Doctor of Philosophy

Master of Arts

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Microeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7960: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Finance, Insurance, and Real Estate Department

Chair: Michael D. Ryngaert
Graduate Coordinator: Mahen Nimalendran

Complete faculty listing: Follow this link.

The Department of Finance, Insurance, and Real Estate offers graduate work leading to the Master of Science degree with major programs in finance and real estate; the Master of Science in Entrepreneurship (M.S.E.); and the Doctor of Philosophy degree in business administration with a concentration in finance, insurance, quantitative analysis, or real estate. Complete descriptions of the minimum requirements for the M.S., M.S.E., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

Finance, Real Estate, and Entrepreneurship are also available as concentrations within the M.B.A program. For information about the M.B.A. program, please consult that listing in the Graduate Degrees section.

For more information see the program pages below, and visit our website: http://warrington.ufl.edu/departments/fire.

Other

Business Administration (Finance, Insurance, and Real Estate)

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Business Administration (Finance, Insurance, and Real Estate) Program Information

The Ph.D. in Business Administration - Finance and Real Estate program prepares students to engage in productive scholarly research and teaching in the broad area of financial and real estate economics. Graduates of this program typically are placed with major universities in the United States, although some students choose to work in research positions at non-academic institutions.

The Ph.D. program has a strong emphasis on scholarly research training. Admission requirements include (a) minimum grade point average of 3.5 in the last two years of an undergraduate program and in any previous graduate-level work, (b) minimum GRE score of 1300 or GMAT score of 600 (both verbal and quantitative scores must exceed the sixtieth percentile), and (c) (for nonnative speakers of English) a minimum score of 550 on the TOEFL. Generally students will not be admitted to the Ph.D. program unless they have been offered financial assistance by the University.

Finance

The student pursuing a concentration in finance typically specializes in corporate finance, financial markets and institutions, or investments. The Ph.D. curriculum consists of course work of four types: research foundations, the major field, a minor or supporting field, and a breadth requirement.

The research foundation requirements are comprised of courses in microeconomic theory, macroeconomic theory, mathematical methods and applications to economics, mathematical statistics, and econometrics. The actual courses will depend on the student's background and proposed thesis research.

The major field in finance consists of at least 16 credit hours in graduate course work in finance including financial theory, corporate finance, and seminars in empirical methods, market micro
structure, and special topics. Students may elect to have one "strong" minor (16 credit hours), two "weak" minors (8 credit hours each), or a supporting field which is not declared as a minor. If a supporting field is chosen, at least 16 hours of course work acceptable to the student's supervisory committee must be taken. The supporting field option is selected when a student wishes to take courses across a number of departments. The department offers a combined B.S./M.S. program. Contact the graduate coordinator for information.

The breadth requirement applies only to students with no prior course work in business and consists of financial and managerial accounting or their equivalents, plus two courses out of the following areas: managerial economics, production operations management, or problems and methods in marketing management.

**Real Estate**

The research foundations are identical to those listed above for finance. The major field, minor, and supporting field requirements have the same credit stipulation as those outlined above for finance, except that the major work is in real estate.

The breadth requirement, as in all concentrations for the business administration program, applies only to students entering without prior course work in business. It consists of at least three courses from the following list (two or more fields must be represented): managers and legal environment of business, finance, money and capital markets, problems and methods of marketing management, consumer behavior, and financial and managerial accounting.

Other degree requirements are listed in the [Graduate Degrees](#) section of this catalog.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/phd-fre](http://warrington.ufl.edu/graduate/academics/phd-fre).

### Degrees Offered with a Major in Business Administration

**Doctor of Philosophy**

- concentration in Finance
- concentration in Insurance
- concentration in Quantitative Finance
- concentration in Real Estate and Urban Analysis

### Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6600: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics In Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7936: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary/Mortgage Markets and Institutions
- REE 6208: Secondary/Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
- REE 6910: Supervised Research
- REE 6930: Special Topics in Real Estate
- REE 6935: Real Estate Case Studies
- REE 6940: Supervised Teaching
- REE 6948: Capstone Seminar and Applied Project
- REE 6957: International Studies in Real Estate
- REE 7979: Advanced Research
- REE 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
ACG 6207: Accounting for Risk
ACG 6265: International Accounting and Taxation
ACG 6635: Issues in Audit Practice
ACG 6685: Forensic Accounting
ACG 6891: International Auditing
ACG 6897: Information Systems Assurance
ACG 6905: Individual Work in Accounting
ACG 6935: Special Topics in Accounting
ACG 6940: Supervised Teaching
ACG 7885: Accounting Research I
ACG 7886: Accounting Research II
ACG 7887: Research Analysis in Accounting
ACG 7939: Theoretical Constructs in Accounting
ACG 7979: Advanced Research
ACG 7980: Research for Doctoral Dissertation
TAX 5005: Introduction to Federal Income Taxation
TAX 5025: Federal Income Tax 1
TAX 5027: Federal Income Tax 2
TAX 5065: Tax Professional Research
TAX 6105: Corporate Taxation
TAX 6115: Advanced Corporate Taxation
TAX 6205: Partnership Taxation
TAX 6525: International Taxation
TAX 6726: Executive Tax Planning
TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Macroeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Information Systems and Operations Management Departmental Courses
- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III

- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6588: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6659: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
• MAN 5245: Organizational Behavior
• MAN 5246: Organizational Behavior
• MAN 5265: Managing Groups and Teams
• MAN 6107: Motivation in Organizational Setting
• MAN 6128: Management Skills and Personal Development
• MAN 6149: Developing Leadership Skills
• MAN 6257: Power and Politics in Organizations
• MAN 6266: Managing Groups and Teams in Organizations
• MAN 6286: Managing Strategic Processes and Change in Organizations
• MAN 6296: Designing Effective Organizations
• MAN 6321: Human Resource Management
• MAN 6331: Compensation in Organizations
• MAN 6351: Training and Development in Organizations
• MAN 6365: Organizational Staffing
• MAN 6366: Organizational Staffing
• MAN 6385: Strategic Human Resource Management
• MAN 6446: Negotiations
• MAN 6447: Art and Science of Negotiation
• MAN 6537: Managing Technology in Organizations
• MAN 6627: Cross Cultural Negotiation
• MAN 6635: International Aspects of Human Resource Management
• MAN 6636: Global Strategic Management
• MAN 6637: Global Strategic Management
• MAN 6721: Business Policy
• MAN 6724: Strategic Management
• MAN 6905: Individual Work in Management
• MAN 6910: Supervised Research
• MAN 6920: Special Topics
• MAN 6940: Supervised Teaching
• MAN 6957: International Studies in Management
• MAN 6958: International Study Program
• MAN 6973: Project in Lieu of Thesis
• MAN 7108: Seminar in Research Concepts and Methods in Management
• MAN 7109: Seminar in Motivation and Attitudes
• MAN 7146: Seminar in Leadership
• MAN 7207: Seminar on Foundations of Organizational Theory
• MAN 7208: Seminar in Contemporary Approaches to Organizations
• MAN 7267: Seminar on Groups and Teams Research
• MAN 7275: Organizational Behavior
• MAN 7328: Seminar on Staffing and Selection
• MAN 7778: Seminar in Strategic Adaptation to Environment
• MAN 7779: Strategic Processes and Structure in Organizations
• MAN 7933: Seminar in Management
• MAN 7979: Advanced Research
• MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5806: Problems and Methods in Marketing Management
• MAR 5808: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Customer Analysis
• MAR 6646: Marketing Research for Managerial Decision Making
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6725: Introduction to Electronic Commerce
• MAR 6816: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6833: Product Development and Management
• MAR 6834: Marketing of Science and Technology
• MAR 6835: Marketing of Science and Technology
• MAR 6837: Consumer-Centered Product Design
• MAR 6861: Customer Relationship Management
• MAR 6862: Customer Relationship Management
• MAR 6905: Individual Work
• MAR 6910: Supervised Research
• MAR 6930: Special Topics in Marketing
• MAR 6940: Supervised Teaching
• MAR 6957: International Studies in Marketing
• MAR 6971: Research for Master's Thesis
• MAR 6973: Project in Lieu of Thesis
• MAR 7507: Perspectives on Consumer Behavior
• MAR 7588: Consumer Information Processing and Decision Making
• MAR 7589: Judgment and Decision Making
• MAR 7626: Multivariate Statistical Methods in Marketing
• MAR 7636: Research Methods in Marketing
• MAR 7866: Marketing Decision Models
Entrepreneurship Program Information

The Masters of Science in Entrepreneurship (M.S.E.) program is a one-year, 36-credit, campus-based program designed for young and aspiring entrepreneurs and change-makers. Offered to both business and non-business majors alike, the program is a combination of classroom delivery and experiential learning activities with a focus on opportunity assessment, feasibility analysis, lean entrepreneurial concept testing, business plan development, entrepreneurial leadership, and the sourcing of capital. Students are exposed to cutting edge entrepreneurial theory, which they apply immediately by consulting for small business, commercializing UF technology, and creating their own businesses.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/mse](http://warrington.ufl.edu/graduate/academics/mse).

Degrees Offered with a Major in Entrepreneurship

Master of Science in Entrepreneurship

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
Finance

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Finance Program Information

The student pursuing a major in finance typically specializes in corporate finance, financial markets and institutions, or investments.

**Master of Science degree in Finance, nonthesis option**: This M.S. program option consists of at least 32 credits in letter-graded courses. It is designed to ensure that each student acquires a basic knowledge of the major financial economics subject areas: corporate finance, derivatives, fixed income securities, investments, international finance, and real estate. The program is designed to prepare students with an undergraduate background in finance for positions in commercial banking, money management, investment banking, and securities markets.

The Department also offers a combined bachelor's/master's program. Contact the admissions director for information.

**Master of Science degree in Finance/juris doctorate joint degree program**: This joint degree program culminates in the M.S. and J.D. degrees. Applicants must meet the entrance requirements for both the Warrington College of Business Administration and the Levin College of Law. Admission to the second degree program is required no later than the end of the second consecutive semester after beginning one degree in the joint program.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/msf](http://warrington.ufl.edu/graduate/academics/msf).

Degrees Offered with a Major in Finance

**Master of Science**

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6906: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Securities Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6586: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6625: International Finance
- FIN 6636: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6672: Economic Organizations and Markets
- FIN 6678: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modelling I
- FIN 6786: Investment Banking and Corporate Financial Modelling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
- REE 6910: Supervised Research
- REE 6930: Special Topics in Real Estate
- REE 6935: Real Estate Case Studies
- REE 6940: Supervised Teaching
- REE 6948: Capstone Seminar and Applied Project
- REE 6957: International Studies in Real Estate
- REE 7979: Advanced Research
- REE 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
The ten-month, full-time in residence, Nathan S. Collier Master of Science in Real Estate (MSRE) Program, housed in the Warrington College of Business Administration (WCBA), thrives on innovation, a dynamic student body, significant interaction with high-level working professionals, and nationally recognized professors. The program is a unique combination of theory and practice that will both enhance your real estate education and develop your professional skills.

Master of Science degree in real estate, nonthesis option: This M.S. option consists of at least 34 credits of letter-graded courses. It is designed to ensure that each student acquires a basic knowledge of the various functional areas in real estate, real estate finance and investment, real estate development, real estate law and institutions, real estate asset management, international real estate, and advanced training in specialized areas. The capstone course (REE 6948) involves actual projects in which students work in teams to undertake a real estate problem for real clients. This two-tiered program of study provides both a firm theoretical foundation for later professional effectiveness and an applied bridge to professional practice.

Master of Science degree in real estate/juris doctorate joint program: This joint degree program culminates in the M.S. and J.D. degrees. Applicants must meet the entrance requirements for both the Warrington College of Business Administration and the Levin College of Law. Admission to the second degree program is required no later than the end of the second consecutive semester after beginning one degree of the joint program.

The Department also offers a combined bachelor's / master's program for all undergraduate disciplines.

For more information, please contact the admissions director and see our website: http://warrington.ufl.edu/graduate/academics/msre.

Degrees Offered with a Major in Real Estate

Master of Science

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5406: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6636: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modelling I
FIN 6786: Investment Banking and Corporate Financial Modelling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
Information Systems and Operations Management Department

Warrington College of Business Administration

Chair: Haldun Aytug
Graduate Coordinator: Praveen Pathak

Complete faculty listing: Follow this link.

The primary mission of the Department of Information Systems & Operations Management is a commitment to scholarly research, teaching and service to advance the state of knowledge in information systems and supply chain management and to train future leaders for professional and academic careers.

The Department offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Combined Bachelor/Master of Science: The Department also offers a combined bachelor/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.

For more information, please see the program pages below and our website: http://warrington.ufl.edu/departments/isom.

Other

Business Administration (Information Systems and Operations Management)

College

Warrington College of Business Administration

Department/School

Information Systems and Operations Management Department

Business Administration (Information Systems and Operations Management)

The Department of Information Systems & Operations Management offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Doctor of Philosophy: The mission of the Ph.D. Program is to educate scholars who will make substantial contributions in their field of research. Our primary goal is to train graduate students to make such contributions. To achieve this goal, we attempt to place students in productive academic research environments. The major areas of study within the department are Information Systems/Information Technology (IS/IT) and Operations Management (OM).

Students come from a variety of backgrounds, with the most common being engineering, computer sciences, mathematics, business, and statistics. Students admitted for the Ph.D. choose to specialize either in information systems/information technology or in operations management. The course schedule taken by each student is always personalized to fit the background of the student and is developed in consultation with the Ph.D. program coordinator and/or chair of the dissertation committee. Additionally, doctoral students will be required to attend all ISOM Workshops and the Department Seminar Series (regardless of area of specialization) held at the University of Florida.

Admission requirements for the Ph.D. include:

- A minimum grade point average of 3.2
- A minimum GMAT score of 650, or GRE scores acceptable to the program
- For nonnative speakers of English, submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/phd-isom.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy
concentration in Information Systems and Operations Management

Information Systems and Operations Management Departmental Courses

- ISM5021: Information Systems in Organizations
- ISM6022: Management Information Systems
- ISM6123: Systems Analysis and Design
- ISM6128: Advanced Business Systems Design and Development I
- ISM6129: Advanced Business Systems Design and Development II
- ISM6215: Business Database Systems I
- ISM6216: Business Database Systems II
- ISM6217: Database Management Systems
- ISM6222: Business Telecom Strategy and Applications I
- ISM6223: Business Telecom Strategy and Applications II
- ISM6224: Business Telecom Strategy and Applications III
- ISM6225: Business Telecom Strategy and Applications
- ISM6236: Business Objects I
- ISM6239: Business Objects II
- ISM6257: Intermediate Business Programming
- ISM6258: Advanced Business Programming
- ISM6259: Business Programming
- ISM6405: Business Intelligence
- ISM6423: Data Analysis for Decision Support
- ISM6485: Electronic Commerce and Logistics
- ISM6486: eCommerce Technologies
- ISM6487: Risks and Controls in eCommerce
- ISM6942: Electronic Commerce Practicum
- ISM7166: Advanced Business Systems Design and Development III
- MAN5501: Management
- MAN5502: Production and Operations Management
- MAN6508: Management of Service Operations
- MAN6511: Production Management Problems
- MAN6528: Principles of Logistics/Transportation Systems
- MAN6573: Purchasing and Materials Management
- MAN6575: Purchasing and Supplier Relationship Management
- MAN6581: Project Management
- MAN6586: Project Management
- MAN6598: Logistics and Distribution Management
- MAN6599: Tactical Logistics Planning
- MAN6617: International Operations/Logistics
- MAN6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7932: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG5005: Financial Accounting
- ACG5065: Financial and Managerial Accounting
- ACG5075: Managerial Accounting
- ACG5226: Advanced Accounting
- ACG5505: Governmental Accounting
- ACG5637: Auditing I
ACG 5647: Auditing II
ACG 5815: Accounting Regulation
ACG 6136: Accounting Theory
ACG 6175: International Accounting and Taxation
ACG 6635: Issues in Audit Practice
ACG 6685: Forensic Accounting
ACG 6691: International Auditing
ACG 6695: Information Systems Assurance
ACG 6905: Individual Work in Accounting
ACG 6935: Special Topics in Accounting
ACG 6940: Supervised Teaching
ACG 7885: Accounting Research I
ACG 7886: Accounting Research II
ACG 7887: Research Analysis in Accounting
ACG 7939: Theoretical Constructs in Accounting
ACG 7979: Advanced Research
ACG 7980: Research for Doctoral Dissertation
TAX 5005: Introduction to Federal Income Taxation
TAX 5025: Federal Income Tax I
TAX 5027: Federal Income Tax II
TAX 5065: Tax Professional Research
TAX 6105: Corporate Taxation
TAX 6115: Advanced Corporate Taxation
TAX 6205: Partnership Taxation
TAX 6526: International Taxation
TAX 6726: Executive Tax Planning
TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master’s Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7515: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics In Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master’s Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary/Mortgage Markets and Institutions
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7106: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation
Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Information Systems and Operations Management

College

Warrington College of Business Administration

Department/School

Information Systems and Operations Management Department

Information Systems and Operations Management Program Information
The Department of Information Systems & Operations Management offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Master of Science: The M.S.ISOM program provides computing, analytical, and application skills to be used in a business setting. The primary areas of emphasis in the M.S.ISOM program are business intelligence and analytics, information systems/information technology, and supply chain management. Requirements span traditional academic disciplines to produce a multidiscipline focus. Typical positions for graduates include decision support specialist, information systems specialist, systems analyst, and logistical support specialist.

For a student with a bachelor's degree in business or economics, the M.S.ISOM non-thesis on-campus program consists of a minimum of 36 credit hours, normally requiring a minimum of three semesters of study, not including summer. For students without a bachelor's degree in business or economics, the M.S.ISOM non-thesis on-campus program consists of a minimum of 40 credit hours, normally requiring a minimum of four semesters of study, not including summer.

All M.S.ISOM candidates must complete 26 credits of core coursework:

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6215: Business Database Systems I
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6485: Electronic Commerce and Logistics (capstone course)
- MAN 6581: Project Management
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- ACG 5005, ACG 5075, ECP 5702, FIN 5437, FIN 5439, MAN 5246, MAR 5806.

All M.S.ISOM candidates must also complete 6 credits of track coursework for the information technology, supply chain management, or business intelligence and analytics track:

Information Technology Track

- ISM 6216: Business Database Systems II
- ISM 6259: Business Programming

Supply Chain Management Track

- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management

Business Intelligence and Analytics Track

- ISM 6216: Business Database Systems II
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support

These required courses total 32 credit hours. In addition, each M.S.ISOM student with an undergraduate major or minor in business must take a minimum of 4 additional hours of approved graduate business electives for a total of 36 credit hours required for the M.S.ISOM degree. For students without an undergraduate business degree or minor, instead of graduate business electives, they must complete four of the following core business courses: ACG 5005, ACG 5075, ECP 5702, FIN 5437, FIN 5439, MAN 5246, MAR 5806.

Bachelor/Master of Science: The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/ms-isom.

Degrees Offered With a Major in Information Systems and Operations Management

Master of Science in Information Systems and Operations Management

without a concentration

collection in Supply Chain Management

Information Systems and Operations Management Departmental Courses

- ISM5021: Information Systems in Organizations
- ISM6022: Management Information Systems
- ISM6123: Systems Analysis and Design
- ISM6128: Advanced Business Systems Design and Development I
- ISM6129: Advanced Business Systems Design and Development II
- ISM6215: Business Database Systems I
- ISM6216: Business Database Systems II
- ISM6217: Database Management Systems
- ISM6222: Business Telecom Strategy and Applications I
The Management Department offers graduate work leading to a Ph.D. degree with a major in Business Administration and a concentration in Management; a Master of Business Administration degree with a concentration in Management; a Master of Science degree with a major in Management; and a Master of International Business (M.I.B.). Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees Section of this catalog.

The Department participates in combined bachelor's/master's degree programs for the Master of International Business (M.I.B.) and Master of Science (M.S.) with a major in management.
The Master of International Business is open to students pursuing a bachelor's degree in a business discipline or minor in business administration. The M.S. with a major in management program is only open to non-business majors. Contact the graduate coordinator for information.

For more information, please see the program pages below and our website: [http://warrington.ufl.edu/departments/mgt](http://warrington.ufl.edu/departments/mgt).

### Other

#### Business Administration (Management)

**College**

Warrington College of Business Administration

**Department/School**

Management Department

#### Business Administration (Management) Program Information

**Doctor of Philosophy**

The Ph.D. program in business administration in the Department of Management prepares students for careers as faculty members of universities that emphasize teaching and research. The program is designed so that the student will (1) develop strong competence in the base discipline crucial to the study of organizations and organization processes and (2) follow a field of specialization in organizational behavior, organizational theory, human resource management, and strategic studies. Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) a minimum GRE score of 1000, and (c) for non-native speakers of English, a minimum score of 550 on the TOEFL.

The research interests of the faculty are quite broad. For example, work is being done on defining the domain of performance in organizations, employee selection, performance appraisal, goal setting and incentives, aging, dispositions and job satisfaction, corporate governance, health care, innovation processes, organizational control and executive compensation practices, agency theory, and organizational processes. Faculty often work on interdisciplinary projects with other departments.

In addition, the student has exposure to scholars and faculty members from other universities, and from other departments in the University, who are invited to give workshops in the Department.

**Breadth Requirement:** All students pursuing the Ph.D. are expected to be well versed in the structure and functioning of business organizations and the environment within which they operate. This requirement may be met through undergraduate or master's level work in business administration. The student who does not meet the breadth requirement before entering the Ph.D. program must take at least three graduate courses in different functional areas in the Warrington College of Business Administration but outside of the Department of Management. These courses should complement the major area of study selected by the student.

**Research Skills Requirement:** The general nature of the research requirement has been specified by the Graduate Committee of the Warrington College of Business. Students must take six approved courses to satisfy it. For the typical student in the Department of Management, the research foundation courses include at least 18 credits in courses such as philosophy of social science (e.g., PHI 5425 or PHI 5405), basic statistical methods (e.g., STA 6208), research methods (e.g., MAR 7786, EDF 7866, or PPE 6308), psychometrics (e.g., EDF 6436, EDF 7439), multivariate analysis (EDF 7932), experimental design (MAR 7622), field research methods (POS 6757), and qualitative research (EDF 6475, SYA 6315). The specific program is determined by the student's supervisory committee and will be tailored to fit the student's prior preparation and the specialization that the student chooses.

**Major Course Requirements:** The program of study for each student will include required seminars in Organizational Behavior, Organizational Theory, Strategic Management, and Human Resource Management Research, and the Management Workshop.

**Specialization Requirements:** Each student selects a specialization area. Courses must provide the depth of knowledge required to teach and conduct research successfully in the area of specialization. This part of the program will be developed by the supervisory committee in conjunction with the student. The specialization courses are primarily offered within the Department of Management, although it is quite common for students to take courses in related disciplines, such as Marketing, Finance, Economics, Psychology, Statistics, and Decision and Information Systems. Procedures for the qualifying examinations, dissertation, and final examination are given in the Requirements for the Ph.D. section of this catalog.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/phd-mgt](http://warrington.ufl.edu/graduate/academics/phd-mgt).

#### Degrees Offered with a Major in Business Administration

**Doctor of Philosophy**

concentration in Management

#### Management Departmental Courses
- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6268: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6968: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7209: Seminar in Organizational Theory
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
ACG 6697: Information Systems Assurance
ACG 6905: Individual Work in Accounting
ACG 6935: Special Topics in Accounting
ACG 6940: Supervised Teaching
ACG 7885: Accounting Research I
ACG 7886: Accounting Research II
ACG 7887: Research Analysis in Accounting
ACG 7939: Theoretical Constructs in Accounting
ACG 7979: Advanced Research
ACG 7980: Research for Doctoral Dissertation
TAX 5005: Introduction to Federal Income Taxation
TAX 5025: Federal Income Tax I
TAX 5027: Federal Income Tax II
TAX 5065: Tax Professional Research
TAX 6105: Corporate Taxation
TAX 6115: Advanced Corporate Taxation
TAX 6205: Partnership Taxation
TAX 6526: International Taxation
TAX 6726: Executive Tax Planning
TAX 6877: State and Local Taxation

Economics Departmental Courses

ECO 5715: Open Economy Macroeconomics
ECO 6075: Economics/Consumer Education
ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
ECO 6409: Game Theory Applied to Business Decisions
ECO 6716: International Macroeconomics
ECO 6906: Individual Work in Economics
ECO 6910: Supervised Research
ECO 6936: Special Topics
ECO 6940: Supervised Teaching
ECO 6957: International Studies in Economics
ECO 6971: Research for Master's Thesis
ECO 7113: Information Economics
ECO 7115: Macroeconomic Theory
ECO 7118: Markets and Institutions
ECO 7119: Information, Incentives, and Agency Theory
ECO 7120: General Equilibrium and Welfare Economics
ECO 7206: Macroeconomic Theory I
ECO 7272: Economic Growth I
ECO 7404: Game Theory for Economists
ECO 7405: Mathematical Economics: Game Theory
ECO 7406: Dynamic Economics: Theory and Applications
ECO 7408: Mathematical Methods and Applications to Economics
ECO 7415: Statistical Methods in Economics
ECO 7424: Econometric Models and Methods
ECO 7426: Econometric Methods I
ECO 7427: Econometric Methods II
ECO 7452: Best Empirical Practices in Economics
ECO 7516: Tax Theory and Public Policy
ECO 7525: Welfare Economics and The Second Best
ECO 7534: Empirical Public Economics I
ECO 7535: Empirical Public Economics II
ECO 7536: Theoretical Public Economics
ECO 7706: Theory of International Trade
ECO 7707: International Economic Relations
ECO 7925: Research Skills Workshop
ECO 7938: Advanced Economics Seminar
ECO 7979: Advanced Research
ECO 7980: Research for Doctoral Dissertation
ECP 5415: Antitrust Policy and Managerial Decisions
ECP 5702: Managerial Economics
ECP 5705: Economics of Business Decisions
ECP 6417: Public Policy and Social Control
ECP 6701: Competitive Strategies in Expanding Markets
ECP 6708: Cases in Competitive Strategy
ECP 6407: Economics for Managing Information for Electronic Commerce
ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
ECP 7408: Empirical Industrial Organization
ECP 7418: Economics of Regulation
ECP 7419: Current Research in Regulation
HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

ENT 5275: Family/Business Management
ENT 6006: Entrepreneurship
ENT 6008: Entrepreneurial Opportunity
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- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6606: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7809: Investments
- FIN 7846: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary/Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
- REE 6910: Supervised Research
- REE 6930: Special Topics in Real Estate
Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6228: Business Objects I
- ISM 6229: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6533: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6639: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6904: Individual Work in Information Systems and Operations Management
- QMB 6909: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
International Business

The Master of International Business (M.I.B.) is a non-thesis interdisciplinary graduate business program designed to enhance a student's knowledge and understanding of global business trends and problems.

All M.I.B. candidates must complete the 30-credit curriculum, which consists of 14 core credits and 16 elective credits, with a grade point average (major and overall) of 3.0 or higher. The curriculum includes a mandatory global immersion experience and a non-thesis capstone project.

Combined Degree: The Master of International Business offers a combined bachelor's/master's degree option for students pursuing a bachelor's degree in a business discipline or minor in business administration.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/mib

Degrees Offered with a Major in International Business
Master of International Business

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5852: International Business Law
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6527: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
ACS 5226: Advanced Accounting
ACS 5505: Governmental Accounting
ACS 5637: Auditing I
ACS 5647: Auditing II
ACS 5815: Accounting Regulation
ACS 6136: Accounting Theory
ACS 6175: Financial Reporting and Analysis
ACS 6207: Accounting for Risk
ACS 6265: International Accounting and Taxation
ACS 6697: Information Systems Assurance
ACS 6905: Individual Work in Accounting
ACS 6935: Special Topics in Accounting
ACS 6940: Supervised Teaching
ACS 7885: Accounting Research I
ACS 7886: Accounting Research II
ACS 7887: Research Analysis in Accounting
ACS 7939: Theoretical Constructs in Accounting
ACS 7979: Advanced Research
ACS 7980: Research for Doctoral Dissertation
TAX 5005: Introduction to Federal Income Taxation
TAX 5025: Federal Income Tax 1
TAX 5027: Federal Income Tax 2
TAX 5065: Tax Professional Research
TAX 6105: Corporate Taxation
TAX 6115: Advanced Corporate Taxation
TAX 6205: Partnership Taxation
TAX 6526: International Taxation
TAX 6726: Executive Tax Planning
TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy/Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6967: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6807: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6436: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6578: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analysis
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7806: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- GEB 6976: Introduction to Real Estate
Information Systems and Operations Management Departmental Courses

- ISM5021: Information Systems in Organizations
- ISM5022: Management Information Systems
- ISM6123: Systems Analysis and Design
- ISM6128: Advanced Business Systems Design and Development I
- ISM6129: Advanced Business Systems Design and Development II
- ISM6215: Business Database Systems I
- ISM6216: Business Database Systems II
- ISM6217: Database Management Systems
- ISM6222: Business Telecom Strategy and Applications I
- ISM6223: Business Telecom Strategy and Applications II
- ISM6224: Business Telecom Strategy and Applications III
- ISM6226: Business Telecom Strategy and Applications
- ISM6236: Business Objects I
- ISM6239: Business Objects II
- ISM6257: Intermediate Business Programming
- ISM6258: Advanced Business Programming
- ISM6259: Business Programming
- ISM6405: Business Intelligence
- ISM6423: Data Analysis for Decision Support
- ISM6485: Electronic Commerce and Logistics
- ISM6486: eCommerce Technologies
- ISM6487: Risks and Controls in eCommerce
- ISM6942: Electronic Commerce Practicum
- ISM7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supply Chain Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation
Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Management

College

Warrington College of Business Administration

Department/School

Management Department

Management Program Information

Master of Science degree with a major in Management, non-thesis option: This M.S. program is designed to afford general business competency to students who possess little or no educational business background. The M.S. with a major in management program is only open to non-business majors. Students must complete the 32-credit curriculum, which consists of 22
core credits and 10 elective credits, with a grade point average (major and overall) of 3.0 or higher.

**Combined Degree Program:** The M.S. with a major in management offers a combined bachelor's/master's degree option.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/msm](http://warrington.ufl.edu/graduate/academics/msm).

### Degrees Offered with a Major in Management

**Master of Science**

without a concentration

concentration in Health Care Risk Management

### Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7953: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6897: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7226: Microeconomic Theory II
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6266: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6606: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7806: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
- REE 6910: Supervised Research
- REE 6930: Special Topics in Real Estate
- REE 6935: Real Estate Case Studies
- REE 6940: Supervised Teaching
- REE 6948: Capstone Seminar and Applied Project
- REE 6957: International Studies in Real Estate
- REE 7979: Advanced Research
- REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- CMIS 5303: Managerial Statistics
• QMB 5304: Introduction to Managerial Statistics
• QMB 5305: Advanced Managerial Statistics
• QMB 6358: Statistical Analysis for Managerial Decisions I
• QMB 6359: Statistical Analysis for Managerial Decisions II
• QMB 6607: Decision Processes Under Uncertainty I
• QMB 6616: Business Process Analysis
• QMB 6693: Quality Management and Control Systems
• QMB 6697: Optimization in Simulation Modeling I
• QMB 6755: Managerial Quantitative Analysis I
• QMB 6756: Managerial Quantitative Analysis II
• QMB 6905: Individual Work in Information Systems and Operations Management
• QMB 6910: Supervised Research
• QMB 6930: Special Topics in Information Systems and Operations Management
• QMB 6940: Supervised Teaching
• QMB 6941: Internship
• QMB 6957: International Studies in Quantitative Methods
• QMB 6971: Research for Master's Thesis
• QMB 7931: Special Topics in Information Systems and Operations Management
• QMB 7933: Seminar in Information Systems and Operations Management
• QMB 7979: Advanced Research
• QMB 7990: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Customer Analysis
• MAR 6646: Marketing Research for Managerial Decision Making
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6725: Introduction to Electronic Commerce
• MAR 6818: Advanced Marketing Management (MBA)
• MAR 6833: Product Development and Management
• MAR 6834: Marketing of Science and Technology
• MAR 6835: Marketing of Science and Technology
• MAR 6837: Consumer-Centered Product Design
• MAR 6861: Customer Relationship Management
• MAR 6862: Customer Relationship Management
• MAR 6905: Individual Work
• MAR 6910: Supervised Research
• MAR 6930: Special Topics in Marketing
• MAR 6940: Supervised Teaching
• MAR 6957: International Studies in Marketing
• MAR 6971: Research for Master's Thesis
• MAR 6973: Project in Lieu of Thesis
• MAR 7507: Perspectives on Consumer Behavior
• MAR 7588: Consumer Information Processing and Decision Making
• MAR 7589: Judgment and Decision Making
• MAR 7626: Multivariate Statistical Methods in Marketing
• MAR 7636: Research Methods in Marketing
• MAR 7666: Marketing Decision Models
• MAR 7786: Marketing Literature
• MAR 7925: Workshop in Marketing Research
• MAR 7979: Advanced Research
• MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

• GEB 5212: Professional Writing in Business
• GEB 5215: Professional Communication in Business
• GEB 5217: Executive Communication
• GEB 5225: Advanced Business Writing
• GEB 5929: Foundations Review
• GEB 6229: Professional Communication for Accountants
• GEB 6365: International Business
• GEB 6368: Globalization and the Business Environment
• GEB 6905: Individual Work
• GEB 6928: Professional Development Module IV
• GEB 6930: Special Topics
• GEB 6941: Internship
• GEB 6957: International Studies in Business
Marketing Department

Chair: Joseph W. Alba  
Graduate Coordinator: Lyle A. Brenner  
Complete faculty listing Follow this link

The Marketing Department at the University of Florida is a recognized leader in the discipline of marketing. For over a decade, our faculty has ranked as one of the most productive and influential in the field. Our faculty is known for conducting provocative, cutting-edge research that contributes both to the scientific understanding and practice of marketing. Our Ph.D. program has produced many leading researchers in the discipline. And the David F. Miller Center for Retailing Education and Research is known as one of the foremost centers for developing the science of retailing.

The Marketing Department offers graduate work leading to the Ph.D. degree in business administration, the M.S. degree in business administration, and a concentration in the Master of Business Administration (M.B.A.) program. Requirements for the M.B.A., M.S., and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

For more information, please see our website: http://warrington.ufl.edu/departments/mkt.

Other

Business Administration (Marketing - Master's)

College

Warrington College of Business Administration

Department/School

Marketing Department

Business Administration (Marketing - Master's)

The Masters of Business Administration (M.B.A) with a concentration in marketing focuses on consumer behavior, marketing management, and marketplace phenomenon. Students study the critical linkages between an organization and its environment, particularly customers and competitors.

The M.S. degree in Business Administration with a concentration in marketing is intended for students whose ultimate objective is to earn a Ph.D. in marketing at another institution. Applicants must have (a) an undergraduate degree from a nationally accredited program, (b) a minimum 3.5 undergraduate GPA, (c) a minimum 600 GMAT (1250 GRE), and (d) evidence of a strong interest in academic research in marketing. The concentration requires 30 credits of graduate-level courses, at least half of which must be in marketing.

Degrees Offered with a Major in Business Administration

Master of Arts

concentration in Marketing

Master of Science

concentration in Marketing

Marketing Departmental Courses
The doctoral program is research-focused and offers the opportunity for concentrated study in consumer behavior, marketing management, and quantitative or analytical modeling of marketplace phenomena.

The Ph.D. curriculum consists of course work in three areas: research foundations, the major field, and electives. In addition, students are required to complete a first-year summer research project, a third-year review paper, and a dissertation. Other requirements are outlined in the Graduate Degrees section of this catalog.
The research foundations requirement comprises a set of research methods and data analysis courses chosen from statistics, psychology, and/or economics. The major field course work is made up of a set of four required marketing seminars that are completed during the student's first 2 years in the program. Electives are selected from both advanced marketing seminars and other related disciplines to complement the student's research program.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

collection in Marketing

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7738: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
ECONOMICS DEPARTMENTAL COURSES

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Macroeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and the Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization/Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

FINANCE, INSURANCE, AND REAL ESTATE DEPARTMENTAL COURSES

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6436: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6516: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6796: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7806: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6059: Real Estate Appraisal
- REE 6206: Primary Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6222: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: e-Commerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6492: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Departments within the College of Engineering

College of Engineering
Dear C. Abernathy

Complete faculty listings: Follow this link.

The College of Engineering is organized into a number of departments focusing on today’s most pressing engineering questions. There is an interdisciplinary culture at the core of Gator Engineering, though, and researchers regularly collaborate with colleagues in departments and colleges beyond their own.

For more information, please see our website: http://www.eng.ufl.edu

Departments and Programs within the College of Engineering
College of Engineering Courses

Agricultural and Biological Engineering Department

College of Agricultural and Life Sciences

Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

A combined B.S/M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

Agricultural production includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

Biological engineering includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

Information systems includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

Land and water resources includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Biomedical Engineering Department

Chair: C. Schmidt
Graduate Coordinator: D. Hinterling

Complete faculty listing by department: Follow this link.

The mission of the J. Crayton Pruitt Family Department of Biomedical Engineering (BME) is to educate students with strong engineering and science backgrounds for Master's and/or Ph.D. degrees in biomedical engineering. Graduates in BME typically apply their skills and training directly to engineering solutions to clinical problems in medicine. The BME mission is accomplished through a core program of study that has strong collaborations with faculty in the Colleges of Engineering and Medicine. The Biomedical Engineering Department faculty members work collaboratively with joint, affiliate, and adjunct faculty from many other departments in the College of Engineering, the College of Medicine, and local industry. This diversity ensures students the highest-quality education and varied opportunities for cutting-edge research. The BME Department currently focuses in: neural engineering, biomaterials, tissue engineering, biomechanics, nanomedicine, biomedical imaging and medical physics. A concentration in Medical Physics is available at both the M.S. and Ph.D. level and prepares students for clinical or research careers in medical imaging or radiation therapy. The Medical Physics concentration is fully accredited by CAMPEP. Additional information on admissions requirements, faculty, and research projects is available at http://www.bme.ufl.edu.

BME graduate students are admitted directly through the BME Department. The BME Graduate Academic Committee reviews and makes all decisions regarding admission. Each student’s research advisor must hold a Graduate Faculty appointment in the BME Department. Supervisory committees for BME students normally include at least one member from the College of Engineering and one from the College of Medicine to emphasize the need for a clinical focus in the research.

Chemical Engineering Department

Chair: R. Dickinson.
Graduate Coordinator: A. Chauhan.

Complete faculty listing by department: Follow this link.

The Ph.D., M.E., and M.S. degrees in chemical engineering require course work in three core areas:

- **The chemical engineering basis area**, consisting of three core courses in the mathematical, the molecular, and the continuum bases of chemical engineering.
- **The chemical engineering science and systems area**, consisting of a selection of courses in such areas as transport phenomena, electrochemical engineering, thermodynamics, kinetics, reaction engineering, process control, separation processes, and heat and mass transfer.
- **The research specialty area**, consisting of courses designed to build depth in a field of specialization. Courses may be from other academic units, or may be chemical engineering courses such as colloid science, corrosion, polymer science, advanced materials, and biochemical engineering.

### Civil and Coastal Engineering Department

Chair: K. Hatfield
Graduate Coordinator: A. Drescher

Complete faculty listing by department: Follow this link.

The Department of Civil and Coastal Engineering offers two distinct graduate programs: civil engineering and coastal and oceanographic engineering. All degrees except the Ph.D. are available in a thesis or nonthesis option. The nonthesis option has two formats: report and 30-hour non-report. Students who elect the nonthesis report must successfully complete a document of substantial engineering content for a minimum of two hours credit in CGN 6972 for civil engineering majors, or HOC 6948 for coastal and oceanographic engineering majors.

Civil and Coastal Engineering degree programs include areas of specialization in construction, civil engineering management, geotechnical engineering, water resources and hydrology, public works, structural engineering, civil engineering materials, geosensing systems engineering, coastal engineering, oceanographic engineering and offshore structures, and transportation engineering.

Minor or supporting work is encouraged from a variety of related or allied fields of study. Ph.D. students are required to take a preliminary examination. Requirements for the M.S., M.E., and Ph.D. degrees are given in the [Graduate Degrees](#) section of this catalog.

### Computer and Information Science and Engineering Department

College of Engineering

Chair: Paul Gader
Graduate Coordinator: Jih-kwon Peir

Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems**: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies.
- **Database and information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics.
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry.
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, computer imaging, and computer databases.
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases.
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below “B.” Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either a thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The nonthesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core.
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B, to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A minimum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.
The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: http://www.cise.ufl.edu

**Electrical and Computer Engineering Department**

Chair: J. Harris.
Graduate Coordinators: G. Bosman, J. McNair

Complete faculty listing [Follow this link.](#)

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the [Graduate Degrees Section](#) of this catalog. For more information about our program, please visit the link below.

**Environmental Engineering Sciences Department**

Director: K. Hatfield
Graduate Coordinator: P. Chadik

Complete faculty listing [Follow this link](#)

The Department of Environmental Engineering Sciences offers graduate study in the following areas: Air Resources; Biogeochemical Systems; Environmental Nanotechnology; Solid and Hazardous Waste Management; Storm Water, Water Supply and Waste Water; Sustainability Science & Engineering Systems Ecology and Ecological Engineering and Water Resources. Students graduated from the program will demonstrate depth in individual focus areas as well as breadth of core knowledge concepts in all areas. Please visit the link below for more information about our program in Environmental Engineering Sciences.

**Industrial and Systems Engineering Department**

Chair: J. Geunes.
Graduate Coordinator: J. C. Smith and P. Momicovic.

Complete faculty listing [by department: Follow this link](#)

The Department of Industrial and Systems Engineering offers the Master of Engineering and the Master of Science degrees, each with a thesis or nonthesis option, with specialization in engineering management, manufacturing and logistics systems engineering, operations research, quality engineering, and special interest options such as health systems. In addition, the Department offers the Engineer degree and the Doctor of Philosophy degree with specialization in linear, combinatorial, nonlinear, and global optimization; supply chain management and e-commerce; financial engineering; manufacturing management; facilities location and layout; quality engineering and stochastic processes.

Complete descriptions of the requirements for the M.E., M.S., Engineer, and Ph.D. degrees are provided in the [General Information](#) section of this catalog.

A degree in one of the engineering disciplines or in mathematics, statistics, physics, computer sciences, quantitative management, or similar fields is prerequisite. Where the student's background is deficient, an articulation program of foundation courses will be required.

The Department offers a combined bachelor's/master's degree program of B.S.I.S.E./Master of Science (Management), B.S.I.S.E./Master of Engineering or Master of Science, and a B.S. from disciplines within the College of Engineering/Master of Science or Master of Engineering. Contact the graduate coordinator for information.

**Materials Science and Engineering Department**

Chair: S. Phillpot
MSE Graduate Coordinator: J. J. Mecholsky, Jr.
NE Graduate Coordinator: E. Dugan

Complete faculty listing [by department: Follow this link](#)

The Department of Materials Science and Engineering offers the Master of Science and Doctor of Philosophy degrees in Materials Science & Engineering (MSE) and Nuclear Engineering (NE). Requirements for these degrees are described in the General Information section of this catalog.

Degrees in MSE include specific areas of research and study in biomaterials, ceramics, composites, computational materials science, electronic materials, metals, polymers, nanomaterials, and nuclear materials. Degrees in NE include specific areas of research and study in advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security.

**Nontraditional Degree Programs:** The Department offers combined bachelor/master’s degree programs: MSE BS/MS, NE BSMS, and students may also combine the MSE BS with the MS awarded through the Dept. of Biomedical Engineering (BME). The combined bachelor/master’s program allows qualified students to earn both degrees in materials science and engineering with savings of a tangible number of credit hours. Qualified students are allowed to begin master’s course work in their junior years and double count specific graduate courses for both degrees.

The master’s degree may be completed within 2 to 3 semesters after completing the bachelor’s degree. Program admission requirements are (1) satisfaction of Graduate School admission requirements prior to the beginning of the senior year, (2) an upper division GPA of at least 3.5 in MSE and 3.4 in NE, (3) for MSE, completion of a minimum of 18 credit hours of courses, (4) admission by the Department’s Graduate Admission Committee and approval by the College of Engineering and the Graduate School. For more information, contact the Department.

The J.D./M.S. in MSE (thesis/nonthesis) is a joint degree program culminating in both the Juris Doctor degree, awarded by the College of Law, and the Master of Science (thesis/nonthesis), awarded by the College of Engineering. Under this program, a student can earn both degrees in approximately 1 year less than it would take to attain both degrees if pursued consecutively.

Follow this link.
Concurrent M.D./Ph.D. degrees are offered through a collaborative program between the College of Medicine and Materials Science and Engineering. For more information, please contact the Department.

To be eligible for regular admission to the graduate program within the Department, the student must hold a B.S. in an appropriate major. Because of the breadth of MSE graduate programs, students with degrees in materials, ceramics, metallurgy, other engineering, mathematics, or science areas (such as biology, chemistry, or physics) have found ample opportunities to pursue their research and training areas of interest.

The faculties of the Department of Materials Science and Engineering (MSE) of the University of Florida (UF) and the University of Roma Tor Vergata (URT) have approved a cooperative degree program in Materials Science and Engineering culminating in a Doctor of Philosophy degree, awarded by both universities. Contact the Department for details.

Mechanical and Aerospace Engineering Department

Chair: David W. Hahn
Graduate Coordinator: D. W. Mikolaitis

Complete faculty listing by department: Follow this link.

The Department of Mechanical and Aerospace Engineering offers the degrees of Master of Science (thesis or nonthesis), Master of Engineering (thesis or nonthesis), Engineer, and Doctor of Philosophy in aerospace engineering and mechanical engineering. Minimum requirements for these degrees are given in the General Information section of this catalog. Additional information can be found at http://www.mae.ufl.edu/graduate. Prospective students are expected to have strong backgrounds in engineering. For the first year of study, each student is generally required to take a minimum of three regular courses each semester. There are three areas of specialization available for graduate studies: dynamics, systems, and control; solid mechanics, design, and manufacturing; thermal science and fluid dynamics. Within a specialization there are unique opportunities to conduct analytical, experimental, and/or numerical study in a wide variety of challenging problems. The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Nuclear and Radiological Engineering Department

Chair: D. Hintenlang
Graduate Coordinator: W. Bolch

Complete faculty listing Follow this link.

The Department offers the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy in nuclear engineering sciences with emphases in nuclear power engineering, medical physics, and health physics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The medical physics and health physics options are offered through interdepartmental programs in cooperation with the College of Medicine (see the Health Physics and Medical Physics description under Interdisciplinary Graduate Studies).

Combined Program — The Department also offers a B.S.N.E./M.S. degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of one semester. Qualified students may begin their master's program while seniors counting 12 hours of specified nuclear engineering sciences graduate courses for both the bachelor's and master's degree requirements. Seniors admitted to the combined program are eligible for teaching and research assistantships. Program admission requirements are (1) satisfaction of Graduate School admission requirements for a master's degree, (2) an upper-division (undergraduate) GPA of at least 3.6, and (3) completion of specified bachelor's degree requirements.

The graduate program has two major programs, Nuclear Engineering and Medical Physics. Specific areas of research and study in Nuclear Engineering include advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security. The Medical Physics program is a CAMPEP accredited program designed to meet the professional requirements for a career in clinical service or research and development. Areas of Medical Physics study and research include diagnostic medical imaging, radiation therapy, nuclear medicine imaging, and radiation dosimetry.

The requirement for admission to the graduate program in nuclear engineering sciences is a bachelor's degree in an approved program in engineering or in the sciences. Students applying to the Medical Physics program should have completed the equivalent of at least a minor in physics. If the student's background is considered deficient for the planned course of study, an articulation program of background courses will be required.

Depending on professional objectives, the student may select a non-thesis option for the MS degree and substitute 8 credits of graduate-level course work, of which at least 6 credits are in nuclear engineering sciences, including a 4-credit (minimum) special project, ENU 6936. Completion of 32 credits will meet the minimum requirements for the non-thesis MS degree.

Normally, the requirements for a master's degree can be completed in 12 months. Students in the medical physics option usually take 21 to 24 months to complete the master's degree, which requires 40-42 credit hours. For a master's degree in health physics, a student must complete 42 hours of credit. If articulation work is required, it may take longer, depending upon the extent of the student's deficiency.

Education Courses - filtered

College of Education

Dear: G. Good.

Complete faculty listings: Follow this link.

Graduate study in education, allows individuals with bachelor's degrees in agriculture, business, education, engineering, mathematics, sciences, humanities, foreign languages, preprofessional studies and other fields to prepare for rewarding professional careers in education and related fields.

The College of Education offers 19 master's or specialist programs, 12 doctoral programs, and a J.D./Ph.D. program with the College of Law through its three schools: Human Development and Organizational Studies in Education; Special Education; School Psychology and Early Childhood Studies; and School of Teaching and Learning.

Follow these links for more information about UF's College of Education graduate programs:

http://education.ufl.edu/graduate-studies
http://education.ufl.edu/programs

Departments and Programs within the College of Education
College of Education Courses

MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations

Human Development and Organizational Studies in Education Department

Director: Linda B. Eldridge
Graduate Coordinator: Patricia Ashton

Complete faculty listing by department: Follow this link.

Programs leading to the Master of Arts in Education (M.A.E.), Master of Education (M.Ed.), Education Specialist (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees are offered through this school with programs in Counseling and Counselor Education, Educational Leadership, Higher Education Administration, Marriage and Family Counseling, Mental Health Counseling, Research and Evaluation Methodology, School Counseling and Guidance, and Student Personnel in Higher Education.

Requirements for these degrees are given in the Graduate Degrees section of this catalog.

More information can be found at our website: http://education.ufl.edu/hdose

EDA 5938: Special Topics
EDA 6061: Educational Organization and Administration
EDA 6107: Leading Change in Educational Organizations
EDA 6192: Educational Leadership: The Individual
EDA 6193: Educational Leadership: Instruction
EDA 6195: Educational Policy Development
EDA 6215: Communications in Educational Leadership
EDA 6222: Administration of School Personnel
EDA 6225: Labor Relations in Public Education
EDA 6232: Public School Law
EDA 6242: Public School Finance
EDA 6271: Technology Leadership for Educational Administrators
EDA 6423: Data-Driven Decision Making in Educational Organizations
EDA 6503: The Principalship
EDA 6905: Individual Work
EDA 6931: Special Topics
EDA 6935: Problems in School Administration and Supervision
EDA 6948: Supervised Practice in School Administration
EDA 6971: Research for Master's Thesis
EDA 7206: Organizational Leadership in Education
EDA 7945: Practicum in Supervision and Administration
EDA 7979: Advanced Research
EDA 7980: Research for Doctoral Dissertation
EDA 7985: Research Design in Educational Administration

EDF 5441: Assessment in General and Exceptional Student Education

EDF 6113: Educational Psychology: Human Development

EDF 6211: Educational Psychology: General

EDF 6215: Educational Psychology: Learning Theory

EDF 6232: Principles of Learning and Instructional Practice

EDF 6400: Quantitative Foundations of Education Research Overview

EDF 6401: Educational Statistics


EDF 6403: Quantitative Foundations of Educational Research

EDF 6434: Educational Measurement

EDF 6436: Theory of Measurement

EDF 6471: Survey Design and Analysis in Educational Research

EDF 6475: Qualitative Foundations of Educational Research

EDF 6481: Quantitative Research Methods in Education

EDF 6905: Individual Study

EDF 6910: Supervised Research

EDF 6938: Special Topics

EDF 6940: Supervised Teaching

EDF 6941: Practicum in Educational Research

EDF 6971: Research for Master's Thesis

EDF 7117: Affective Development and Education

EDF 7405: Advanced Quantitative Foundations of Educational Research

EDF 7412: Structural Equation Models

EDF 7413: Advanced Topics in Structural Equation Modeling

EDF 7435: Rating Scale Design and Analysis in Educational Research

EDF 7439: Item Response Theory

EDF 7474: Multilevel Models

EDF 7479: Qualitative Data Analysis: Approaches and Techniques

EDF 7483: Qualitative Data Collection: Approaches and Techniques

EDF 7486: Methods of Educational Research

EDF 7491: Evaluation of Educational Products and Systems
EDF 7639: Research in Educational Sociology
EDF 7931: Seminar in Educational Research
EDF 7932: Multivariate Analysis in Educational Research
EDF 7979: Advanced Research
EDF 7980: Research for Doctoral Dissertation
EDG 6250: The School Curriculum
EDG 6285: Evaluation in the School Program
EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7222: Curriculum: Theory and Research
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7665: Bases of Curriculum and Instruction Theory
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EDH 6040: Theory of College Student Development
EDH 6046: Diversity Issues in Higher Education
EDH 6049: Domestic and International College Student Services
EDH 6051: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community Junior College in America
EDH 6066: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6503: Resource Development in Higher Education
EDH 6632: Current Issues in Community College Leadership
EDH 6637: Crisis Management in Higher Education
EDH 6931: Special Topics in Higher Education
EDH 6935: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7505: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDP 6052: Cognitive Psychology Applied to Education
EDS 6140: Supervision of Instruction
MHS 5005: Introduction to Counseling
MHS 6000: Assessment and Treatment of Family Violence
MHS 6020: Counseling in Community Settings
MHS 6061: Spiritual Issues in Multicultural Counseling
MHS 6071: Diagnosis and Treatment of Mental Disorders
MHS 6200: Assessment in Counseling
MHS 6340: Career Development
MHS 6401: Counseling Theories and Applications
MHS 6421: Play Counseling and Play Process with Children
MHS 6428: Multicultural Counseling
MHS 6430: Introduction to Family Counseling
MHS 6440: Marriage Counseling
MHS 6450: Substance Abuse Counseling
MHS 6464: Introduction to Disaster Mental Health Counseling
MHS 6466: Trauma and Crisis Intervention: Theory and Practice
MHS 6468: Multicultural issues in disaster mental health counseling
MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
MHS 6471: Sexuality and Mental Health
MHS 6480: Developmental Counseling Over the Life Span
MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
MHS 6500: Group Counseling: Theories and Procedures
MHS 6602: Educational Mediation
MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
MHS 6720: Professional Identity and Ethics in Counseling
MHS 6831: Supervision for a Split Internship
MHS 6905: Individual Work
MHS 6910: Supervised Research
MHS 6940: Supervised Teaching
MHS 6971: Research for Master's Thesis
MHS 7402: Brief Therapy
MHS 7407: Advanced Counseling Theories
MHS 7431: Advanced Family Counseling
MHS 7600: Consultation Procedures
MHS 7610: Practicum in Counseling Supervision
MHS 7730: Seminar in Counseling Research
MHS 7740: Research in Counseling
MHS 7800: Practicum in Counseling
MHS 7804: Group Supervision in Agency Counseling
MHS 7805: Practicum in Agency Counseling
MHS 7806: Practicum in Marriage and Family Counseling
MHS 7807: Group Supervision in Marriage and Family Counseling
MHS 7830: Internship in Counseling and Development-600 Hours
MHS 7840: Internship in Counselor Education
MHS 7946: Internship in Agency Program Management
MHS 7979: Advanced Research
MHS 7980: Research for Doctoral Dissertation
SDS 6401: Counseling Skills for Non-Counselors
SDS 6411: Counseling with Children
SDS 6413: Counseling Adolescents
SDS 6436: Family-School Intervention
SDS 6520: Family, Student Development and Role of Teacher as Adviser
SDS 6620: Organization and Administration of School Counseling Programs
SDS 6831: Supervision for a Split Internship
SDS 6905: Individual Work
SDS 6936: Seminar in Counselor Education
SDS 6938: Special Topics
SDS 7800: Practicum in School Counseling
SDS 7820: Group Supervision in School Counseling
SDS 7830: Internship in Counseling and Development-600 Hours

Special Education, School Psychology and Early Childhood Studies Department

Director: Jean Crockett

Complete faculty listing by department: Follow this link.

The School of Special Education, School Psychology, and Early Childhood Studies offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 3 areas of specialization: Special Education; School Psychology; and Early Childhood Studies. Programs are accredited by the Florida Department of Education and approved by the National Council for Accreditation of Teacher Education (NCATE). The School Psychology program is approved by the NCATE and the National Association of School Psychologists (NASP). The Ph.D. program in School Psychology is accredited by the American Psychological Association (APA).

EDF 7482: Quasi-experimental Design and Analysis in Educational Research

EEC 6205: Early Childhood Curriculum
EEC 6304: Creativity in the Early Childhood Curriculum
EEC 6525: Issues in Child Care Administration
EEC 6615: Early Childhood Education: Background and Concepts
EEC 6905: Individual Work
EEC 6910: Supervised Research
EEC 6933: Special Topics
EEC 6940: Supervised Teaching
EEC 6946: Practicum in Early Childhood Education
EEC 7056: Early Childhood Policy and Advocacy
EEC 7617: Early Childhood Assessment & Evaluation
EEC 7666: Theory and Research in Early Childhood Studies
EEC 7979: Advanced Research
EEX 5940: Supervised Student Teaching in Special Education
EEX 6053: Foundations of Special Education
EEX 6072: Accessing Academic and Social Communities for Students with Disabilities
EEX 6098: Students with Disabilities in Higher Education
EEX 6125: Interventions for Language and Learning Disabilities
EEX 6219: Reading Assessment and Intervention for Students with Disabilities
EEX 6222: Evaluation in Special Education
EEX 6233: Designing Instruction for Inclusive Classrooms
EEX 6234: Assessment, Curriculum, and Instruction for Students with Severe Disabilities
EEX 6249: Advanced Strategies for Teaching Students with Disabilities
EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
EEX 6296: Differentiated Instruction
EEX 6299: Understanding Assessment for Postsecondary Students with Disabilities
EEX 6661: Teaching and Managing Behavior for Student Learning
EEX 6750: Families and Transition for Students with Disabilities
EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
EEX 6785: Introduction to Education-Healthcare Transition
EEX 6786: Transdisciplinary and Transition Services in Special Education
EEX 6788: Methods for Integrating Education-Health Care Transition
EEX 6789: Legal Aspects and Policy in Education-Healthcare Transition
EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
EEX 6835: Practicum in Special Education: Severe Disabilities
EEX 6841: Practicum in Special Education: Mild Disabilities
EEX 6863: Supervised Practice in Special Education
EEX 6905: Individual Work
EEX 6910: Supervised Research
EEX 6936: Special Topics
EEX 6940: Supervised Teaching
EEX 6971: Research for Master's Thesis
EEX 6973: Project in Lieu of Thesis
EEX 7303: Inquiry in Special Education: Analysis of the Literature
EEX 7304: Introduction to Field of Inquiry in Special Education
EEX 7428: Teacher Education in Special Education
EEX 7526: Grant Writing Seminar in Education
EEX 7709: Social-Emotional Learning & Play in Early Childhood
EEX 7787: School Improvement for All Students
EEX 7865: Internship: Special Education
EEX 7934: Seminar: Trends in Special Education
EEX 7979: Advanced Research
EEX 7980: Research for Doctoral Dissertation
EGI 6051: Education of the Gifted Child
EGI 6245: Program Development for the Gifted
SPS 6052: Issues and Problems in School Psychology
SPS 6191: Psychoeducational Assessment I
SPS 6192: Psychoeducational Assessment II
SPS 6193: Academic Assessment & Intervention
SPS 6195: Developmental Psychopathology
SPS 6197: Psychoeducational Assessment III
SPS 6410: Direct Interventions I: Applied Behavior Analysis for School Psychologists
SPS 6707: Interventions in School Psychology II: Cognitive Behavioral Interventions
SPS 6708: Interventions in School Psychology III: System Level Interventions for Children and Youths
SPS 6815: Law and Ethics in Psychology
SPS 6905: Individual Study
SPS 6910: Supervised Research
SPS 6937: Special Topics in School Psychology
SPS 6940: Supervised Teaching
SPS 6941: Practicum in School Psychology
SPS 6942: School Psychology Practicum II
SPS 6945: Advanced Practicum in School Psychology
SPS 7205: School Psychology Consultation
SPS 731: Seminar in School Psychology
SPS 7949: Internship in School Psychology
SPS 7979: Advanced Research
SPS 7980: Research for Doctoral Dissertation

School of Teaching and Learning
The School of Teaching and Learning (http://education.ufl.edu/school) offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis or project in lieu of thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees in curriculum and instruction. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 10 areas of specialization: curriculum, teaching, and teacher education; educational technology; elementary education; mathematics education; language and literacy education (including children's literature, English education, ESOL/bilingual education, language arts, and reading education); science and environmental education; social foundations of education; social studies education; and teacher leadership for school improvement.

The nationally recognized ProTeach graduate program leads to the M.Ed. degree and state certification as a classroom teacher. Unified Elementary ProTeach admits undergraduates who complete the five-year program with a master's degree. Secondary ProTeach (English, Science, Social Studies) prepares teachers who have completed a bachelor's degree in the discipline they will teach. Prospective elementary teachers who already hold a bachelor's degree in a non-education field may want to consider the School's SITE program (Site-based Implementation of Teacher Education), which leads to the M.Ed. degree in curriculum and instruction. Students may apply to the state for alternative certification.

Beyond the Graduate School and College of Education admission requirements, students should have academic preparation and teaching experience appropriate to the program being pursued. Students having deficiencies in their preparation will be required to follow a program to remove such deficiencies. A limited amount of support is available for graduate studies through fellowships, scholarships, research assistantships, and teaching assistantships.

**EDE 5940: Integrated Teaching and Learning**

**EDE 6225: Practices in Childhood Education**

**EDE 6266: Teaching and Learning in Elementary Classrooms**

**EDE 6325: Teacher Inquiry/Action Research**

**EDE 6905: Individual Work**

**EDE 6910: Supervised Research**

**EDE 6932: Special Topics**

**EDE 6948: Internship in Elementary Schools**

**EDE 7047: Issues in Teacher Education**

**EDE 7935: Seminar in Curriculum & Instruction**

**EDF 5552: Role of School in Democratic Society**

**EDF 6520: History of Education**

**EDF 6544: Philosophical Foundations of Education**

**EDF 6606: Socioeconomic Foundations of Education**

**EDF 6616: Education and American Culture**

**EDF 6630: Educational Sociology**

**EDF 6812: Comparative Education**

**EDF 6820: Education in Latin America**

**EDF 7555: Values and Ethics in Education**

**EDF 7934: Seminar in Educational Foundations**

**EDG 5666: Knowing and Learning in STEM**

**EDG 6017: Writing for Academic Purposes**

**EDG 6047: Teacher Leadership for Educational Change**

**EDG 6207: Transforming the Curriculum**
EDG 6225: Global Studies Methods in K-12 Education
EDG 6226: Foundations of Research in Curriculum & Instruction
EDG 6348: Instructional Coaching for Enhanced Student Learning
EDG 6415: Culturally Responsive Classroom Management
EDG 6445: Meeting the Educational Needs of Students Living in Poverty
EDG 6953: TLSI Online Portfolio Preparation
EDG 7224: Critical Pedagogy
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7359: Professional Development and Teacher Learning
EDG 7982: Practitioner Research: Theory & Practice
EDM 6005: The Emergent Middle School
EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
EME 5054: Foundations of Educational Technology
EME 5207: Designing Technology-Rich Curricula
EME 5315: Communicating with Technology
EME 5316: Educational Technology Management Issues
EME 5403: Instructional Computing I
EME 5404: Instructional Computing II
EME 5405: Internet in K-12 Instruction
EME 5431: Integrating Technology in the Mathematics Classroom
EME 5432: Integrating Technology into Social Science Classroom
EME 5433: Integrating Technology into Science Classroom
EME 6059: Blended Learning Environments
EME 6066: Issues and Trends in Educational Technology Research
EME 6076: Virtual School Philosophy and Pedagogy
EME 6156: Games and Simulations for Teaching and Learning
EME 6205: Digital Photography and Visual Literacy
EME 6208: Designing Integrated Media Environments I
EME 6209: Designing Integrated Media Environments II
EME 6235: Managing Educational Projects
EME 6236: Distance Education Leadership and Management
EME 6405: Educational Technology and Teaching
EME 6458: Distance Teaching and Learning
EME 6505: Educational Television Design and Production
EME 6602: Human-Computer Interactivity and the Learner
EME 6606: Advanced Instructional Design
EME 6609: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design
ESE 6215: The Secondary School Curriculum
ESE 6344: Classroom Practices and Assessment in Secondary Education
ESE 6345: Effective Teaching and Classroom Management
ESE 6905: Individual Work
ESE 6939: Special Topics
ESE 6945: Student Teaching in Secondary School
FLE 6165: Bilingual-Bicultural Education
FLE 6167: Cross-Cultural Communication for Teachers
FLE 6336: Teaching Foreign Languages in Elementary Schools
FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
LAE 6298: Literacy & Language Instruction
LAE 6319: Language Arts in the Elementary School
LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
LAE 6348: Teaching Multiliteracies
LAE 6365: Language Arts: Language and Composition
LAE 6366: Language Arts: Literature
LAE 6407: Early Childhood Children's Literature
LAE 6446: Multicultural Literature for Children and Adolescents
LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
LAE 6455: International Children's Literature
LAE 6616: Seminar in Children's Literature
LAE 6635: Teaching Adolescent Literature in the Secondary School
LAE 6714: Children’s Literature in the Childhood Curriculum
LAE 6861: Technology and Media Literacy
LAE 6865: Teaching Media Literacy with the Internet
LAE 6869: Teaching Digital Storytelling
LAE 6893: Literacy, Family, and Culture
LAE 6945: Practicum and Assessment for Teachers of Secondary School English
LAE 6946: Children’s Literature in Educational Settings
LAE 7006: Language Acquisition and Education
LAE 7519: Language and Inquiry
LAE 7715: Research in Children’s Literature
LAE 7934: Seminar in Composition Theory and Practice
LAE 7936: Seminar in English Language Arts
MAE 5327: Middle School Mathematics Methods
MAE 5332: Secondary School Mathematics Methods and Assessment
MAE 5347: Teaching K-8 Mathematics for Understanding
MAE 5395: Multicultural Mathematics Methods
MAE 5396: Using Formative Assessment to Improve Mathematical Learning
MAE 5945: Secondary School Mathematics Practicum
MAE 6313: Problem Solving in School Mathematics
MAE 6615: Individualizing Instruction in Mathematics
MAE 6641: Readings and Research in Mathematics Education
MAE 6916: Inquiry in Mathematics Teaching
MAE 7899: Mathematics Education Seminar
RED 5046: Foundations of Reading in Grades PreK-12
RED 5316: Reading in the Primary Grades
RED 5337: Reading in the Secondary School
RED 5355: Reading Instruction in the Intermediate Grades
RED 5399: Practices in Beginning Reading Instruction
RED 6346: Seminar in Reading
RED 6520: Classroom Literacy Assessment and Instruction
RED 6546C: Diagnosis of Reading Difficulties
RED 6548C: Remediation of Reading Difficulties
The College of Engineering is organized into a number of departments focusing on today's most pressing engineering questions. There is an interdisciplinary culture at the core of Gator Engineering, though, and researchers regularly collaborate with colleagues in departments and colleges beyond their own.
For more information, please see our website: http://www.eng.ufl.edu

Departments and Programs within the College of Engineering

College of Engineering Courses

EEE 5354L: Semiconductor Device Fabrication Laboratory
EGN 5010L: NRF Training Lab
EGN 5949: Practicum/Internship/Cooperative Work Experience
EGN 6039: Engineering Leadership
EGN 6640: Entrepreneurship for Engineers
EGN 6642: Engineering Innovation

Agricultural and Biological Engineering Department

College of Agricultural and Life Sciences
Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The College of Science and the College of Engineering degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

- **Agricultural production** includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

- **Biological engineering** includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

- **Information systems** includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

- **Land and water resources** includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

**ABE 5015: Empirical Models of Crop Growth and Yield Response**

**ABE 5038: Recent Developments and Applications in Biosensors**

**ABE 5152: Electro-Hydraulic Circuits and Controls**

**ABE 5332: Advanced Agricultural Structures**

**ABE 5442: Advanced Agricultural Process Engineering**

**ABE 5643C: Biological Systems Modeling**

**ABE 5646: Biological and Agricultural Systems Simulation**
ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials

ABE 5663: Advanced Applied Microbial Biotechnology

ABE 5707C: Agricultural Waste Management

ABE 5815C: Food and Bioprocess Engineering Design

ABE 6005: Applied Control for Automation and Robots

ABE 6031: Instrumentation in Agricultural Engineering Research

ABE 6035: Advanced Remote Sensing: Science and Sensors

ABE 6037C: Remote Sensing in Hydrology

ABE 6252: Advanced Soil and Water Management Engineering

ABE 6254: Simulation of Agricultural Watershed Systems

ABE 6265: Vadose Zone Modeling

ABE 6266: Nanotechnology in Water Research

ABE 6615: Advanced Heat and Mass Transfer in Biological Systems

ABE 6644: Agricultural Decision Systems

ABE 6816: Food and Bioprocess Sterilization

ABE 6905: Individual Work in Agricultural and Biological Engineering

ABE 6910: Supervised Research

ABE 6931: Seminar

ABE 6933: Special Topics in Agricultural and Biological Engineering

ABE 6940: Supervised Teaching

ABE 6971: Research for Master's Thesis

ABE 6972: Research for Engineer's Thesis

ABE 6974: Nonthesis Project

ABE 6986: Applied Mathematics in Agricultural and Biological Engineering

ABE 7979: Advanced Research

ABE 7997: Advanced Research

ABE 7980: Research for Doctoral Dissertation

CWR 6536: Stochastic Subsurface Hydrology

PKG 5003: Advanced Distribution and Transport Packaging

PKG 5006: Advanced Packaging Principles

PKG 5105: Advanced Consumer Products Packaging

PKG 5206C: Advanced Package Decoration

PKG 5256C: Advanced Analytical Packaging Methods

PKG 6100: Advanced Computer Tools for Packaging
PKG 6905: Individual Work in Packaging

PKG 6932: Special Topics in Packaging Sciences

Biomedical Engineering Department

Chair: C. Schmidt
Graduate Coordinator: D. Hintenlang

Complete faculty listing by department: Follow this link.

The mission of the J. Crayton Pruitt Family Department of Biomedical Engineering (BME) is to educate students with strong engineering and science backgrounds for Master's and/or Ph.D. degrees in biomedical engineering. Graduates in BME typically apply their skills and training directly to engineering solutions to clinical problems in medicine. The BME mission is accomplished through a core program of study that has strong collaborations with faculty in the Colleges of Engineering and Medicine. The Biomedical Engineering Department faculty members work collaboratively with joint, affiliate, and adjunct faculty from many other departments in the College of Engineering, the College of Medicine, and local industry. This diversity ensures students the highest-quality education and varied opportunities for cutting-edge research. The BME Department currently focuses in: neural engineering, biomaterials, tissue engineering, biomechanics, nanomedicine, biomedical imaging and medical physics. A concentration in Medical Physics is available at both the M.S. and Ph.D. level and prepares students for clinical or research careers in medical imaging or radiation therapy. The Medical Physics concentration is fully accredited by CAMPEP. Additional information on admissions requirements, faculty, and research projects is available at: http://www.bme.ufl.edu.

BME graduate students are admitted directly through the BME Department. The BME Graduate Academic Committee reviews and makes all decisions regarding admission. Each student's research adviser must hold a Graduate Faculty appointment in the BME Department. Supervisory committees for BME students normally include at least one member from the College of Engineering and one from the College of Medicine to emphasize the need for a clinical focus in the research.

BME 5052L: Biomedical Engineering Laboratory

BME 5085: Patents, Product Development, and Technology Transfer

BME 5401: Biomedical Engineering and Physiology I

BME 5407: Molecular Biomedical Engineering

BME 5500: Biomedical Instrumentation

BME 5703: Statistical Methods for Biomedical Engineering

BME 5937: Special Topics

BME 6010: Clinical Preceptorship

BME 6324: Stem Cell Engineering

BME 6330: Cell and Tissue Engineering

BME 6360: Neural Engineering

BME 6502: Introduction to Medical Imaging

BME 6505: Advanced Diagnostic Radiological Physics

BME 6522: Biomedical Multivariate Signal Processing

BME 6533: Radiologic Anatomy

BME 6534: Advanced Therapeutic Radiological Physics

BME 6535: Radiological Physics, Measurements and Dosimetry

BME 6590: Medical Physics

BME 6591: Therapeutic Radiological Physics I

BME 6592: Therapeutic Radiological Physics II

BME 6593: Therapeutic Radiological Physics III

BME 6705: Mathematical Modeling of Biological and Physiological Systems
BME 6905: Individual Work in Biomedical Engineering
BME 6907: BME Project
BME 6910: Supervised Research
BME 6936: Biomedical Engineering Seminar
BME 6938: Special Topics in Biomedical Engineering
BME 6940: Supervised Teaching
BME 6971: Research for Master’s Thesis
BME 7979: Advanced Research
BME 7980: Research for Doctoral Dissertation

Chemical Engineering Department

Chair: R. Dickinson.
Graduate Coordinator: A. Chauhan.

Complete faculty listing by department: Follow this link.

The Ph.D., M.E., and M.S. degrees in chemical engineering require course work in three core areas:

- The chemical engineering basis area, consisting of three core courses in the mathematical, the molecular, and the continuum bases of chemical engineering
- The chemical engineering science and systems area, consisting of a selection of courses in such areas as transport phenomena, electrochemical engineering, thermodynamics, kinetics, reaction engineering, process control, separation processes, and heat and mass transfer
- The research specialty area, consisting of courses designed to build depth in a field of specialization. Courses may be from other academic units, or may be chemical engineering courses such as colloid science, corrosion, polymer science, advanced materials, and biochemical engineering.

BME 6221: Biomolecular Cell Mechanics
BME 6322: Dynamics of Cellular Processes
BME 6644: Pharmacokinetics
ECH 5708: Disinfection, Sterilization, and Preservation
ECH 5938: Topics in Colloid Science
ECH 6126: Thermodynamics of Reaction and Phase Equilibria
ECH 6270: Continuum Basis of Chemical Engineering
ECH 6272: Molecular Basis of Chemical Engineering
ECH 6285: Transport Phenomena
ECH 6326: Computer Control of Processes
ECH 6506: Chemical Engineering Kinetics
ECH 6526: Reactor Design and Optimization
ECH 6709: Electrochemical Engineering Fundamentals and Design
ECH 6726: Interfacial Phenomena I
ECH 6727: Interfacial Phenomena II
ECH 6843: Experimental Basis of Chemical Engineering
ECH 6847: Mathematical Basis of Chemical Engineering
ECH 6851: Impedance Spectroscopy
ECH 6905: Individual Work
ECH 6910: Supervised Research
ECH 6926: Graduate Seminar
ECH 6937: Topics in Chemical Engineering I
ECH 6939: Topics in Chemical Engineering III
ECH 6940: Supervised Teaching
ECH 6971: Research for Master's Thesis
ECH 7938: Advanced Special Chemical Engineering Topics for Doctoral Candidates
ECH 7979: Research for Doctoral Dissertation

Civil and Coastal Engineering Department

Chair: K. Hatfield
Graduate Coordinator: A. Drescher
Complete faculty listing by department: Follow this link.

The Department of Civil and Coastal Engineering offers two distinct graduate programs: civil engineering and coastal and oceanographic engineering. All degrees except the Ph.D. are available in a thesis or nonthesis option. The nonthesis option has two formats: report and 30-hour non-report. Students who elect the nonthesis report must successfully complete a document of substantial engineering content for a minimum of two hours credit in CEN 6974 for civil engineering majors, or EOC 6905 for coastal and oceanographic engineering majors.

Civil and Coastal Engineering degree programs include areas of specialization in construction, civil engineering management, geotechnical engineering, water resources and hydrology, public works, structural engineering, civil engineering materials, geosensing systems engineering, coastal engineering, oceanographic engineering and offshore structures, and transportation engineering.

Minor or supporting work is encouraged from a variety of related or allied fields of study. Ph.D. students are required to take a preliminary examination. Requirements for the M.S., M.E., and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

CCE 5035: Construction Planning and Scheduling
CCE 5405: Construction Equipment and Procedures
CCE 6037: Civil Engineering Operations I
CCE 6038: Innovative Construction Techniques
CCE 6505: Computer Applications in Construction Engineering
CCE 6507: Computer Applications in Construction Engineering II
CCE 6516: Topics in Airborne Laser Mapping Technology
CEG 5105: Geotechnical Engineering
CEG 5114: Advanced Geotechnical Aspects of Landfill Design
CEG 5115: Foundation Design
CEG 5205C: Insitu Measurement of Soil Properties
CEG 5206: Geosensing I
CEG 5805: Ground Modification Design
CEG 6015: Advanced Soil Mechanics
CEG 6116: Advanced Shallow Foundation Design
CEG 6117: Advanced Deep Foundation Design
CEG 6201: Experimental Determination of Soil Properties
CEG 6207: Geosensing II
CEG 6405: Seepage in Soils
CEG 6505: Numerical Methods of Geomechanics
CEG 6515: Earth Retaining Systems and Slope Stability
CES 5010: Probabilistic and Stochastic Methods in Civil Engineering
CES 5116: Finite Elements in Civil Engineering
CES 5325: Design of Highway Bridges
CES 5606: Topics in Steel Design
CES 5607: Behavior of Steel Structures
CES 5715: Prestressed Concrete
CES 5726: Design of Concrete Systems
CES 5801: Design and Construction in Timber
CES 5835: Design of Reinforced Masonry Structures
CES 6106: Advanced Structural Analysis
CES 6108: Structural Dynamics
CES 6165: Computer Methods in Structural Engineering
CES 6551: Design of Folded Plates and Shells
CES 6571: Design of Temporary Structures
CES 6585: Wind Engineering
CES 6588: Protective Structures
CES 6590: Impact Engineering
CES 6591: Applied Protective Structures
CES 6592: Retrofit Protective Structures
CES 6593: Advanced Protective Structures
CES 6706: Advanced Reinforced Concrete
CES 6855: Condition Assessment of Structures
CGN 5125: Legal Aspects of Civil Engineering
CGN 5315: Civil Engineering Systems
CGN 5605: Public Works Planning
CGN 5606: Public Works Management
CGN 5715: Experimentation and Instrumentation in Civil Engineering Materials Research

CGN 6150: Engineering Project Management

CGN 6155: Civil Engineering Practice I

CGN 6156: Construction Engineering II

CGN 6505: Properties, Design and Control of Concrete

CGN 6506: Bituminous Materials

CGN 6525: Sustainable Materials

CGN 6905: Special Problems in Civil Engineering

CGN 6910: Supervised Research

CGN 6936: Civil Engineering Graduate Seminar

CGN 6940: Supervised Teaching

CGN 6971: Research for Master's Thesis

CGN 6972: Research for Engineer's Thesis

CGN 6974: Master of Engineering or Engineer Degree Report

CGN 7979: Advanced Research

CGN 7980: Research for Doctoral Dissertation

CWR 5125: Groundwater Flow I

CWR 5127: Evaluation of Groundwater Quality

CWR 5235: Open Channel Hydraulics

CWR 6115: Surface Hydrology

CWR 6126: Variable-Density Groundwater Flow

CWR 6236: Sediment Transport I

CWR 6240: Mixing and Transport in Turbulent Flow

CWR 6255: Diffusive and Dispersive Transport

CWR 6525: Groundwater Flow II

CWR 6537: Contaminant Subsurface Hydrology

EOC 5860: Port and Harbor Engineering

EOC 6196: Littoral Processes

EOC 6430: Coastal Structures

EOC 6850: Numerical Simulation Techniques in Coastal and Ocean Engineering

EOC 6905: Individual Study in Coastal and Oceanographic Engineering

EOC 6932: Selected Field and Laboratory Problems
EOC 6934: Advanced Topics in Coastal and Oceanographic Engineering  
EOC 6939: Graduate Seminar  
EOC 6971: Research for Master's Thesis  
EOC 6972: Research for Engineer's Thesis  
EOC 7979: Research for Doctoral Dissertation  
EOC 7972: Research for Engineer's Thesis  
EOC 7979: Advanced Research  
OCP 5293: Coastal Processes  
OCP 6050: Physical Oceanography  
OCP 6165: Ocean Waves I: Linear Theory  
OCP 6165L: Ocean Waves Laboratory  
OCP 6167: Ocean Waves II: Nonlinear Theory  
OCP 6168: Data Analysis Techniques for Coastal and Ocean Engineers  
OCP 6169: Random Sea Analysis  
OCP 6295: Estuarine and Shelf Hydrodynamics I  
OCP 6297: Coastal and Estuarine Sediment Transport  
OCP 6298: Coastal Sediment Transport Processes  
TTE 5006: Advanced Urban Transportation Planning  
TTE 5256: Traffic Engineering  
TTE 5305: Advanced Transportation Systems Analysis  
TTE 5805: Geometric Design of Transportation Facilities  
TTE 5835: Pavement Design  
TTE 5837: Pavement Management Systems  
TTE 6205: Freeway Operations and Simulation  
TTE 6207: Advanced Highway Capacity Analysis  
TTE 6259: Urban Streets Simulation and Control  
TTE 6267: Traffic Flow Theory  
TTE 6306: Computational Methods in Transportation Engineering  
TTE 6315: Highway Safety Analysis  
TTE 6505: Discrete Choice Analysis  
TTE 6606: Urban Transportation Models  

Computer and Information Science and Engineering Department

College of Engineering
Chair: Paul Gader
Graduate Coordinator: Jih-kwon Peir

Complete faculty listing by department: [Follow this link](#).

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems**: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 grade-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B, to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A minimum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: [http://www.cise.ufl.edu](http://www.cise.ufl.edu)

**CAP 5100: Human-Computer Interaction**

**CAP 5416: Computer Vision**

**CAP 5510: Bioinformatics**

**CAP 5515: Computational Molecular Biology**

**CAP 5635: Artificial Intelligence Concepts**

**CAP 5705: Computer Graphics**

**CAP 5805: Computer Simulation Concepts**

**CAP 6137: Malware Reverse Engineering**

**CAP 6402: Aesthetic Computing**

**CAP 6516: Medical Image Analysis**

**CAP 6610: Machine Learning**

**CAP 6615: Neural Networks for Computing**
CAP 6617: Advanced Machine Learning
CAP 6685: Expert Systems
CAP 6701: Advanced Computer Graphics
CDA 5155: Computer Architecture Principles
CDA 5636: Embedded Systems
CDA 6156: High Performance Computer Architecture
CEN 5035: Software Engineering
CEN 6070: Software Testing and Verification
CEN 6075: Software Specification
CIS 6905: Individual Study
CIS 6910: Supervised Research
CIS 6930: Special Topics in CIS
CIS 6935: Graduate Seminar
CIS 6940: Supervised Teaching
CIS 6971: Research for Master's Thesis
CIS 7979: Advanced Research
CIS 7980: Research for Doctoral Dissertation
CNT 5106C: Computer Networks
CNT 5410: Computer and Network Security
CNT 5412: Network and System Security
CNT 5517: Mobile Computing
CNT 6107: Advanced Computer Networks
CNT 6885: Distributed Multimedia Systems
COP 5536: Advanced Data Structures
COP 5555: Programming Language Principles
COP 5615: Distributed Operating System Principles
COP 5618: Concurrent Programming
COP 5625: Programming Language Translators
COP 5725: Database Management Systems
COP 6726: Database System Implementation
COP 6755: Distributed Database Systems
COT 5405: Analysis of Algorithms
Electrical and Computer Engineering Department

Chair: J. Harris.
Graduate Coordinators: G. Bosman, J. McNair

Complete faculty listing: [Follow this link](#)

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the [Graduate Degrees Section](#) of this catalog. For more information about our program, please visit the link below.

CNT 6805: Network Science and Applications
EEE 5317C: Introduction to Power Electronics
EEE 5320: Bipolar Analog IC Design
EEE 5322: VLSI Circuits and Technology
EEE 5364: Fundamentals of Data Converters
EEE 5400: Future of Microelectronics Technology
EEE 5405: Microelectronic Fabrication Technologies
EEE 5426: Introduction to Nanodevices
EEE 5502: Foundations of Digital Signal Processing
EEE 5544: Noise in Linear Systems
EEE 5556: Electronic Countermeasures
EEE 6287: Brain Machine Interface Engineering
EEE 6321: MOS Analog IC Design
EEE 6323: Advanced VLSI Design
EEE 6325: Computer Simulation of Integrated Circuits and Devices
EEE 6328C: Microwave IC Design
EEE 6374: Radio Frequency (RF) Integrated Circuits and Technologies
EEE 6382: Semiconductor Physical Electronics
EEE 6390: VLSI Device Design
EEE 6397: Semiconductor Device Theory I
EEE 6402: Nonclassical Si-Based Nanoscale CMOS Devices
EEE 6428: Computational Nanoelectronics
EEE 6431: Carbon Nanotubes
EEE 6460: Advanced Microsystem Technology
EEE 6465: Design of MEMS Transducers
EEE 6503: Digital Filtering
EEE 6504: Adaptive Signal Processing
EEE 6512: Image Processing and Computer Vision
EEE 6586: Automatic Speech Processing
EEL 5182: State Variable Methods in Linear Systems
EEL 5225: Principles of Micro-Electro-Mechanical Transducers
EEL 5400: Airborne Sensors and Instrumentation
EEL 5401: Airborne Laser Scanning: Data Processing and Analysis
EEL 5441: Fundamentals of Photonics
EEL 5462: Advanced Antenna Systems
EEL 5490: Lightning
EEL 5666C: Intelligent Machines Design Laboratory
EEL 5718: Computer Communications
EEL 5721: Reconfigurable Computing
EEL 5737: Principles of Computer System Design
EEL 5764: Computer Architecture
EEL 5840: Elements of Machine Intelligence
EEL 5905: Individual Work
EEL 5934: Special Topics in Electrical Engineering
EEL 6065: Electrical & Computer Engineering Technical Writing
EEL 6264: Advanced Electric Energy Systems I
EEL 6265: Advanced Electric Energy Systems II
EEL 6443: Integrated and Fiber Optics
EEL 6486: Electromagnetic Field Theory and Applications I
EEL 6487: Electromagnetic Field Theory and Applications II
EEL 6507: Queuing Theory and Data Communications
EEL 6509: Wireless Communication
EEL 6528: Digital Communications with Software-defined Radios
EEL 6532: Information Theory
EEL 6533: Statistical Decision Theory
EEL 6535: Digital Communications
EEL 6537: Spectral Estimation
EEL 6550: Error Correction Coding
EEL 6555: Signal Processing for Active Sensing
EEL 6588: Wireless Ad Hoc Networks
EEL 6591: Wireless Networks
EEL 6614: Modern Control Theory
EEL 6617: Linear Multivariable Control
EEL 6619: Robust Control Systems
EEL 6686: Embedded Systems Seminar
EEL 6706: Fault-Tolerant Computer Architecture
EEL 6763: Parallel Computer Architecture
EEL 6769: Hardware-Software Interactions: Nonnumeric Processing
EEL 6814: Neural Networks for Signal Processing
EEL 6825: Pattern Recognition and Intelligent Systems
EEL 6841: Machine Intelligence and Synthesis
EEL 6871: Autonomic Computing
EEL 6892: Virtual Computers
EEL 6905: Individual Work
EEL 6910: Supervised Research
EEL 6933: Electrical and Computer Engineering Graduate Seminar
EEL 6935: Special Topics in Electrical Engineering
EEL 6940: Supervised Teaching
EEL 6971: Research for Master's Thesis
EEL 6972: Research for Engineer's Thesis
EEL 7979: Advanced Research
EEL 7980: Research for Doctoral Dissertation

Environmental Engineering Sciences Department

Director: K. Hatfield
Graduate Coordinator: P. Chadik

Complete faculty listing Follow this link.

The Department of Environmental Engineering Sciences offers graduate study in the following areas: Air Resources; Biogeochemical Systems; Environmental Nanotechnology; Solid and Hazardous Waste Management; Storm Water, Water Supply and Waste Water; Sustainability Science & Engineering; Systems Ecology and Ecological Engineering; and Water Resources. Students graduated from the program will demonstrate depth in individual focus areas as well as breadth of core knowledge concepts in all areas. Please visit the link below for more
information about our program in Environmental Engineering Sciences.

CWR 6116: Advanced Surface Hydrology
CWR 6252: Environmental Biochemistry of Trace Metals
EES 5105: Advanced Wastewater Microbiology
EES 5107: Ecological and Biological Systems
EES 5207: Environmental Chemistry
EES 5245: Water Quality Analysis
EES 5305C: Ecological and General Systems
EES 5306: Energy Analysis
EES 5307: Ecological Engineering
EES 5315: Ecology and the Environment
EES 5415: Environmental Health
EES 6007: Advanced Energy and Environment
EES 6009: Ecological Economics
EES 6026C: Environmental Systems Dynamics
EES 6028: Spatial Modeling Using Geographic Information Systems
EES 6051: Advanced Environmental Planning and Design
EES 6135: Aquatic Microbiology
EES 6136: Aquatic Autotrophs
EES 6137: Aquatic Heterotrophs
EES 6140: Biology of Exotic Species
EES 6208: Principles of Water Chemistry I
EES 6209: Principles of Water Chemistry II
EES 6225: Atmospheric Chemistry
EES 6246: Advanced Water Analysis
EES 6301: Comparative Approaches in Systems Ecology
EES 6308C: Wetland Ecology
EES 6309: Wetland Treatment Systems
EES 6318: Principles of Industrial Ecology
EES 6335: Springs Ecosystems
EES 6356: Estuarine Systems
EES 6371: Environmental Meteorology and Oceanography
EES 6405: Environmental Toxicology

ENV 5072: Pollution Control and Prevention

ENV 5075: Environmental Policy

ENV 5105: Foundations of Air Pollution

ENV 5305: Advanced Solid Waste Treatment Design

ENV 5306: Municipal Refuse Disposal

ENV 5518: Field Methods in Environmental Hydrology

ENV 5520: Fluid Flow in Environmental Systems

ENV 5555: Wastewater Treatment

ENV 5565: Hydraulic Systems Design

ENV 6050: Advanced Pollutant Transport

ENV 6052: Immiscible Fluids in Porous Media

ENV 6116: Air Pollution Sampling and Analysis

ENV 6126: Air Pollution Control Design

ENV 6130: Aerosol Mechanics

ENV 6146: Atmospheric Dispersion Modeling

ENV 6215: Health Physics

ENV 6216: Radioactive Wastes

ENV 6301: Advanced Solid Waste Containment Design

ENV 6416: Advanced Stormwater Control Systems

ENV 6435: Advanced Water Treatment Process Design

ENV 6435C: Advanced Water Treatment Process Design

ENV 6435L: Water Treatment Process Design Laboratory

ENV 6437: Advanced Wastewater System Design

ENV 6438: Advanced Potable Water Systems Design

ENV 6439: Activated Carbon: Environmental Design and Application

ENV 6441: Water Resources Planning and Management

ENV 6508: Wetland Hydrology

ENV 6510: Groundwater Restoration

ENV 6511: Biological Wastewater Treatment

ENV 6556: Advanced Waste Treatment Operations

ENV 6617: Principles of Green Engineering Design and Sustainability
ENV 6905: Individual Work

ENV 6910: Supervised Research

ENV 6916: Nonthesis Project

ENV 6932: Special Problems in Environmental Engineering

ENV 6935: Graduate Environmental Engineering Seminar

ENV 6971: Research for Master's Thesis

ENV 7979: Advanced Research

ENV 7980: Research for Doctoral Dissertation

Industrial and Systems Engineering Department

Chair: J. Geunes.
Graduate Coordinator: J. C. Smith and P. Momcilovic.

Complete faculty listing by department: Follow this link.

The Department of Industrial and Systems Engineering offers the Master of Engineering and the Master of Science degrees, each with a thesis or nonthesis option, with specialization in engineering management, manufacturing and logistics systems engineering, operations research, quality engineering, and special interest options such as health systems. In addition, the Department offers the Engineer degree and the Doctor of Philosophy degree with specialization in linear, combinatorial, nonlinear, and global optimization; supply chain management and e-commerce; financial engineering; manufacturing management; facilities location and layout; quality engineering; and stochastic processes.

Complete descriptions of the requirements for the M.E., M.S., Engineer, and Ph.D. degrees are provided in the General Information section of this catalog.

A degree in one of the engineering disciplines or in mathematics, statistics, physics, computer sciences, quantitative management, or similar fields is prerequisite. Where the student's background is deficient, an articulation program of foundation courses will be required.

The Department offers a combined bachelor's/master's degree program of B.S./M.S. Master of Science (Management), B.S./M.S. Master of Engineering or Master of Science, and a B.S. from disciplines within the College of Engineering/Master of Science or Master of Engineering. Contact the graduate coordinator for information.

EIN 6227: Advanced Quality Management and Engineering for Business Processes

EIN 6336: Advanced Production and Inventory Control

EIN 6357: Advanced Engineering Economy

EIN 6367: Facilities Layout and Location

EIN 6392: Manufacturing Management

EIN 6905: Special Problems

EIN 6910: Supervised Research

EIN 6918: Graduate Seminar

EIN 6940: Supervised Teaching

EIN 6971: Research for Master's Thesis

EIN 6972: Research for Engineer's Thesis

EIN 7933: Special Problems

EIN 7979: Advanced Research

EIN 7980: Research for Doctoral Dissertation

ESI 5236: Reliability Engineering

ESI 6162C: Advanced Industrial Applications of Microprocessors

ESI 6314: Deterministic Methods in Operations Research
Materials Science and Engineering Department

Chair: S. Phillpot
MSE Graduate Coordinator: J. J. Macholsky, Jr.
NE Graduate Coordinator: E. Dugan

Complete faculty listing by department: [Follow this link](#).

The Department of Materials Science and Engineering offers the Master of Science and Doctor of Philosophy degrees in Materials Science & Engineering (MSE) and Nuclear Engineering (NE). Requirements for these degrees are described in the General Information section of this catalog.

Degrees in MSE include specific areas of research and study in biomaterials, ceramics, composites, computational materials science, electronic materials, metals, polymers, nanomaterials, and nuclear materials. Degrees in NE include specific areas of research and study in advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security.

Nontraditional Degree Programs: The Department offers combined bachelor/master’s degree programs: MSE BSMS, NE BSMS, and students may also combine the MSE BS with the MS awarded through the Dept. of Biomedical Engineering (BME). The combined bachelor/master’s program allows qualified students to earn both degrees in materials science and engineering with savings of a tangible number of credit hours. Qualified students are allowed to begin master’s coursework in their junior years and double count specific graduate courses for both degrees. The master’s degree may be completed within 2 to 3 semesters after completing the bachelor’s degree. Program admission requirements are (1) satisfaction of Graduate School admission requirements prior to the beginning of the senior year, (2) an upper division GPA of at least 3.5 in MSE and 3.4 in NE, (3) completion of a minimum of 18 credit hours of courses, (4) admission by the Department’s Graduate Admission Committee and approval by the College of Engineering and the Graduate School. For more information, contact the Department.

The J.D./M.S. in MSE (thesis/nonthesis) is a joint degree program culminating in both the Juris Doctor degree, awarded by the College of Law, and the Master of Science (thesis/nonthesis), awarded by the College of Engineering. Under this program, a student can earn both degrees in approximately 1 year less than it would take to attain both degrees if pursued consecutively.

Concurrent M.D./Ph.D. degrees are offered through a collaborative program between the College of Medicine and Materials Science and Engineering. For more information, please contact the Department.

To be eligible for regular admission to the graduate program within the Department, the student must hold a B.S. in an appropriate major. Because of the breadth of MSE graduate programs, students with degrees in materials, ceramics, metallurgy, other engineering mathematics, or science areas (such as biology, chemistry, or physics) have found ample opportunities to pursue their research and training areas of interest.

The faculties of the Department of Materials Science and Engineering (MSE) of the University of Florida (UF) and the University of Roma Tor Vergata (URTV) have approved a cooperative
degree program in Materials Science and Engineering culminating in a Doctor of Philosophy degree, awarded by both universities. Contact the Department for details.

EMA 5008: Particle Science and Technology: Theory and Practice
EMA 5095: Critical Analysis of Research in Materials Science & Engineering
EMA 5108: Vacuum Science and Technology
EMA 5365: Biomimetic Synthesis
EMA 6001: Properties of Materials - A Survey
EMA 6005: Thin and Thick Films
EMA 6105: Fundamentals and Applications of Surface Science
EMA 6106: Advanced Phase Diagrams
EMA 6107: High Temperature Materials
EMA 6109: Physical Chemistry of High Temperature Materials
EMA 6110: Electron Theory of Solids for Materials Scientists I
EMA 6111: Electron Theory of Solids for Materials Scientists II
EMA 6114: Advanced Materials Principles 2
EMA 6128: Materials Microstructures
EMA 6136: Diffusion, Kinetics, and Transport Phenomena
EMA 6165: Polymer Physical Science
EMA 6166: Polymer Composites
EMA 6226: Synthesis and Properties of Metallic Nanostructures
EMA 6227: Advanced Mechanical Metallurgy II
EMA 6265: Mechanical Properties of Polymers
EMA 6313: Advanced Materials Principles I
EMA 6315: Colloidal Hydrodynamics
EMA 6316: Materials Thermodynamics
EMA 6319: Applied Colloid and Interfacial Chemistry for Engineers
EMA 6412: Synthesis and Characterization of Electronic Materials
EMA 6416: Organic Electronics
EMA 6445: Electroceramics
EMA 6446: Solid State Ionics
EMA 6448: Ceramic Processing
EMA 6461: Polymer Characterization
EMA 6507: Scanning Electron Microscopy and Microanalysis
EMA 6507L: Scanning Electron Microscopy and Microanalysis Lab

EMA 6510: Survey of Materials Analysis Techniques

EMA 6512C: X-ray Scattering for Thin Film Analysis

EMA 6518: Transmission Electron Microscopy

EMA 6518L: Transmission Electron Microscopy Laboratory

EMA 6519L: Specialized Research Techniques in Materials Science

EMA 6540: Fundamentals of Crystallography

EMA 6541: Applied Crystallography and Powder Diffraction

EMA 6580: Science of Biomaterials I

EMA 6581C: Polymers Biomaterials

EMA 6589: Mechanical Behavior of Biomaterials

EMA 6590: Advances in Biomaterials and Tissue Engineering for Healthcare

EMA 6591: Clinical Applications of Biomaterials and Tissue Engineering

EMA 6616: Advanced Electronic Materials Processing

EMA 6625: Advanced Metals Processing

EMA 6667: Polymer Processing

EMA 6715: Fracture of Brittle Materials

EMA 6803: Classical Methods in Computational Materials Science

EMA 6804: Quantum Methods in Computational Materials Science

EMA 6805: Mathematical Methods in Materials Science I

EMA 6806: Mathematical Methods in Materials Science II

EMA 6808: Error Analysis and Optimization Methodologies in Materials Research

EMA 6905: Individual Work in Materials Science and Engineering

EMA 6910: Supervised Research

EMA 6936: Seminar in Materials Science and Engineering

EMA 6938: Special Topics in Materials Science and Engineering

EMA 6971: Research for Master’s Thesis

EMA 7979: Advanced Research

EMA 7980: Research for Doctoral Dissertation

ENU 6805: Introduction to Nuclear Reactor Materials

Mechanical and Aerospace Engineering Department

Chair: David W. Hahn
Graduate Coordinator: D. W. Mikolaitis
The Department of Mechanical and Aerospace Engineering offers the degrees of Master of Science (thesis or nonthesis), Master of Engineering (thesis or nonthesis), Engineer, and Doctor of Philosophy in aerospace engineering and mechanical engineering. Minimum requirements for these degrees are given in the General Information section of this catalog. Additional information can be found at [http://www.mae.ufl.edu/graduate](http://www.mae.ufl.edu/graduate). Prospective students are expected to have strong backgrounds in engineering. For the first year of study, each student is generally required to take a minimum of three regular courses each semester. There are three areas of specialization available for graduate studies: dynamics, systems, and control; solid mechanics, design, and manufacturing; thermal science and fluid dynamics. Within a specialization there are unique opportunities to conduct analytical, experimental, and/or numerical study in a wide variety of challenging problems. The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

BME 5580: Introduction to Microfluidics and BioMEMS

EAS 5938: Special Topics in Aerospace Engineering

EAS 6135: Molecular Theory of Fluid Flows

EAS 6138: Gasdynamics

EAS 6242: Advanced Structural Composites

EAS 6415: Guidance and Control of Aerospace Vehicles

EAS 6905: Aerospace Research

EAS 6910: Supervised Research

EAS 6935: Graduate Seminar

EAS 6939: Special Topics in Aerospace Engineering

EAS 6971: Research for Master's Thesis

EAS 7979: Advanced Research

EAS 7980: Research for Doctoral Dissertation

EGM 5005: Laser Principles and Applications

EGM 5111L: Experimental Stress Analysis

EGM 5121C: Data Measurement and Analysis

EGM 5533: Applied Elasticity and Advanced Mechanics of Solids

EGM 5584: Biomechanics of Soft Tissue

EGM 5816: Intermediate Fluid Dynamics

EGM 5933: Special Topics in Engineering Science and Mechanics

EGM 6006: Laser-Based Diagnostics

EGM 6321: Principles of Engineering Analysis I

EGM 6322: Principles of Engineering Analysis II

EGM 6323: Principles of Engineering Analysis III

EGM 6341: Numerical Methods of Engineering Analysis I

EGM 6342: Fundamentals of Computational Fluid Dynamics

EGM 6352: Advanced Finite Element Methods

EGM 6365: Structural Optimization
EGM 6570: Principles of Fracture Mechanics
EGM 6611: Continuum Mechanics
EGM 6671: Inelastic Materials
EGM 6812: Fluid Mechanics I
EGM 6813: Fluid Mechanics II
EGM 6855: Bio-Fluid Mechanics and Bio-Heat Transfer
EGM 6905: Individual Study
EGM 6910: Supervised Research
EGM 6934: Special Topics in Engineering Mechanics
EGM 6936: Graduate Seminar
EGM 6971: Research for Master's Thesis
EGM 7819: Computational Fluid Dynamics
EGM 7845: Turbulent Fluid Flow
EGM 7979: Advanced Research
EGM 7980: Research for Doctoral Dissertation
EML 5045: Computational Methods for Design and Manufacturing
EML 5104: Classical and Statistical Thermodynamics
EML 5124: Two-Phase Flow and Boiling Heat Transfer
EML 5131: Combustion
EML 5215: Analytical Dynamics I
EML 5223: Structural Dynamics
EML 5224: Acoustics
EML 5233: Failure of Materials in Mechanical Design
EML 5311: Control System Theory
EML 5318: Computer Control of Machines and Processes
EML 5455: Clean Combustion Technology
EML 5465: Energy Management for Mechanical Engineers
EML 5515: Gas Turbines and Jet Engines
EML 5516: Design of Thermal Systems
EML 5526: Finite Element Analysis and Application
EML 5595: Mechanics of the Human Locomotor System
EML 5598: Orthopedic Biomechanics
EML 5605: Advanced Refrigeration
EML 5714: Introduction to Compressible Flow
EML 6146: Microscale Heat Transfer
EML 6154: Conduction Heat Transfer
EML 6155: Convective Heat Transfer I
EML 6156: Multiphase Convection Heat Transfer
EML 6157: Radiation Heat Transfer
EML 6216: Analytical Dynamics II
EML 6229: Introduction to Random Dynamical Systems
EML 6267: Structural Dynamics of Production Machinery
EML 6278: Advanced Rotor Dynamics
EML 6281: Geometry of Mechanisms and Robots I
EML 6282: Geometry of Mechanisms and Robots II
EML 6323: Nontraditional Manufacturing
EML 6324: Fundamentals of Production Engineering
EML 6350: Introduction to Nonlinear Control
EML 6351: Nonlinear Control II: Adaptive Control
EML 6352: Optimal Estimation
EML 6365: Robust Control Synthesis
EML 6417: Solar Energy Utilization
EML 6451: Energy Conversion
EML 6606: Advanced Air Conditioning
EML 6905: Individual Projects in Mechanical Engineering
EML 6934: Special Topics in Mechanical Engineering
EML 6936: Nonthesis Project
EML 6971: Research for Master's Thesis
EML 7979: Advanced Research
EML 7980: Research for Doctoral Dissertation

Nuclear and Radiological Engineering Department

Chair: D. Hintenlang
Graduate Coordinator: W. Bolch

Complete faculty listing [Follow this link](#).

The Department offers the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy in nuclear engineering sciences with emphases in nuclear power engineering, medical physics, and health physics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The medical physics and health physics options are offered through interdepartmental programs in cooperation with the College of Medicine (see the Health Physics and Medical Physics description under Interdisciplinary Graduate Studies).
Combined Program — The Department also offers a B.S.N.E./M.S. degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of one semester. Qualified students may begin their master's program while seniors counting 12 hours of specified nuclear engineering sciences graduate courses for both the bachelor's and master's degree requirements. Seniors admitted to the combined program are eligible for teaching and research assistantships. Program admission requirements are (1) satisfaction of Graduate School admission requirements for a master's degree, (2) an upper-division (undergraduate) GPA of at least 3.6, and (3) completion of specified bachelor's degree requirements.

The graduate program has two major programs, Nuclear Engineering and Medical Physics. Specific areas of research and study in Nuclear Engineering include advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security. The Medical Physics program is a CAMPEP accredited program designed to meet the professional requirements for a career in clinical service or research and development. Areas of Medical Physics study and research include diagnostic medical imaging, radiation therapy, nuclear medicine imaging, and radiation dosimetry.

The requirement for admission to the graduate program in nuclear engineering sciences is a bachelor's degree in an approved program in engineering or in the sciences. Students applying to the Medical Physics program should have completed the equivalent of at least a minor in physics. If the student's background is considered deficient for the planned course of study, an articulation program of background courses will be required.

Depending on professional objectives, the student may select a non-thesis option for the MS degree and substitute 8 credits of graduate-level course work, of which at least 6 credits are in nuclear engineering sciences, including a 4-credit (minimum) special project, ENU 6936. Completion of 32 credits will meet the minimum requirements for the non-thesis MS degree.

Normally, the requirements for a master's degree can be completed in 12 months. Students in the medical physics option usually take 21 to 24 months to complete the master's degree, which requires 40-42 credit hours. For a master's degree in health physics, a student must complete 42 hours of credit. If articulation work is required, it may take longer, depending upon the extent of the student's deficiency.

ENU 5142: Reliability and Risk Analysis for Nuclear Facilities
ENU 5176L: Principles of Nuclear Reactor Operations Laboratory
ENU 5186: Nuclear Fuel Cycles
ENU 5196: Nuclear Reactor Power Plant System Dynamics and Control
ENU 5516L: Nuclear Engineering Laboratory II
ENU 5615C: Nuclear Radiation Detection and Instrumentation
ENU 5615L: Nuclear Radiation Detection and Instrumentation Lab
ENU 5626: Radiation Biology
ENU 5658: Imaging System Analysis with Medical Physics Applications
ENU 5705: Advanced Concepts for Nuclear Energy
ENU 6051: Radiation Interaction Basics and Applications I
ENU 6052: Radiation Transport Basics and Applications
ENU 6053: Radiation Interaction Basics and Applications II
ENU 6061: Survey of Medical Radiological Physics
ENU 6106: Nuclear Reactor Analysis I
ENU 6107: Nuclear Reactor Analysis II
ENU 6126: Fundamentals of Reactor Kinetics
ENU 6135: Nuclear Thermal Hydraulics
ENU 6623: Radiation Dosimetry
ENU 6627: Therapeutic Radiological Physics
ENU 6636: Medical Radiation Shielding & Protection
ENU 6651: Clinical Rotation in Radiation Therapy
ENU 6655: Advanced Diagnostic Radiological Physics
ENU 6659: Nuclear Medicine Instrumentation and Procedure
ENU 6835: Nuclear Fuels

ENU 6905: Individual Work

ENU 6910: Supervised Research

ENU 6935: Nuclear and Radiological Engineering Seminar

ENU 6936: Special Projects in Nuclear and Radiological Engineering Sciences

ENU 6937: Special Topics in Nuclear and Radiological Engineering Sciences

ENU 6971: Research for Master's Thesis

ENU 6972: Research for Engineer's Thesis

ENU 7979: Advanced Research

ENU 7980: Research for Doctoral Dissertation

**Fall 2011 Critical Dates**

**Fall 2011**

**August 5, Friday, 5:00 p.m.**
Deadline for requesting transfer of credit (for fall degree candidates).

**August 18-19, Thursday-Friday, ends at 5:00 p.m. on Friday**
Registration

**August 22, Monday**
Classes start.
Drop/add starts.
Late registration starts (late fee assessed).

**August 26, Friday, 11:59 p.m.**
Drop/add ends.
Late registration ends (late fee assessed).
Deadline to withdraw with no fee liability.

**September 2, Friday, 3:30 p.m.**
Fee payment deadline.
Residency reclassification deadline for receiving the request and all documents.

**September 5, Monday, Labor Day**
No classes.

**September 9, Friday, 5:00 p.m.**
Deadline for Graduate Student Records to review S/U option applications for courses approved with this grading scheme.

**September 16, Friday, 5:00 p.m.**
Deadline to withdraw with 25% refund (W symbol assigned).
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall
Degree application deadline for degree award this term:
www.graduateschool.ufl.edu/files/graduation-checklist.pdf
http://www.isis.ufl.edu/

October 7, Friday, 5:00 p.m.

Last day to submit dissertation for review by Graduate School Editorial Office:

October 13, Thursday

Midpoint of term.
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants.
Late degree application deadline for degree award this term.

November 2, Wednesday, 5:00 p.m.

Last day to submit successfully defended thesis for review by Graduate School Editorial Office.
graduateschool.ufl.edu/files/checklist-thesis.pdf
Deadline for final exam forms to be posted to GIMS for thesis students.

November 4-5, Friday - Saturday, Homecoming

No classes.

November 11, Friday, Veterans Day

No classes.

November 21, Monday

Last day to withdraw (all courses) without failing grades.
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall

November 24-26, Thursday-Saturday, Thanksgiving

No classes.

December 2, Friday, 5:00 p.m.

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students.
Deadline for theses and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term.

December 7, Wednesday

Classes end.
Deadline if requesting transfer of credit (for spring degree candidates).

December 8-9, Thursday-Friday

Examination reading days (no classes).

December 9, Friday, 5:00 p.m.

Deadline for theses and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term. No exceptions can be granted.

December 10, Saturday, 12-16, Monday-Friday

Final examinations.
December 16, Friday, 5:00 p.m.

Last day to drop a course and receive W on transcript.

December 16-17, Friday-Saturday

Commencement.

December 19, Monday, 12:00 noon

Final term grades are due.

December 20, Tuesday

Degree certification.

December 21, Wednesday

Unofficial transcripts with grades and remarks available 8:00 a.m. via ISIS.

NOTES: All dates and deadlines are subject to change and will be updated accordingly.
Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

Spring 2012 Calendar
Summer 2012 Calendar
Expanded Academic Calendar 2011-2012

Fall 2012 Academic Calendar

August 10, Friday, 5:00 p.m.

Deadline if requesting transfer of credit (for fall degree candidates).

August 21, Tuesday, 5:00 p.m.

Registration

August 22, Wednesday

Classes start.
Drop/add starts.
Late registration starts (late fee assessed).

August 28, Tuesday, 11:59 p.m.

Drop/add ends.
Late Registration ends (late fee assessed).
Deadline to withdraw with no fee liability.

August 31, Friday, 3:30 p.m.

Fee payment deadline.
Residency reclassification deadline for receiving the request and all documents.

September 3, Monday, Labor Day

No classes.
September 7, Friday, 5:00 p.m.
Deadline for Graduate Student Records to review S/U option applications for courses approved with this grading scheme.

September 14, Friday, 5:00 p.m.
Deadline to withdraw with 25% refund (W symbol assigned).
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall
Degree application deadline for degree award this term:
www.graduateschool.ufl.edu/files/graduation-checklist.pdf
http://www.isis.ufl.edu/

October 5, Friday, 5:00 p.m.
Last day to submit dissertation for review by Graduate School Editorial Office:

October 11, Thursday
Midpoint of term
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants.
Late degree application deadline for degree award this term.
http://www.registrar.ufl.edu/currents/latedegreeinfo.html

November 5, Monday, 5:00 p.m.
Last day to submit successfully defended thesis for review by Graduate School Editorial Office:
Deadline for final exam forms to be posted to GIMS for thesis students.

November 9-10, Friday - Saturday, Homecoming
No classes.

November 12, Monday, Veterans Day, observed
No classes.

November 19, Monday
Last day to withdraw (all courses) without failing grades.
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall

November 21-24, Wednesday-Saturday, Thanksgiving
No classes.

December 3, Monday, 5:00 p.m.
Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students.
Deadline for theses and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term.

December 5, Wednesday
Classes end.
Deadline if requesting transfer of credit (for spring degree candidates).

December 6-7, Thursday-Friday
Examination reading days (no classes).

December 8, Saturday, 10-14, Monday-Friday
Final examinations.

December 10, Monday, 5:00 p.m.
Deadline for theses and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term. No exceptions can be granted.

December 14, Friday, 5:00 p.m.
Last day to drop a course and receive W on transcript.

December 14-15, Friday-Saturday
Commencement.

December 17, Monday, 12:00 noon
Final term grades are due.

December 18, Tuesday
Degree certification.

December 19, Wednesday
Unofficial transcripts with grades and remarks available 8:00 a.m. via ISIS.

NOTES: All dates and deadlines are subject to change and will be updated accordingly. Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

Fall 2013 Calendar

August 2013

August 9, Friday, 5:00 p.m.
Deadline for requesting transfer of credit (for fall degree candidates)

August 20, Tuesday, 5:00 p.m.
Registration deadline

August 21, Wednesday
Classes start.
Drop/add starts.
Late registration starts (late fee assessed after 5:00 p.m. on 8/20/13).

August 27, Tuesday, 11:59 p.m.
Drop/add ends.
Late Registration ends (late fee assessed).
Deadline to withdraw with no fee liability

August 30, Friday, 3:30 p.m.
Fee payment deadline
Residency reclassification deadline for receiving the request and all documents

September 2013

September 2, Monday, Labor Day

No classes

September 6, Friday, 5:00 p.m.

Deadline for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

September 13, Friday, 5:00 p.m.

Deadline to withdraw with 25% refund (W symbol assigned)


Degree application deadline for degree award this term

www.graduateschool.ufl.edu/files/graduation-checklist.pdf

http://www.isis.ufl.edu/

October 2013

October 4, Friday, 5:00 p.m.

Last day to submit Transmittal Letter and dissertation for review by Graduate School Editorial Office


October 11, Friday

Midpoint of term

Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants

Late degree application deadline for degree award this term

http://www.registrar.ufl.edu/currents/latrdegreeinfo.html

November 2013

November 4, Monday, 5:00 p.m.

Last day to submit successfully defended thesis for review by Graduate School Editorial Office

graduateschool.ufl.edu/files/checklist-thesis.pdf

Deadline for final exam forms to be posted to GIMS for thesis students

November 8-9, Friday-Saturday, Homecoming

No classes

November 11, Monday, Veterans Day

No classes

November 25, Monday, 5:00 p.m.

Last day to withdraw (all courses) without failing grade via ISIS

http://www.registrar.ufl.edu/currents/withdraw.html

November 27-30, Wednesday-Saturday, Thanksgiving

No classes
December 2, Monday, 5:00 p.m.

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students

Deadline for ETD Signature Pages to be posted to GIMS for thesis and dissertation students

Deadline for thesis and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term

No exceptions can be granted.


www.graduateschool.ufl.edu/graduation/checklists

December 4, Wednesday

Classes end.

Deadline for requesting transfer of credit (for spring degree candidates)

December 5-6, Thursday-Friday

Examination reading days (no classes)

December 7, Saturday, 9-13, Monday-Friday

Final examinations

December 11, Wednesday, 5:00 p.m.

Deadline for thesis and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term

No exceptions can be granted.


December 13, Friday, 5:00 p.m.

Last day to drop a course and receive W on transcript via College petition to the Registrar, Room 222 Criser

Last day to withdraw (all courses) without failing grades via College petition to the Registrar, Room 222 Criser

December 13-14, Friday-Saturday

Commencement Ceremonies*

December 16, Monday, 12:00 noon

Final term grades are due.

December 17, Tuesday

Degree certification

December 18, Wednesday

Unofficial transcripts with grades and remarks available via ISIS

NOTES: All dates and deadlines are subject to change and will be updated accordingly.

Prospective students should contact the appropriate academic unit for admission application deadlines.

* Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

Fall 2014 Calendar

August 2014

August 8, Friday, 5:00 p.m.
Deadline for requesting transfer of credit (for fall degree candidates)

**August 22, Friday, 5:00 p.m.**

Registration deadline

Last day for thesis and dissertation students to clear prior to the fall semester with the Graduate School Editorial Office.


**August 25, Monday**

Classes start.

Drop/add starts.

Late registration starts (late fee assessed after 5:00 p.m. on 8/22/14).

**August 29, Friday, 11:59 p.m.**

Drop/add ends.

Late Registration ends (late fee assessed).

Deadline to withdraw with no fee liability

**September 2014**

**September 1, Monday, Labor Day**

No classes

**September 5, Friday, 3:30 p.m.**

Fee payment deadline

Residency reclassification deadline for receiving the request and all documents

**September 12, Friday, 5:00 p.m.**

Deadline for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

**September 19, Friday, 5:00 p.m.**

Deadline to withdraw with 25% refund (W symbol assigned)


Degree application deadline for degree award this term

www.graduateschool.ufl.edu/files/graduation-checklist.pdf

http://www.isis.ufl.edu/

**October 2014**

**October 3, Friday, 5:00 p.m.**

Last day to submit Transmittal Letter and dissertation for initial review by Graduate School Editorial Office


**October 10, Friday**

Midpoint of term

Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants

Late degree application deadline for degree award this term

http://www.registrar.ufl.edu/currents/latedegreeinfo.html

**October 17-18, Friday-Saturday, Homecoming**

No classes
November 2014

November 3, Monday, 5:00 p.m.

Last day to submit successfully defended thesis for review by Graduate School Editorial Office
graduateschool.ufl.edu/files/checklist-thesis.pdf
Deadline for final exam forms to be posted to GIMS for thesis students

November 11, Tuesday, Veterans Day

No classes

November 24, Monday, 5:00 p.m.

Last day to withdraw (all courses) without failing grades via ISIS
http://www.registrar.ufl.edu/currents/withdraw.html

November 26-29, Wednesday-Saturday, Thanksgiving

No classes

December 2014

December 1, Monday, 5:00 p.m.

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students
Deadline for ETD Signature Pages to be posted to GIMS for thesis and dissertation students
Deadline for thesis and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term
No exceptions can be granted.
www.graduateschool.ufl.edu/graduation/checklists

December 10, Wednesday

Classes end.
Deadline for requesting transfer of credit (for spring degree candidates)

December 10, Wednesday, 5:00 p.m.

Deadline for thesis and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term
No exceptions can be granted.

December 11-12, Thursday-Friday

Examination reading days (no classes)

December 13, Saturday, 15-19, Monday-Friday

Final examinations

December 19, Friday, 5:00 p.m.

Last day to drop a course and receive W on transcript via College petition to the Registrar, Room 222 Criser
Last day to withdraw (all courses) without failing grades via College petition to the Registrar, Room 222 Criser

December 19-20, Friday-Saturday

Commencement Ceremonies↑

December 22, Monday, 12:00 noon
Final term grades are due.

December 23, Tuesday

Degree certification

December 24, Wednesday

Unofficial transcripts with grades and remarks available via ISIS

NOTES: All dates and deadlines are subject to change and will be updated accordingly. Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

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Purpose and Mission
Vision, Mission, and Values of the Graduate School

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Purpose and Mission of the University

The University of Florida is a public land-grant, sea-grant and space-grant research university, one of the most comprehensive in the United States. The university encompasses virtually all academic and professional disciplines. It is the largest and oldest of Florida's eleven universities, a member of the Association of American Universities and has high national rankings by academic assessment institutions. Its faculty and staff are dedicated to the common pursuit of the university's threefold mission: teaching, research and service.

The University of Florida belongs to a tradition of great universities. Together with its undergraduate and graduate students, UF faculty participate in an educational process that links the history of Western Europe with the traditions and cultures of all societies, explores the physical and biological universes and nurtures generations of young people from diverse backgrounds to address the needs of the world's societies. The university welcomes the full exploration of its intellectual boundaries and supports its faculty and students in the creation of new knowledge and the pursuit of new ideas.

Teaching is a fundamental purpose of this university at both the undergraduate and graduate levels. Research and scholarship are integral to the educational process and to the expansion of our understanding of the natural world, the intellect and the senses. Service reflects the university's obligation to share the benefits of its research and knowledge for the public good.

The university serves the nation's and the state's critical needs by contributing to a well-qualified and broadly diverse citizenry, leadership and workforce. The University of Florida must create the broadly diverse environment necessary to foster multi-cultural skills and perspectives in its teaching and research for its students to contribute and succeed in the world of the 21st century.

These three interlocking elements—teaching, research and scholarship, and service—span all the university's academic disciplines and represent the university's commitment to lead and serve the state of Florida, the nation and the world by pursuing and disseminating new knowledge while building upon the experiences of the past. The university aspires to advance by strengthening the human condition and improving the quality of life.

Vision, Mission, and Values of the University of Florida Graduate School

Vision

The Graduate School is the umbrella administrative unit that guides all graduate programs at the University of Florida, thereby allowing students to reach their educational potential with a focus on contributions to the state of Florida, the nation, and the world.

Mission

The University of Florida Graduate School is committed to ensuring that every graduate student obtains the best possible educational and research experiences, is supported by committed Graduate Faculty and can complete their degrees in a reasonable time. Policies and procedures developed by the Graduate School are intended to uphold the highest academic standards without restricting student successes in scientific, scholarly, creative, and professional arenas. The Graduate School provides administrative services to help coordinate, educate, and collaborate with the university community in all aspects of graduate education.

Values

Members of the Graduate School and graduate community value

- High academic standards
- Ethical conduct of scholarship and research
- Creating, archiving and transmitting knowledge and beauty in word, thought and the arts that enhance the human experience
- Desire for life-long learning
- Diversity
- Commitment to advance the health, education, and well-being of citizens throughout the world

Graduate Degrees Offered by the University of Florida

Master of Accounting (M.Acc.)

Accounting

Master of Advertising (M.Adv.)

Advertising

Master of Agribusiness (M.AB.)

Food and Resource Economics
Tropical Conservation and Development

Master of Architecture (M.Arch.)

Architecture
Historic Preservation
Sustainable Architecture
Sustainable Design

**Master of Arts (MA)**

- Anthropology  
- Historic Preservation  
- Tropical Conservation and Development  
- Art  
- Digital Arts and Sciences  
- Art Education  
- Art History  
- Arts in Medicine  
- Business Administration  
- Marketing  
- Classical Studies  
- Communication Sciences and Disorders  
- Criminology, Law, and Society  
- Digital Arts and Sciences  
- Economics  
- English  
- French and Francophone Studies  
- Geography  
  - Applications of Geographic Technologies  
  - Geographic Information Systems  
  - Tropical Conservation and Development  
  - Wetland Sciences  
- German  
- History  
- International Business  
- Jewish Studies  
- Latin  
- Latin American Studies  
- Linguistics  
- Mathematics  
- Museology  
- Political Science - International Relations  
- Political Science  
- International Development Policy and Administration  
- Political Campaigning  
- Public Affairs  
- Tropical Conservation and Development  
- Psychology  
- Religion  
- Jewish Studies  
- Tropical Conservation and Development  
- Women's/Gender Studies  
- Sociology  
- Tropical Conservation and Development  
- Spanish  
- Women's Studies  

**Master of Arts in Education (MAE)**

- Curriculum and Instruction  
- Early Childhood Education  
- Educational Leadership  
- Elementary Education  
- English Education  
- Marriage and Family Counseling  
- Mathematics Education  
- Mental Health Counseling  
- Reading Education  
- Research and Evaluation Methodology  
- School Counseling and Guidance  
- School Psychology  
- Science Education  
- Social Studies Education  
- Special Education  
- Student Personnel in Higher Education  

**Master of Arts in Mass Communication (MAMC)**

- Mass Communication  

**Master of Arts in Teaching (MAT)**
Anthropology
Tropical Conservation and Development
French and Francophone Studies
Latin
Latin American Studies
Tropical Conservation and Development
Mathematics
Philosophy
Political Science - International Relations
Spanish

Master of Arts in Urban and Regional Planning (M.A.U.R.P.)
Urban and Regional Planning
Geographic Information Systems
Historic Preservation
Sustainable Design
Tropical Conservation and Development
Wetland Sciences

Master of Business Administration (M.B.A.)
Business Administration
Competitive Strategy
Entrepreneurship
Finance
Global Management
Graham-Buffett Security Analysis
Human Resource Management
Information Systems and Operations Management
International Studies
Latin American Business
Management
Marketing
Real Estate
Sports Administration

Master of Construction Management (M.C.M)
Construction Management
Historic Preservation
Sustainable Construction
Sustainable Design

Master of Education (M.Ed.)
Curriculum and Instruction
Early Childhood Education
Educational Leadership
Elementary Education
English Education
Marriage and Family Counseling
Mathematics Education
Mental Health Counseling
Reading Education
Research and Evaluation Methodology
School Counseling and Guidance
School Psychology
Science Education
Social Studies Education
Special Education
Student Personnel in Higher Education

Master of Engineering (M.E.)
Aerospace Engineering
Agricultural and Biological Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Biomedical Engineering
Chemical Engineering
Civil Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Coastal and Oceanographic Engineering
Computer Engineering
Electrical and Computer Engineering
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Master of Music (M.M.)

Music
- Choral Conducting
- Composition
- Electronic Music
- Ethnomusicology
- Instrumental Conducting
- Music Education
- Music History and Literature
- Music Theory
- Performance
- Sacred Music

Music Education
- Choral Conducting
- Composition
- Electronic Music
- Ethnomusicology
- Instrumental Conducting
- Music History and Literature
- Music Theory
- Performance
- Piano Pedagogy

Master of Occupational Therapy (M.O.T.)

Occupational Therapy

Master of Public Health (M.P.H.)

Public Health
- Biostatistics
- Environmental Health
- Epidemiology
- Health Management and Policy
- Public Health Practice
- Social and Behavioral Sciences

Master of Science (M.S.)

Aerospace Engineering
- Agricultural and Biological Engineering
- Geographic Information Systems
- Hydrologic Sciences
- Wetland Sciences

Agricultural Education and Communication
- Tropical Conservation and Development

Agronomy
- Agroecology
- Geographic Information Systems
- Tropical Conservation and Development

Animal Molecular and Cellular Biology

Animal Sciences
- Applied Physiology and Kinesiology
- Athletic Training/Sports Medicine
- Biobehavioral Science
- Clinical Exercise Physiology
- Exercise Physiology
- Human Performance

Astronomy

Biochemistry and Molecular Biology

Biomedical Engineering
- Medical Physics

Biostatistics

Botany
- Tropical Conservation and Development

Business Administration
- Marketing
- Retailing

Chemical Engineering

Chemistry

Civil Engineering
- Geographic Information Systems
- Hydrologic Sciences
- Wetland Sciences

Coastal and Oceanographic Engineering

Computer Engineering
- Digital Arts and Sciences
Computer Sciences
Dental Sciences
  Endodontics
  Orthodontics
  Periodontics
  Prosthodontics
Digital Arts and Sciences
Electrical and Computer Engineering
Entomology and Nematology
Entrepreneurship
Environmental Engineering Sciences
  Geographic Information Systems
  Hydrologic Sciences
  Wetland Sciences
Epidemiology
  Biostatistics
  Health Management and Policy
Family, Youth and Community Sciences
  Community Studies
  Family and Youth Development
  Nonprofit Organization Development
Finance
Fisheries and Aquatic Sciences
  Ecological Restoration
  Geographic Information Systems
  Natural Resource Policy and Administration
  Wetland Sciences
Food and Resource Economics
  Agribusiness
  Hydrologic Sciences
  Toxology
  Tropical Conservation and Development
Food Science and Human Nutrition
  Nutritional Sciences
Forest Resources and Conservation
  Agroforestry
  Ecological Restoration
  Geographic Information Systems
  Geomatics
  Hydrologic Sciences
  Natural Resource Policy and Administration
  Tropical Conservation and Development
  Wetland Sciences
Geography
  Applications of Geographic Technologies
  Geographic Information Systems
  Hydrologic Sciences
  Tropical Conservation and Development
  Wetland Sciences
Geology
  Hydrologic Sciences
  Tropical Conservation and Development
  Wetland Sciences
Health Education and Behavior
Horticultural Sciences
  Environmental Horticulture
  Horticultural Sciences
Industrial and Systems Engineering
Information Systems and Operations Management
Supply Chain Management
Interdisciplinary Ecology
  Agricultural and Biological Engineering
  Agricultural Education and Communication
  Agronomy
  Anthropology
  Architecture
  Biochemistry and Molecular Biology
  Botany
  Business Administration
  Chemistry
  Civil Engineering
  Climate Science
  Coastal and Oceanographic Engineering
  Economics
  English
Entomology and Nematology
Environmental Engineering Sciences
Family, Youth and Community Sciences
Farming Systems
Fisheries and Aquatic Sciences
Food and Resource Economics
Food Science
Forest Resources and Conservation
Foundations of Education
Geographic Information Systems
Geography
Geology
Health and Human Performance
Horticultural Sciences
Landscape Architecture
Mathematics
Microbiology and Cell Science
Nuclear and Radiological Engineering
Philosophy
Political Science
Religion
Sociology
Soil and Water Science
Statistics
Tropical Conservation and Development
Urban and Regional Planning
Veterinary Medical Sciences
Wildlife Ecology and Conservation
Women's/Gender Studies
Zoology

Management
Health Care Risk Management
Materials Science and Engineering
Mathematics
Mechanical Engineering
Medical Sciences
Aging and Geriatric Practice
Clinical and Translational Science
Health Outcomes and Policy
Translational Biotechnology
Microbiology and Cell Science
Medical Microbiology and Biochemistry
Nuclear Engineering Sciences
Physics
Plant Molecular and Cellular Biology
Plant Pathology
Psychology
Real Estate
Recreation, Parks, and Tourism
Historic Preservation
Natural Resource Recreation
Therapeutic Recreation
Tourism
Tropical Conservation and Development
Soil and Water Science
Agroecology
Geographic Information Systems
Hydrologic Sciences
Tropical Conservation and Development
Wildland Sciences
Sport Management
Historic Preservation
Tropical Conservation and Development
Veterinary Medical Sciences
Forensic Toxicology
Shelter Medicine
Veterinary Forensic Sciences
Wildlife Ecology and Conservation
Geographic Information Systems
Tropical Conservation and Development
Wildland Sciences
Zoology
Tropical Conservation and Development
Master of Science in Architectural Studies (M.S.A.S.)
  Architecture
  Historic Preservation
  Sustainable Architecture
  Sustainable Design

Master of Science in Construction Management (M.S.C.M)
  Construction Management
  Historic Preservation
  Sustainable Construction
  Sustainable Design

Master of Science in Entrepreneurship (M.S.E.N.T)
  Entrepreneurship

Master of Science in Information Systems and Operations Management (M.S.I.S.O.M)
  Information Systems and Operations Management
  Supply Chain Management

Master of Science in Nursing (M.S.Nsg.)
  Nursing

Master of Science in Pharmacy (M.S.P.)
  Pharmaceutical Sciences
    Clinical Pharmacy
    Clinical Toxicology
    Forensic DNA and Serology
    Forensic Drug Chemistry
    Forensic Science
    Medication Therapy Management
    Medicinal Chemistry
    Pharmaceutical Chemistry
    Pharmaceutical Outcomes and Policy
    Pharmacodynamics
    Pharmacy

Master of Science in Statistics (M.S.Stat.)
  Statistics

Master of Science in Teaching (M.S.T.)
  Astronomy
  Botany
  Tropical Conservation and Development
  Wetland Sciences
  Chemistry
  Geography
  Geologic Information Systems
  Tropical Conservation and Development
  Wetland Sciences
  Geology
  Tropical Conservation and Development
  Wetland Sciences
  Mathematics
  Physics
  Zoology
  Tropical Conservation and Development
  Wetland Sciences

Master of Statistics (M.Stat.)
  Statistics

Master of Sustainable Development Practice (M.D.P.)
  Sustainable Development Practice

Engineer (Engr.)
  Chemical Engineering
  Industrial and Systems Engineering

Specialist in Education (Ed.S.)
  Curriculum and Instruction
  Educational Leadership
  Higher Education Administration
  Marriage and Family Counseling
  Mental Health Counseling
  Research and Evaluation Methodology
School Counseling and Guidance
School Psychology
Special Education
Student Personnel in Higher Education

**Doctor of Audiology (Au.D.)**
Audiology

**Doctor of Education (Ed.D.)**
Counseling and Counselor Education
Marriage and Family Counseling
Mental Health Counseling
School Counseling and Guidance
Curriculum and Instruction
Educational Leadership
Educational Policy
Higher Education Administration
Marriage and Family Counseling
Mental Health Counseling
Research and Evaluation Methodology
School Counseling and Guidance
School Psychology
Special Education

**Doctor of Philosophy (Ph.D.)**
Aerospace Engineering
Agricultural and Biological Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Agricultural Education and Communication
Tropical Conservation and Development
Agronomy
Toxicology
Tropical Conservation and Development
Animal Molecular and Cellular Biology
Animal Sciences
Anthropology
Historic Preservation
Tropical Conservation and Development
Women's/Gender Studies
Art History
Astronomy
Biochemistry and Molecular Biology
Animal Molecular and Cellular Biology
Imaging Science and Technology
Mammalian Genetics
Toxicology
Biomedical Engineering
Clinical and Translational Science
Medical Physics
Biostatistics
Botany
Tropical Conservation and Development
Wetland Sciences
Business Administration
Accounting
Finance
Information Systems and Operations Management
Insurance
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Marketing
Quantitative Finance
Real Estate and Urban Analysis
Chemical Engineering
Chemistry
Clinical and Translational Science
Imaging Science and Technology
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Hydrologic Sciences
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Communication Sciences and Disorders
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  Mental Health Counseling
  School Counseling and Guidance
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Curriculum and Instruction
Design, Construction, and Planning
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  Educational Policy
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Environmental Engineering Sciences
  Geographic Information Systems
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  Wetland Sciences
Epidemiology
  Clinical and Translational Science
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  Geographic Information Systems
  Natural Resource Policy and Administration
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Food and Resource Economics
  Hydrologic Sciences
  Toxicology
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Forest Resources and Conservation
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  Hydrologic Sciences
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  Hydrologic Sciences
  Tropical Conservation and Development
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  Applied Physiology and Kinesiology
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Horticultural Sciences
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Quantitative Finance

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Clinical and Translational Science
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Imaging Science and Technology
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Molecular Cell Biology
Neuroscience
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Toxicology

Mental Health Counseling
Microbiology and Cell Science

Music

Nuclear Engineering Sciences

Nursing Sciences

Nutritional Sciences

Pharmaceutical Sciences

Philosophy

Physics

Plant Molecular and Cellular Biology

Plant Pathology

Political Science

Public Health

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Soil and Water Science

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Veterinary Medical Sciences

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## Graduate Degrees Table

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</table>
## Graduate Degrees Table

### Listing of Degrees and Programs

See the Majors Section of this catalog for specializations in the approved programs.

T=thesis or dissertation N=non-thesis or no dissertation. Degree names and correct abbreviations are listed in bold. Possible majors (if different than the degree name) are listed in normal type.

Possible concentrations that are not interdisciplinary are listed under the major in italics. Interdisciplinary concentrations can be found in the Interdisciplinary Concentrations section of this catalog.

<table>
<thead>
<tr>
<th>Degree Name</th>
<th>Specialization(s)</th>
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<td>Master of Advertising (M.Adv.)</td>
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<td>Master of Agribusiness (M.AB.)</td>
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<tr>
<td></td>
<td>T Tropical Conservation and Development</td>
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<tr>
<td>Master of Architecture (M.Arch.)</td>
<td>T Architecture</td>
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<tr>
<td></td>
<td>T Historic Preservation</td>
</tr>
</tbody>
</table>
Sustainable Architecture
Sustainable Design

Master of Arts (MA)\textsuperscript{TN}

Anthropology \textsuperscript{TN}
Historic Preservation\textsuperscript{TN}
Tropical Conservation and Development\textsuperscript{TN}

Art \textsuperscript{T}
Digital Arts and Sciences\textsuperscript{T}
Art Education \textsuperscript{TN}
Art History \textsuperscript{T}
Arts in Medicine\textsuperscript{N}
Business Administration\textsuperscript{TN}
Marketing\textsuperscript{TN}
Classical Studies \textsuperscript{T}
Communication Sciences and Disorders\textsuperscript{TN}
Criminology, Law, and Society\textsuperscript{TN}
Digital Arts and Sciences\textsuperscript{T}
Economics\textsuperscript{TN}
English\textsuperscript{TN}
French and Francophone Studies\textsuperscript{TN}
Geography \textsuperscript{T}
Applications of Geographic Technologies \textsuperscript{T}
Geographic Information Systems\textsuperscript{T}
Tropical Conservation and Development\textsuperscript{T}
Wetland Sciences\textsuperscript{T}
German\textsuperscript{TN}
History\textsuperscript{TN}
Historic Preservation\textsuperscript{TN}
Jewish Studies\textsuperscript{TN}
International Business\textsuperscript{TN}
Latin \textsuperscript{T}
Latin American Studies \textsuperscript{T}
Tropical Conservation and Development\textsuperscript{T}
Linguistics\textsuperscript{TN}
Mathematics\textsuperscript{TN}
Museology\textsuperscript{T}
Historic Preservation\textsuperscript{T}
Philosophy \textsuperscript{TN}
Political Science - International Relations\textsuperscript{TN}
Political Science \textsuperscript{TN}
International Development Policy and Administration\textsuperscript{TN}
Political Campaigning\textsuperscript{TN}
Public Affairs\textsuperscript{TN}
Tropical Conservation and Development\textsuperscript{TN}
Psychology\textsuperscript{TN}
Religion\textsuperscript{TN}
Jewish Studies\textsuperscript{TN}
Tropical Conservation and Development\textsuperscript{TN}
Women's/Gender Studies\textsuperscript{TN}
Sociology\textsuperscript{TN}
Tropical Conservation and Development\textsuperscript{TN}
Spanish\textsuperscript{TN}
Women's Studies\textsuperscript{TN}

Master of Arts in Education (MAE)\textsuperscript{T}

Curriculum and Instruction\textsuperscript{T}
Early Childhood Education \textsuperscript{T}
Educational Leadership \textsuperscript{T}
Elementary Education \textsuperscript{T}
English Education \textsuperscript{T}
Marriage and Family Counseling \textsuperscript{T}
Mathematics Education \textsuperscript{T}
Mental Health Counseling \textsuperscript{T}
Reading Education \textsuperscript{T}
Research and Evaluation Methodology \textsuperscript{T}
School Counseling and Guidance \textsuperscript{T}
School Psychology \textsuperscript{T}
Science Education \textsuperscript{T}
Social Studies Education \textsuperscript{T}
Special Education \textsuperscript{T}
Student Personnel in Higher Education \textsuperscript{T}

Master of Arts in Mass Communication (MAMC)\textsuperscript{TN}

Mass Communication\textsuperscript{TN}
Master of Arts in Teaching (M.A.T.)

- Anthropology
- Tropical Conservation and Development
- French and Francophone Studies
- Latin
- Latin American Studies
- Tropical Conservation and Development
- Mathematics
- Philosophy
- Political Science - International Relations
- Spanish

Master of Arts in Urban and Regional Planning (MAURP)

- Urban and Regional Planning
- Geographic Information Systems
- Historic Preservation
- Sustainable Design
- Tropical Conservation and Development
- Wetland Sciences

Master of Business Administration (M.B.A.)

- Business Administration
- Competitive Strategy
- Entrepreneurship
- Finance
- Global Management
- Graham-Buffett Security Analysis
- Human Resource Management
- Information Systems and Operations Management
- International Studies
- Latin American Business
- Management
- Marketing
- Real Estate
- Sports Administration

Master of Construction Management (M.C.M.)

- Construction Management
- Historic Preservation
- Sustainable Construction
- Sustainable Design

Master of Education (M.Ed.)

- Curriculum and Instruction
- Early Childhood Education
- Educational Leadership
- Elementary Education
- English Education
- Marriage and Family Counseling
- Mathematics Education
- Mental Health Counseling
- Reading Education
- Research and Evaluation Methodology
- School Counseling and Guidance
- School Psychology
- Science Education
- Social Studies Education
- Special Education
- Student Personnel in Higher Education

Master of Engineering (M.E.)

- Aerospace Engineering
- Agricultural and Biological Engineering
- Geographic Information Systems
- Hydrologic Sciences
- Wetland Sciences
- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Geographic Information Systems
- Hydrologic Sciences
- Wetland Sciences
- Coastal and Oceanographic Engineering
- Computer Engineering
- Electrical and Computer Engineering
- Environmental Engineering Sciences
Master of Fine Arts (M.F.A.)
- Art
- Creative Writing
- Theatre

Master of Fire and Emergency Services (M.F.E.S.)
- Fire and Emergency Services

Master of Fisheries and Aquatic Sciences (M.F.A.S.)
- Fisheries and Aquatic Sciences
- Ecological Restoration
- Geographic Information Systems
- Natural Resource Policy and Administration
- Wetland Sciences

Master of Forest Resources and Conservation (M.F.R.C.)
- Forest Resources and Conservation
- Agroforestry
- Ecological Restoration
- Geographic Information Systems
- Geomatics
- Natural Resource Policy and Administration
- Tropical Conservation and Development
- Wetland Sciences

Master of Health Administration (M.H.A.)
- Health Administration

Master of Health Science (M.H.S.)
- Environmental and Global Health
- One Health
- Occupational Therapy

Master of Historic Preservation (M.H.P.)
- Historic Preservation

Master of Interior Design (M.I.D.)
- Interior Design
- Historic Preservation
- Sustainable Design

Master of International Business (M.I.B.)
- International Business

Master of International Construction Management (M.I.C.M.)
- International Construction Management
- Historic Preservation

Master of Landscape Architecture (M.L.A.)
- Landscape Architecture
- Geographic Information Systems
- Historic Preservation
- Sustainable Design
- Wetland Sciences

Master of Latin (M.L.)
- Latin

Master of Laws in Comparative Law (LL.M.Comp.Law)
- Comparative Law
- Tropical Conservation and Development

Master of Laws in Environmental and Land Use Law (LL.M.EL.U.)
- Environmental and Land Use Law

Master of Laws in International Taxation (LL.M.Tax.)
- International Taxation

Master of Laws in Taxation (LL.M.Tax.)
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<td>Public Health Practice</td>
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<td>Agricultural Education and Communication</td>
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<td>Tropical Conservation and Development</td>
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<td><strong>Agronomy</strong></td>
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<td>Geographic Information Systems</td>
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<td>Tropical Conservation and Development</td>
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<tr>
<td><strong>Animal and Cellular Biology</strong></td>
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<td><strong>Animal Sciences</strong></td>
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<td>Applied Physiology and Kinesiology</td>
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<td>Athletic Training/Sports Medicine</td>
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<td>Biobehavioral Science</td>
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<tr>
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<td><strong>Computer Engineering</strong></td>
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Prosthodontics

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Statistics
Tropical Conservation and Development
Urban and Regional Planning
Veterinary Medical Sciences
Wetland Sciences
Wildlife Ecology And Conservation
Women's/Gender Studies
Zoology
Management
Health Care Risk Management
Materials Science and Engineering
Mathematics
Mechanical Engineering
Medical Sciences
Aging and Geriatric Practice
Clinical and Translational Science
Health Outcomes and Policy
Translational Biotechnology
Microbiology and Cell Science
Medical Microbiology and Biochemistry
Nuclear Engineering Sciences
Physics
Plant Molecular and Cellular Biology
Plant Pathology
Psychology
Real Estate
Recreation, Parks, and Tourism
Historic Preservation
Natural Resource Recreation
Therapeutic Recreation
Tourism
Tropical Conservation and Development
Soil and Water Science
Agroecology
Geographic Information Systems
Hydrologic Sciences
Tropical Conservation and Development
Wetland Sciences
Sport Management
Historic Preservation
Tropical Conservation and Development
Veterinary Medical Sciences
Forensic Toxicology
Shelter Medicine
Veterinary Forensic Sciences
Wildlife Ecology and Conservation
Geographic Information Systems
Tropical Conservation and Development
Wetland Sciences
Zoology
Tropical Conservation and Development
Wetland Sciences

Master of Science in Architectural Studies (M.S.A.S.)
  Architecture
  Historic Preservation
  Sustainable Architecture
  Sustainable Design

Master of Science in Construction Management (M.S.C.M)
  Construction Management
  Historic Preservation
  Sustainable Construction
  Sustainable Design

Master of Science in Entrepreneurship (M.S.E.N.T)
  Entrepreneurship

Master of Science in Information Systems and Operations Management (M.S.I.S.O.M)
  Information Systems and Operations Management
  Supply Chain Management

Master of Science in Nursing (M.S.Nsg.)
  Nursing

Master of Science in Pharmacy (M.S.P.)
  Pharmaceutical Sciences
  Clinical Pharmacy
  Clinical Toxicology
  Forensic DNA and Serology
  Forensic Drug Chemistry
  Forensic Science
  Medication Therapy Management
  Medicinal Chemistry
  Pharmaceutical Chemistry
  Pharmaceutical Outcomes and Policy
  Pharmacodynamics
  Pharmacy

Master of Science in Statistics (M.S.Stat.)
  Statistics

Master of Science in Teaching (M.S.T.)
  Astronomy
  Botany
  Chemistry
  Geography
  Geology
  Mathematics
  Physics
  Zoology

Master of Statistics (M.Stat.)
  Statistics

Master of Sustainable Development Practice (M.D.P.)
  Sustainable Development Practice

Engineer (Engr.)
  Chemical Engineering
  Industrial and Systems Engineering

Specialist in Education (Ed.S.)
  Curriculum and Instruction
  Educational Leadership
  Higher Education Administration
  Marriage and Family Counseling
  Mental Health Counseling
Research and Evaluation Methodology
School Counseling and Guidance
School Psychology
Special Education
Student Personnel in Higher Education

Doctor of Audiology (Au.D.)
Audiology

Doctor of Education (Ed.D.)
Counseling and Counselor Education
Marriage and Family Counseling
Mental Health Counseling
School Counseling and Guidance
Curriculum and Instruction
Educational Leadership
Educational Policy
Higher Education Administration
Educational Policy
Marriage and Family Counseling
Mental Health Counseling
Research and Evaluation Methodology
School Counseling and Guidance
School Psychology
Special Education

Doctor of Philosophy (Ph.D.)
Aerospace Engineering
Agricultural and Biological Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Agricultural Education and Communication
Tropical Conservation and Development
Agronomy
Toxicology
Tropical Conservation and Development
Animal Molecular and Cellular Biology
Animal Sciences
Animal Molecular and Cellular Biology
Anthropology
Historic Preservation
Tropical Conservation and Development
Women's/Gender Studies
Art History
Astronomy
Biochemistry and Molecular Biology
Animal Molecular and Cellular Biology
Imaging Science and Technology
Mammalian Genetics
Toxicology
Biomedical Engineering
Clinical and Translational Science
Medical Physics
Biostatistics
Botany
Tropical Conservation and Development
Wetland Sciences
Business Administration
Accounting
Finance
Information Systems and Operations Management
Insurance
Management
Marketing
Quantitative Finance
Real Estate and Urban Analysis
Chemical Engineering
Chemistry
Clinical and Translational Science
Imaging Science and Technology
Civil Engineering
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Classical Studies
Coastal and Oceanographic Engineering
Communication Sciences and Disorders
Computer Engineering
Counseling and Counselor Education
Marriage and Family Counseling
Mental Health Counseling
School Counseling and Guidance
Counseling Psychology
Criminology, Law, and Society
Curriculum and Instruction
Design, Construction, and Planning
Construction Management
Historic Preservation
Interior Design
Landscape Architecture
Urban and Regional Planning
Economics
Educational Leadership
Educational Policy
Electrical and Computer Engineering
English
Entomology and Nematology
Environmental Engineering Sciences
Geographic Information Systems
Hydrologic Sciences
Wetland Sciences
Epidemiology
Clinical and Translational Science
Fisheries and Aquatic Sciences
Ecological Restoration
Geographic Information Systems
Natural Resource Policy and Administration
Wetland Sciences
Food and Resource Economics
Hydrologic Sciences
Toxicology
Tropical Conservation and Development
Food Science
Toxicology
Forest Resources and Conservation
Agroforestry
Geographic Information Systems
Geomatics
Hydrologic Sciences
Natural Resource Policy and Administration
Toxicology
Tropical Conservation and Development
Wetland Sciences
Genetics and Genomics
Clinical and Translational Science
Geography
Geographic Information Systems
Hydrologic Sciences
Tropical Conservation and Development
Wetland Sciences
Geology
Hydrologic Sciences
Tropical Conservation and Development
Wetland Sciences
German
Women's/Gender Studies
Health and Human Performance
Applied Physiology and Kinesiology
Biobehavioral Science
Clinical and Translational Science
Exercise Physiology
Health Behavior
Historic Preservation
Recreation, Parks, and Tourism
Sport Management
Health Services Research
Higher Education Administration
Educational Policy
History
Historic Preservation
Women's/Gender Studies

Horticultural Sciences
  Environmental Horticulture
  Horticultural Sciences
  Toxicology

Industrial and Systems Engineering
  Quantitative Finance

Interdisciplinary Ecology
  Agricultural and Biological Engineering
  Agricultural Education and Communication
  Agronomy
  Anthropology
  Architecture
  Biochemistry and Molecular Biology
  Botany
  Business Administration
  Chemistry
  Civil Engineering
  Climate Science
  Coastal and Oceanographic Engineering
  Economics
  English
  Entomology and Nematology
  Environmental Engineering Sciences
  Family, Youth and Community Sciences
  Farming Systems
  Fisheries and Aquatic Sciences
  Food and Resource Economics
  Food Science
  Forest Resources and Conservation
  Foundations of Education
  Geographic Information Systems
  Geography
  Geology
  Health and Human Performance
  Horticultural Sciences
  Hydrologic Sciences
  Landscape Architecture
  Mathematics
  Microbiology and Cell Science
  Nuclear and Radiological Engineering
  Philosophy
  Political Science
  Religion
  Sociology
  Soil and Water Science
  Statistics
  Tropical Conservation and Development
  Urban and Regional Planning
  Veterinary Medical Sciences
  Wetland Sciences
  Wildlife Ecology And Conservation

Women's/Gender Studies

Zoology

Linguistics

Marriage and Family Counseling

Mass Communication

Materials Science and Engineering

Mathematics

Imaging Science and Technology

Quantitative Finance

Mechanical Engineering

Medical Sciences
  Biochemistry and Molecular Biology
  Clinical and Translational Science
  Genetics
  Health Outcomes and Policy
  Imaging Science and Technology
  Immunology and Microbiology
  Molecular Cell Biology
  Neuroscience
  Physiology and Pharmacology
  Toxicology
Mental Health Counseling
Microbiology and Cell Science
Toxicology

Music
Composition
Music History and Literature

Music Education

Nuclear Engineering Sciences
Imaging Science and Technology

Nursing Sciences
Clinical and Translational Science

Nutritional Sciences
Clinical and Translational Science

Pharmaceutical Sciences
Clinical and Translational Science
Clinical Pharmaceutical Sciences
Medicinal Chemistry
Pharmaceutical Outcomes and Policy
Pharmacodynamics
Pharmacy
Toxicology

Philosophy

Physics
Imaging Science and Technology

Plant Molecular and Cellular Biology
Toxicology

Plant Pathology
Toxicology

Political Science
Educational Policy
Tropical Conservation and Development

Psychology
Clinical and Health Psychology
Clinical and Translational Science
Women's/Gender Studies

Public Health
Environmental Health
One Health
Social and Behavioral Sciences

Rehabilitation Science
Clinical and Translational Science

Religion
Tropical Conservation and Development
Women's/Gender Studies

Research and Evaluation Methodology

Romance Languages
French and Francophone Studies
Spanish

School Counseling and Guidance

School Psychology

Sociology
Tropical Conservation and Development
Women's/Gender Studies

Soil and Water Science
Geographic Information Systems
Hydrologic Sciences
Tropical Conservation and Development
Wetland Sciences

Special Education

Statistics
Quantitative Finance

Veterinary Medical Sciences
Animal Molecular and Cellular Biology
Clinical and Translational Science
Toxicology

Wildlife Ecology and Conservation
Geographic Information Systems
Tropical Conservation and Development
Wetland Sciences

Zoology
Animal Molecular and Cellular Biology
Tropical Conservation and Development
Wetland Sciences

Doctor of Plant Medicine (D.P.M.)
HHP Courses - filtered

College of Health and Human Performance

Dear M. Reid

Complete faculty listing: Follow this link.

Research and teaching in HHP has an impact on almost every aspect of the human condition. The college's four centers – the Florida Center for Health Promotion, Center for Exercise Science, and the Eric Friedheim Tourism Institute – as well as its three primary departments – Applied Physiology and Kinesiology, Health Education and Behavior, and Tourism, Recreation, and Sport Management Department – place the college firmly in a position to influence and improve an array of societal problems and challenges.

For more information about the College of Health and Human Performance, please see our website: http://hhp.ufl.edu

Departments and Programs within the College of Health and Human Performance

College of Health and Human Performance Courses

Applied Physiology and Kinesiology Department

Chair: S. Dodd
Graduate Coordinator: E. Christou

Complete faculty listing by department: Follow this link.

The Ph.D. program is offered with concentrations in biobehavioral science and exercise physiology. Students in the biobehavioral science concentration specialize in one of four areas: biomechanics, exercise/performance psychology, motor control/learning, or sports medicine. These interdisciplinary concentrations focus on preparing students as researchers with a blend of course work and research training.

A program leading to the Master of Science degree in applied physiology and kinesiology (thesis and non-thesis options) is also offered. Areas of concentration for the master's program include athletic training/sports medicine, biobehavioral science, clinical exercise physiology, exercise physiology, and human performance. The thesis option gives the student an opportunity to study, conduct research, and prepare a thesis in an area of special interest. The non-thesis option offers the student a specialization in a selected area of study, with additional work in other areas. A comprehensive written examination is required for this option, as is a capstone internship experience. Requirements for these degrees are given in the General Information section of this catalog.

Athletic training/sports medicine: This concentration provides comprehensive academic preparation, research, and clinical experience in the areas of injury prevention, assessment, treatment, rehabilitation, and therapeutic modalities.

Biobehavioral Science: This thesis mandatory concentration is multidisciplinary and flexible, permitting students to tailor their scholarly experience to the development of research skills in one of several related disciplines: biomechanics, motor control and learning, and exercise and performance psychology. Each area of specialization is briefly described below.

- **Biomechanics:** The specialization in biomechanics draws from the fields of neuroscience, engineering, and medicine. The course work and training include kinematics and kinetics of movement. Course work also includes anatomy/kinesiology, biomechanics, engineering neuroscience, medicine, psychology, physical therapy, and statistics.
- **Motor learning/ control:** This interdisciplinary specialization draws on experiences and a knowledge base in the movement and sport sciences, cognitive sciences, and physical therapy. Students are prepared to conduct research and provide expertise in traditional motor performance and learning settings.
- **Exercise/performance psychology:** This area of specialization provides the basis for understanding and influencing the underlying thought processes and attitudes that will ultimately determine the performance of individuals involved in sport, exercise, and other achievement oriented activities. The primary emphasis is to develop the scientific background and skills necessary for doctoral training and research.

Clinical exercise physiology: The purpose of this non-thesis program is to give students the opportunity to develop advanced knowledge and competencies in Exercise Physiology. Clinical Exercise Physiologists typically practice in hospitals, clinics and wellness centers as part of a health care team that administers tests and develops programs of exercise, counseling, and education for patients with cardiopulmonary, metabolic, and musculoskeletal diseases.

Exercise physiology: This thesis mandatory area of concentration is concerned with the scientific study of how the various physiological systems of the human body respond to physical activity. It is a multidisciplinary field with strong ties to the basic life sciences and medicine, and application to clinical, normal, and athletic populations.

Human performance: This non-thesis master's concentration merges a range of specializations within the Department into a curriculum that provides educational experiences to graduate students interested in studying the factors that determine human performance in both athletic and nonathletic domains. This flexible approach allows students to focus on specific applications that best meet their individual interests. Human performance incorporates components such as nutrition, psychology, motor behavior, and physiology that are applicable to athletic and clinical populations.

**APK 5127:** Assessment in Exercise Science

**APK 5404:** Sport Psychology

**APK 6111L:** Practicum in Exercise Physiology

**APK 6116C:** Physiological Bases of Exercise and Sport Sciences

**APK 6118:** Neuromuscular Adaptation to Exercise

**APK 6126:** Cardiopulmonary Pathologies
APK 6128: EKG Interpretation
APK 6205C: Nature and Bases of Motor Performance
APK 6206: Planning Motor Actions
APK 6210: Controlling Motor Actions
APK 6225: Biomechanical Instrumentation
APK 6226C: Biomechanics of Human Motion
APK 6406: Exercise Psychology
APK 6408: Performance Enhancement
APK 6410: Seminar in Exercise Psychology
APK 6415: Seminar in Sport Psychology: Current Topics
APK 6900: Directed Independent Study
APK 6940: Advanced Practicum in Exercise and Sport Science
APK 7107: Cardiovascular Exercise Physiology
APK 7108: Environmental Stress Exercise Physiology
APK 7117: Exercise Metabolism
APK 7124: Free Radicals in Aging, Exercise and Disease
APK 7129: Pulmonary Function during Exercise
ATR 6124: Clinical Anatomy for the Exercise Sciences
ATR 6145: Human Pathophysiology for the Exercise Sciences
ATR 6215: Evidence-Based Orthopedic Exam I: Upper-Extremity
ATR 6216: Evidence-Based Orthopedic Exam II: Lower-Extremity
ATR 6304: Rehabilitation and Modalities of Athletic Injuries
ATR 6624: Athletic Training Research and Technology I
ATR 6625: Athletic Training Research and Technology II
ATR 6934: Seminar in Athletic Training
HLP 6515: Evaluation Procedures in Health and Human Performance
HLP 6911: Research Seminar
HLP 6935: Variable International Topics
PET 5936: Special Topics/Seminars
PET 6910: Supervised Research
PET 6940: Supervised Teaching
PET 6947: Graduate Internship in Exercise and Sport Sciences
PET 6971: Research for Master's Thesis
Department of Health Education & Behavior

Chair: Jalie A. Tucker
Graduate Coordinator: Christine B. Stopka

Complete faculty listing by department: Follow this link.

The Department of Health Education & Behavior offers a Doctor of Philosophy (Ph.D.) in Health and Human Performance with a concentration in Health Behavior, a non-thesis 30-credit hour Master of Science and a 36-credit Master of Science (M.S.) in Health Education and Behavior. Requirements for the Ph.D. and M.S. degrees are given in the General Information section of this catalog.

The Ph.D. degree program trains health behavior researchers for academic positions in federal health agencies such as the Centers for Disease Control and Prevention and the National Institutes of Health for postdoctoral research fellowships and for the private sector.

The 30-credit hour, non-thesis M.S. degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector. Full-time students can complete this M.S. option in one year. This degree may also give students unique and distinguishing training experiences when applying to professional schools such as law, medicine, physician assistant, dentistry, chiropractic, osteopathy, nursing, occupational therapy, and physical therapy.

The 36-credit hour project in lieu of thesis, and the 36-credit hour thesis options are designed for students interested in developing research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically can complete these options in about 4 semesters.

The Department also offers an accelerated B.S./M.S. program in health education and behavior to enable students to receive both B.S. and M.S. degrees with a reduction of 12 credits (about one semester of course work).

Students who complete a graduate degree program in the Department of Health Education & Behavior acquire a range of skills required to research, plan, implement, and evaluate health promotion policies and programs aimed at improving the health and well-being of individuals, families, and communities. Specific skills include:

- Conducting needs and capacity assessments to identify health priorities
- Planning, implementing, and evaluating health promotion policies and programs
- Conducting research on questions associated with health problems and their determinants and health promotion policies and programs
- Administering and managing health promotion programs
- Advocating for health promotion policies and programs in schools, communities, health care facilities, and worksites
- Developing social marketing and health communication messages and campaigns
- Researching and developing social media and new media-based health promotion applications
- Serving as a resource person for health information and referrals
- Using a variety of teaching-learning strategies appropriate to the target audience and setting
- Writing scholarly and professional articles
- Working collaboratively with public and private agencies, nongovernmental organizations (NGOs) and the private sector to achieve the goal of a healthier population.

This degree prepares the health promotion specialists and health behavior scientists to work in:

- Local, state, and federal health, education and social agencies
- Nongovernmental health organizations
- Schools and universities
- Healthcare settings
- Private sector

Sample position titles for individuals with this degree include:

- Health education specialist
- Health promotion specialist
- Public health advisor or public health analyst
- Health promotion coordinator or health promotion consultant
- Campus health educator or patient health educator,
- Health communication specialist
- Wellness specialist
- Wellness promotion coordinator
- Prevention specialist

For additional information, visit http://www.hhp.ufl.edu/heb.

HSC 5135: Emotional Health Education

HSC 5138: Human Sexuality

HSC 5142: Drug Education

HSC 5315C: Teaching Health in Elementary Schools

HSC 5536C: Medical Terminology for the Health Professions

HSC 5576: Nutrition Education for Special Populations

HSC 5606: Spirituality and Health

HSC 5618: Advanced Exercise Therapy, Adapted Physical Activity, & Health
HSC 5626: Minority Health Issues
HSC 5657: Health and End-of-Life Issues
HSC 5925: Seminar in Health Education
HSC 5956: Writing for Professional Publications
HSC 6037: Philosophy and Principles of Health Education
HSC 6216: Environmental Health
HSC 6235: Patient Health Education
HSC 6318: Planning Health Education Programs
HSC 6506: Epidemiology
HSC 6567: Health Promotion and Programming in Gerontology
HSC 6571: Contemporary Issues in Health Promotion
HSC 6575: Women's Health Issues
HSC 6595: HIV/AIDS Education
HSC 6603: Theories of Health Behavior and Practice in Health Education
HSC 6605: Scientific Foundations of Holistic Health
HSC 6625: Trends in International Health
HSC 6629: Health Promotion for Priority Populations
HSC 6637: Social Marketing and Health
HSC 6646: Community Health Methods in Injury Prevention & Control
HSC 6665: Health Communication
HSC 6667: Health Communication Programs
HSC 6668: Interpersonal Communication and Health
HSC 6695: Worksite Health Promotion
HSC 6712: Evaluating Health Education Programs
HSC 6735: Research Methods in Health Education
HSC 6850: Internship in Health Education
HSC 6904: Readings in Health Education
HSC 6910: Supervised Research
HSC 6935: Current Topics in Health Education
HSC 6971: Research for Master's Thesis
HSC 6973: Project in Lieu of Thesis
HSC 7904: Advanced Readings in Health Education
HSC 7905: Advanced Independent Study in Health Education
Tourism, Recreation, and Sport Management Department

Chair: Michael Sagas.
Graduate Coordinator: Stephen Holland.
Complete faculty listing: Follow this link.

The degree Master of Science is offered by the Department of Tourism, Recreation, and Sport Management with programs in sport management and in recreation, parks, and tourism. Both programs offer thesis and non-thesis formats. The Department participates in the Ph.D. program in Health and Human Performance. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Master's program provides advanced preparation of tourism, recreation, and parks and sport management professionals for positions of leadership in planning, developing, administering, and marketing of programs in a variety of employment settings; public and private. Concentrations of study may be developed in a number of areas, such as:

- Natural resource recreation management
- Tourism and commercial recreation
- Campus recreation
- Recreation administration and supervision
- Sport management

The Doctoral program is offered through the College of Health and Human Performance with concentrations in tourism; natural resource recreation and sport management. These interdisciplinary specializations blend course work and research. The curriculum is individualized, and applicants with degrees from unrelated fields can be accepted into the program. However, their previous work will be evaluated and their programs planned according to their individual needs, interests, and career objectives.

Combined program: The Department offers a combined bachelor's/master's degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a saving of approximately one semester. Up to 12 approved graduate credit hours can be utilized toward both degrees.

M.S./M.S.M. Concurrent Degree Program: This joint degree program is offered through the College of Business Administration (Master of Science in Business Management [M.S.M.]) and the College of Health and Human Performance's, Department of Tourism, Recreation and Sport Management (Master of Science in Sport Management [M.S.]). Applicants must apply to both programs and be admitted to both to participate. The M.S.M.S.M. is a non-thesis degree. The M.S.M.S.M. is designed for students who seek a graduate business degree and who lack the work experience necessary for admission to the MBA program. The M.S.M.S.M. curriculum is similar to the first year of the MBA program, giving students a solid foundation in business principles. Concurrent degree students can share up to 9 credit hours of the same coursework towards both degree programs. They do not have to graduate during the same semester. Students admitted into the concurrent program must work closely with both departments to verify all requirements are being met during their course of study.

M.S./J.D. joint program: This 98-credit-hour joint degree program culminates in the Master of Science and the Juris Doctor degrees. Applicants must meet the entrance requirements for the Department of Tourism, Recreation, and Sport Management and the College of Law. Admission to the second degree program is required no later than the end of the fourth consecutive semester after beginning one of the degree programs. The student's supervisory committee comprises faculty members from both the Department of Tourism, Recreation, and Sport Management and the College of Law. Students admitted into the joint program are permitted to share up to 12 credit hours of the same coursework towards both degree programs. Students must graduate during the same semester from both programs.

HLP 6535: Research Methods in Health and Human Performance

HLP 7979: Advanced Research in Health and Human Performance

HLP 7980: Research for Doctoral Dissertation

HMG 6076: Introduction to Hospitality and Tourism

HMG 6608: Hospitality Law and Risk Management

HMG 6747: Marketing in Hospitality/Tourism

LEI 5121: Outdoor Recreation and Park Management

LEI 5188: Trends in Leisure Studies

LEI 6108: Contemporary Theories of Recreation and Leisure

LEI 6325: Ecotourism

LEI 6326: Sport Tourism

LEI 6336: Tourism Planning and Development

LEI 6351: Heritage Tourism
LEI 6439: Campus Recreation Administration and Programming
LEI 6513: Administrative Procedures in Leisure Services
LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
LEI 6557: Recreation Management/Development in the Coastal Zone
LEI 6562: Advanced Marketing for Recreation, Parks, and Tourism
LEI 6895: Tourism Theory and Concepts
LEI 6903: Readings in Recreation, Parks, and Tourism
LEI 6905: Directed Independent Study
LEI 6910: Supervised Research
LEI 6931: Special Topics in Recreation, Parks, and Tourism
LEI 6935: Seminar in Recreation, Parks, and Tourism
LEI 6940: Supervised Teaching
LEI 6944: Practicum in Leisure Studies
LEI 6971: Research for Master's Thesis
LEI 7170: Foundations of Leisure Behavior
LEI 7901: Recreation, Parks, and Tourism in Higher Education
LEI 7904: Advanced Readings in Recreation, Parks, and Tourism
LEI 7905: Advanced Independent Study in Recreation, Parks and Tourism
LEI 7910: Advanced Supervised Research
LEI 7933: Advanced Special Topics in Recreation, Parks, and Tourism
LEI 7936: Advanced Seminar in Recreation, Parks, and Tourism
SPM 5016: Sport Sociology
SPM 5206: Sport Ethics
SPM 5309: Sport Marketing
SPM 5506: Sport Finance
SPM 5936: Current Topics in Sport Management
SPM 6006: Contemporary Sport Industry
SPM 6036: Research Seminar in Sport Management
SPM 6106: Management and Planning of Sport and Physical Activity Facilities
SPM 6158: Management and Leadership in Sport
SPM 6308: Study of Sport Consumer Behaviors
SPM 6726: Issues in Sport Law
SPM 6905: Directed Independent Study
SPM 6910: Supervised Research

SPM 6947: Graduate Internship in Sport Management

SPM 6948: Advanced Practicum in Sport Management

SPM 6971: Research for Master’s Thesis

Interdisciplinary Concentrations

Agroforestry
Animal Molecular and Cell Biology
Clinical and Translational Science
Geographic Information Systems
Historic Preservation
Hydrologic Sciences
Quantitative Finance
Sustainable Architecture
Sustainable Design
Tropical Conservation and Development
Wetland Sciences
Women's and Gender Studies

Interdisciplinary Graduate Concentrations

A number of graduate programs offer interdisciplinary enhancements in the form of concentrations, field research, or certificates. The following programs offer interdisciplinary study leading to a concentration or minor, whether offered by a single college or by multiple colleges. Please follow individual links within the Majors Section of this catalog or contact the programs directly for further information.

The agroforestry interdisciplinary concentration is administered through the School of Forest Resources and Conservation. It offers facilities for interdisciplinary graduate education (M.S., Ph.D.) by combining course work and research around a thematic field focusing on agroforestry, especially in the context of tropical land use. Students seeking admission to the concentration need a degree in a relevant field such as agronomy, forestry, horticulture, soil science, or social sciences. They should apply to the School of Forest Resources and Conservation or another academic unit that closely represents their background and interest. Course work may be chosen from several related disciplines. Thesis research can be undertaken in Florida or overseas. Degrees are awarded through the academic units the candidates are enrolled in.

In conjunction with the graduate degree, a student can earn a concentration or minor in agroforestry by fulfilling certain requirements. Students who have a primary interest in agroforestry and undertake graduate research on an agroforestry topic can seek the concentration. Those who have an active interest and some training in agroforestry, but do not conduct graduate research on an agroforestry topic, can earn a minor. Candidates meeting the requirements can have Concentration in Agroforestry or Minor in Agroforestry appear on their transcripts.

Each option requires completing FNR 5335 (Agroforestry) and an appropriate number of approved supporting courses. These courses should be distributed over at least two academic units outside the major to prepare the student to function in multidisciplinary teams and to associate with professionals from other disciplines. Students whose background is in biology are encouraged to take social science courses, and vice versa.

For a student with a concentration or minor in agroforestry, at least one member of the supervisory committee should represent agroforestry. The Agroforestry Program Advisory Committee requires this member to counsel the student on selecting courses and the research topic.

For more information, contact the Agroforestry Program Leader, 330 Newins-Ziegler Hall, Phone (352) 846-0880, Fax (352) 846-1277, E-mail pknair@ufl.edu.

The interdisciplinary concentration in animal molecular and cell biology (AMCB) gives graduate students in the animal and veterinary sciences an understanding of principles of molecular and cell biology as applied to animal health and production. It emphasizes participation in molecular and cell biology research and provides an intellectual environment for cross-fertilization among disciplines. The AMC gives graduate students access to the diverse research facilities needed to study cellular and molecular biology, reproductive biology, virology, immunology, and endocrinology. Facilities exist for recombinant DNA research, experimental surgery, in vitro culture of cells, tissue and organ explants, embryo manipulation, vaccine production, and recombinant protein engineering.

Ph.D. degrees are awarded by participating academic units, with an interdisciplinary concentration in animal molecular and cell biology. Applicants need a strong background in animal or veterinary sciences. Graduate degree programs are designed by each student's supervisory committee, headed by the member who represents AMC. All students must complete a core curriculum, may obtain cross-disciplinary training through rotations in laboratories of participating faculty, and may participate in the AMC seminar series.

Requirements for admission to AMC are the same as for the faculty adviser's academic unit and college.

Note that typically students interested in education through the AMC enroll in the AMC graduate program rather than the AMC interdisciplinary concentration. For more information, contact Dr. Peter J. Hansen, Department of Animal Sciences, pjhansen@ufl.edu.

Clinical and Translational Science

This unique concentration in the Master of Science program in medical sciences was developed by an interdisciplinary faculty to provide sound didactic background in the foundations of clinical research. Core course requirements cover study design, data analysis, ethical conduct of research, epidemiology, manuscript and abstract writing, and grant writing. Additional electives in specific fields may be taken from other concentrations or programs. A research thesis designed and conducted with a clinical research mentor is required.

For clinically trained M.D.s and other doctoral-level health professionals, the M.S. concentration in clinical and translational science (MS-CTS) may be part of a more-complete training experience in clinical research offered through the College of Medicine as the Advanced Postgraduate Program in Clinical Investigation (APPCI).

For more information:
Dr. Marian Limacher
Geographic Information Systems (GIS) revolutionized the way land features are located, measured, inventoried, managed, planned, and studied. GIS provides theories and methods for measuring location and topography, physical and biological attributes, and distribution of cultural components through data storage, analysis, modeling, mapping, and data display.

GIS applications are diverse. They include determining the suitability of land for different uses, planning future land uses, setting cadastral boundaries for the purpose of property recognition and taxation and regulation, analyzing land and land-cover for both resource inventories and scientific studies, and siting commercial enterprises.

Users and producers of GIS include engineers, geographers, planners, biologists and ecologists, land resource managers, archaeologists, sociologists, public health professionals, medical researchers, property tax assessors, law enforcement officers, land development companies, utility companies, and retail stores. Undergraduate and graduate students who learn to use GIS technology are in high demand and so start at higher salaries than their non-GIS peers. As a result the GIS community at the University of Florida developed the Interdisciplinary Concentration for Geographic Information Systems (ICGIS).

The ICGIS integrates existing GIS resources on campus, for graduate students, in response to changing regulatory environments in institutions and governments at all levels. This concentration established a standard set of courses and activities that allow graduate students to become experts in creating, studying, and using geographic information. Such graduates are in strong positions to meet future regulatory requirements for certification as professionals. Structurally, the ICGIS established a five-category curriculum within the standard M.S., M.A., M.E., or Ph.D. requirements. Completing the GIS concentration is officially recognized by statements on transcripts and a certificate.

For more information contact Dr. Scot E. Smith, University of Florida, P.O. Box 110565, Gainesville FL 32611, Phone (352) 392-4990, E-mail sesmith@ifas.ufl.edu.

The Interdisciplinary Concentration and Certificate in Historic Preservation (ICCHP) integrates resources throughout UF to address the diverse topics relevant to the field. Thus, the ICCHP establishes a set of courses that allow graduate students to gain expertise in researching and applying historic preservation in the United States and abroad. Depending on the student’s career goals and background, this can include recognizing, documenting, and protecting historic structures and sites; rehabilitation and restoration technologies; and exploring emerging and related specializations such as community development and sustainable development.

The interdisciplinary curriculum structure draws on course work providing 12 credits for master’s students and 15 credits for Ph.D. students specializing in historic preservation. The concentration is officially recognized by statements on the transcript and by a certificate.

For more information, contact Morris Hylton, Director of Historic Preservation Programs. University of Florida, P.O. Box 115701, Gainesville FL 32611. Phone (352)392-0252, ext. 457. E-mail mhylton@ufl.edu.

For more information contact:
Meary Hylton
Graduate Coordinator
mhylton@idcp.ufl.edu
352-392-0252 ext. 457

Pat Delong
Student Affairs Coordinator
patdelong@idcp.ufl.edu
352-392-4836 ext. 312

Interdisciplinary graduate studies in hydrologic sciences are for science and engineering students seeking advanced training in diverse aspects of water quantity and quality, and water-use issues. This concentration emphasizes (1) understanding the physical, chemical, and biological processes occurring over broad spatial and temporal scales; and (2) skills in hydrologic policy and management based on a strong background in natural and social sciences and engineering.

Graduate Faculty from eight departments in three colleges contribute to this interdisciplinary concentration. Depending on academic background and research interests, students may earn a degree in any one of the following departments: Agricultural and Biological Engineering, Civil and Coastal Engineering, Environmental Engineering Sciences, Food and Resource Economics, Forest Resources and Conservation, Geography, Geophysical Sciences, , and Soil and Water Science.

M.S. (thesis and non-thesis option) and Ph.D. studies are available. Interdisciplinary graduate requirements recognize diversity in the academic backgrounds and professional goals of the students. A core curriculum (12 credits for M.S.; 18 credits for Ph.D.) provides broad training in six topics: subsurface hydrology, surface hydrology, hydrologic chemistry, hydrologic ecology, hydrologic analysis and techniques, and hydrologic policy and management. Research projects involving faculty from several academic units can be provided for the thesis and
Students with B.S. or M.S. degrees in any of the following disciplines are encouraged to consider this specialization in their graduate program engineering (agricultural, chemical, civil, environmental); natural sciences (physics, biology, chemistry); social sciences (agricultural and resource economics); forestry; and earth sciences (geography, geology, and soil and water science).

For more information, contact Dr. Wendy Graham, UF Water Institute, P.O. Box 116601, Gainesville FL 32611, Phone (352) 392-5893, E-mail water-institute@ufl.edu, or visit the Hydrologic Sciences Academic Cluster website (http://www.hydro douche.ufl.edu).

The interdisciplinary concentration in quantitative finance trains students for academic and research positions in quantitative finance, and risk management. It gives graduates an edge in the job market by providing substantial expertise in key related disciplines: finance, operations research, statistics, mathematics, and software development. It is focused in teaching and research on design, development, and implementing new financial and risk management products, processes, strategies, and systems to meet demands of various institutions, corporations, governments, and households. Emphasis is on an interdisciplinary approach requiring knowledge in finance, economics, mathematics, probability/statistics, operations research, engineering, and computer science.

Four academic units participate in this interdisciplinary concentration: Industrial and Systems Engineering (College of Engineering), Mathematics (College of Liberal Arts and Sciences), Statistics (College of Liberal Arts and Sciences), and Finance, Insurance, and Real Estate (College of Business Administration). To be eligible, a student must be admitted to a Ph.D. program in one of those participating academic units. Students seeking admission to the concentration need strong quantitative skills and a degree in one of the relevant fields such as finance, engineering, statistics, or mathematics. Students with a background in several disciplines are welcome. Application should be submitted to one of the participating academic units.

Each student takes basic courses and meets the home academic unit's Ph.D. requirements. The student also takes approved courses in the other participating academic units to meet the requirements of the concentration.

Dissertation research is conducted in quantitative finance, risk management, and relevant areas involving quantitative finance approaches. The student receives a Ph.D. degree and a Certificate in Quantitative Finance.

Activities of the Ph.D. concentration in quantitative finance are supported by the Risk Management and Financial Engineering Laboratory (RMFE Lab) http://www.iec.ufl.edu/rmfe. The RMFE Lab facilitates research and applications in the area of risk management and financial mathematics/engineering, including organizing research meetings, seminars, and conferences. It provides a basis for the collaborative efforts of multidisciplinary teams of UF researchers, governmental institutions, and industrial partners.

The Concentration and Certificate in Sustainable Architecture is for architecture graduate students in the M.Arch. or M.S.A.S. program seeking advanced courses on a wide range of topics related to sustainable architecture. The concentration in sustainable architecture supports detailed rigorous study in specific areas of expertise. Furthermore, the program requirements recognize the inherent diversity of academic backgrounds and professional goals of the students. Thus, there is flexibility in the selection of a suite of courses, while maintaining exposure to the multidisciplinary subject matter of sustainable architecture. This essential feature of the program allows students to develop individualized yet focused plans of study.

Students select from a variety of approved courses offered in the College of Design, Construction, and Planning (the School of Architecture, the School of Building Construction, the Department of Interior Design, the Department of Landscape Architecture, and the Department of Urban and Regional Planning); and in other colleges in the University. Course work may include the following sustainability issues:

- Architectural design and preventing environmental degradation: protecting ecosystems, fauna and flora, energy consumption, energy conservation, architectural commissioning, maintenance, water consumption, land use, and materials selection (resource depletion, environmental degradation, and healthy environments)
- Providing healthy architectural environments: indoor air environmental quality, non-toxic environments, and sustainable ecosystems and landscapes
- Responsive and responsible building design and construction: environmentally sensitive architecture, and environmentally responsible architecture
- Sustainable architectural and environmental theory: the philosophy of sustainable design, ecological theory, sustainability and ethics, deep ecology, and systems theory
- Enhancing the community environment: historic preservation, sustainable developments, community and neighborhood design, regional design, and systems theory
- Mitigating the environmental effects of construction operations: life cycle operations, design longevity, reusing materials, recycling materials, deconstruction, and reconstruction.

Students enrolled in the Concentration and Certificate Program in Sustainable Architecture must complete at least 12 credits of approved sustainable architecture electives. Students must complete at least 6 credits within the School of Architecture; and at least one approved 3 credit course from outside the School of Architecture. Students also must complete a research project or thesis on a subject pre-approved by the concentration's governing board, related to sustainable architecture. For more information, contact the Graduate Program Assistant, School of Architecture, University of Florida, Box 115702, Gainesville FL 32611-5702, Phone (352) 392-0205 ext. 202, E-mail bhuds@ufl.edu.

The Interdisciplinary Concentration and Certificate in Sustainable Design (ICCSD) is for master's-level students in the College of Design, Construction, and Planning. This concentration allows students to become proficient in one or more of the following areas: sustainable architecture, sustainable construction, sustainable interior design, sustainable landscape architecture, or sustainable urban planning. Course work deals with the following issues:

- Preventing environmental degradation: protecting ecosystems, fauna and flora, energy conservation, energy consumption, architectural commissioning, maintenance, water consumption, land use, site selection, and materials selection (resource depletion, environmental degradation, and healthy environments)
- Providing healthy environments: indoor air environmental quality, outdoor environmental quality, healthy environments, and sustainable ecosystems and landscapes
- Sustainable design and responsible building construction: construction impact on site, environmentally responsive architecture, environmentally responsible architecture (preventing environmental degradation), and designing sustainable building components
- Mitigating the environmental effects of construction operations: life cycle operations, design longevity, reusing materials, recycling materials, deconstruction, reconstruction, and historic preservation
- Enhancing the community environment: sustainable developments, community and neighborhood design, regional design, and city planning design
- Environmental theory: the philosophy of sustainable design, ecological theory, sustainability and ethics, deep ecology, and systems theory.

Students wishing to participate in the ICCSD should notify their department or school as early in the graduate program as possible. To participate in the ICCSD, a student must be admitted and enrolled in one of the departments participating in the ICCSD. Students will complete the concentration for either the master's degree or Master of Science degree, but not for both degrees if awarded from the University of Florida. Students cannot enroll in two concentration programs at the same time.

To successfully complete the ICCSD, the student must earn 12 credit hours in sustainable design research and course work from a list of recommended courses. To satisfy the interdisciplinary intent of the ICCSD, the student must take one of the approved 3 credit courses outside their home department or school, but within the College of Design, Construction, and Planning, and at least one approved 3 credit course from another college of the University. For more information, contact the Dean's Office in the College of Design, Construction, and Planning, University of Florida, Box 115701, Gainesville FL 32611, Telephone (352) 392-4836.

The Tropical Conservation and Development Program (TCD), in the Center for Latin American Studies, offers an interdisciplinary graduate certificate and graduate concentration focused on integrative approaches to conservation and development in the tropics, including sub-tropical and temperate areas in developing countries. Both the certificate and concentration are open to students who are interested in acquiring interdisciplinary knowledge and technical skills to pursue a career in conservation and development research and practice. These students must be enrolled in master's or Ph.D. programs in TCD's affiliate academic units at the University of Florida.

Course work for the certificate and the concentration includes social science theory, principles of tropical ecology, and patterns and trends of tropical resource use and conservation. TCD core courses also allow students to gain essential practical skills. Emphasis is on communication and presentation techniques, grant writing, proposal writing, and fundraising facilitation and conflict management; participatory methods for research and project implementation; and project design, analysis, and evaluation. Summer research, practitioner experiences, and field-based training programs provide learning opportunities outside the classroom.

On completing the certificate or concentration, students should have an in-depth understanding of the relationships among biological conservation, resource management, and the livelihood needs of rural communities; and the appropriate professional skills for a career in research, field practice, or both.

Master's students can earn a certificate in TCD by completing 12 credits of approved course work: 2 interdisciplinary core courses and 1 course each in tropical ecology and social science. Ph.D. students can earn a certificate by completing 15 credits of approved course work: 3 interdisciplinary core courses and 1 course each in tropical ecology and social science. Students from natural science academic units must take the social science credits outside their major. Otherwise, courses from the student's major can count toward program requirements. Substitutions need prior approval from the TCD faculty advisor.

To earn a concentration in TCD, students must complete the course requirements for the certificate (as explained above) and they must focus on conservation and development in their thesis, dissertation, or final project. One member of the student's supervisory committee must be a TCD affiliate faculty member. This person is responsible for judging whether the student's thesis focuses on tropical conservation and/or development. For the faculty member to make this judgment, the student must articulate in writing how the research fits in the broader context of biodiversity conservation and/or rural development in the tropics, sub-tropics, or temperate areas in developing countries. This person cannot count as the external member of the committee.

For more information on the TCD concentration and program, and for a list of approved courses, visit the TCD website (http://tcd.ufl.edu) or contact Bette Loiselle, TCD Director, 343 Grinter Hall, (352) 273-4734, Email: Loiselle@tcd.ufl.edu or Patricia Sampaio, TCD Program Coordinator, 343 Grinter Hall, (352) 273-4734, Email: PSpaino@tcd.ufl.edu.

The Interdisciplinary Concentration in Wetland Sciences (ICWS) is a unified interdisciplinary program in wetland science and policy for master's and doctoral students.

Graduate faculty from the following academic units contribute to the wetlands sciences concentrations: Agricultural and Biological Engineering, Botany, Civil Engineering, Environmental Engineering Sciences, Fisheries and Aquatic Sciences, Forest Resources and Conservation, Geography, Geological Sciences, Landscape Architecture, Law, Soil and Water Sciences, Urban and Regional Planning, Wildlife Ecology and Conservation, and Zoology. Students in any of these programs may elect to participate in the ICWS. A major strength of the ICWS is the breadth of wetlands-related courses and research opportunities in many academic programs across campus. The ICWS exposes students to perspectives outside their disciplines and provides a rigorous, substantive education in wetland sciences in addition to their disciplinary focus.

Students may complete the ICWS for either the M.S. or Ph.D. degree. A core curriculum (15 credits for M.S. and 18 credits for Ph.D.) provides the opportunity for interdisciplinary training in four broad subject areas:

- wetlands science (1 course each in wetlands ecology, wetland hydrology, and wetlands biogeochemistry),
- wetlands systems,
- wetlands organisms, and
- wetlands policy/law.

Additional course work in a student's disciplinary focus may strengthen the student's knowledge base or allow for specialization in one or more of the areas.

For more information, contact Dr. Mark T. Brown, Director, Howard T. Odum Center for Wetlands, Phelps Lab, P.O. Box 116350, Gainesville FL 32611, Phone (352) 392-2424, or visit the website (http://www.cfw.ufl.edu).

Two certificates, one master's degree (thesis or non-thesis option), and a doctoral concentration are offered in women's and gender studies. Participating graduate faculty are from several academic units, campus-wide, including Agricultural and Life Sciences, Anthropology, Counselor Education, English, German and Slavic Studies, History, Journalism and Communications, Latin American Studies, Linguistics, Nursing, Philosophy, Psychology, Religion, Romance Languages and Literatures, Sociology, and Teaching and Learning.

The two graduate certificates in women's studies for master's and doctoral students are offered in conjunction with degree programs in other academic units. The Graduate Certificate in Women's Studies and the Graduate Certificate in Gender and Development require specific sets of course work to thoroughly ground students in the discipline. The Graduate Certificate in Women's Studies is a general introduction to the field, and the Graduate Certificate in Gender and Development allows students to focus on issues related to gender, economic development, and globalization.

The doctoral interdisciplinary concentrations in women's and gender studies give graduate students a thorough grounding in the new scholarship produced by the intersection of women's studies and other academic fields. The concentration facilitates analysis and assessment of theories about the role of gender in cultural systems and its interactions with other categories of differences, such as race, ethnicity, religion, class, sexuality, physical and mental ability, age, and economic and civil status. Emphasis is on participating in women's and gender studies research and on providing an intellectual environment for cross-fertilization among disciplines. Women's and gender studies critically explores the role and status of women and men, past and present.

Participating academic units award Ph.D. degrees with an interdisciplinary concentration in women's and gender studies. Study plans are designed by each student's supervisory committee, whose chair is affiliated with women's and gender studies.

Admission requirements are those of the student's home academic unit and college. After admission to the degree-granting academic unit, the application is sent to the Graduate Coordinator of Women's and Gender Studies who chairs an admissions committee.

For more information on the TCD certificate and concentration program, and for a list of approved courses, visit the TCD website (http://tcd.ufl.edu) or contact Bette Loiselle, TCD Director, 343 Grinter Hall, (352) 273-4734, Email: Loiselle@tcd.ufl.edu.

### Journalism Courses - filtered

**College of Journalism and Communications**

**Dean:** D. McFarlin

**Senior Associate Dean for Graduate Studies and Research:** D. Treise

**Graduate Coordinators:**
- (Advertising) J. R. Goodman
- (International Communication) M. Leslie
- (Journalism) R. Rodgers
- (Public Relations) M.A. Ferguson
- (Science/Health Communication) D. Treise
- (Telecommunication) J. Cleary.

Complete faculty listings: [Follow this link.](http://www.journalism.ufl.edu)

Through the Division of Graduate Studies and Research, the College of Journalism and Communications offers the Doctor of Philosophy degree, the Master of Arts in Mass Communication (thesis or project option) degree, and the Master of Advertising (thesis) degree. Requirements for these degrees are given in the [Graduate Degrees](http://www.journalism.ufl.edu/graduate) section of this catalog.

Doctoral students work closely with faculty members in research leading to a dissertation embodying a humanities, law/policy, or social sciences approach. Emphases within these approaches for which faculty members have expertise include advertising, journalism, public relations, telecommunication, international communication, and political communication. Details of doctoral
Faculty research interests and other aspects of the program are given in the College's Ph.D. Handbook.

Master's students may complete a thesis in advertising, journalism, public relations, telecommunication, international communication, or science/health communication. With the approval of the Sr. Associate Dean of Graduate Studies and Research and other faculty members, master's students may develop an individualized program of study, with a thesis, to meet their specific needs and interests. A project in lieu of thesis option is available for some specializations.

Mass Communication/Law joint degree programs: Programs leading to the Master of Arts in Mass Communication or the Doctor of Philosophy and the Juris Doctor are offered under the joint auspices of the College of Journalism and Communications and the College of Law. Students interested in scholarship or practice of communication law or in reporting on the law, the programs offer the opportunity to blend relevant work from the two colleges. Students must meet the entrance requirements of both colleges. A thesis or dissertation is required. Interested students should apply for admission to both the Graduate School and the College of Law, noting on the applications the joint nature of the admission requests. Further information on the programs and on application procedures is available from the Holland Law Center and from the Division of Graduate Studies and Research of the College of Journalism and Communications.

General admission: Admission is granted to applicants with and without background in mass communication. Students without academic preparation in mass communication or appropriate experience may be required to take articulation work. These courses are taken concurrently with general graduate courses, starting in the first term of registration. Some degree plans require a background course in statistics. Students who have satisfied that requirement must provide written verification. Including articulation courses, the master's degree normally can be earned in one and one-half or two years of full-time study. Doctoral studies require three or more years of full-time study and research. Students who may require articulation courses should contact the Sr. Associate Dean of Graduate Studies and Research.

Grading policy: Any student whose cumulative GPA falls below 3.0 will be placed on probation. Any doctoral student who receives one grade below B- or a Master's student who receives one grade below C+ will be placed on probation, with the exception of courses taken from the Levin College of Law. For these courses, any student receiving one grade below C> in any course from the Levin College of Law will be placed on probation. A requirement of the probation is that the student must achieve or maintain a cumulative grade point average of 3.0 or higher at the end of the next academic term in residence. A student who fails to satisfy the requirement will be suspended. A Doctoral student who accumulates two grades below "B-" or a Master's student who accumulates two grades below C+ during graduate studies will be suspended, as will a student who receives one grade of "D+" or lower at any time. Students will be allowed only one suspension.

Combined degree program: The College offers a combined bachelor's/master's program. For information, contact the Associate Dean for Graduate Studies.

For additional information, please see our website: http://www.jou.ufl.edu/grad.

College of Journalism and Mass Communication Courses

ADV 5005: Advertising Planning
ADV 6006: Theories of Advertising
ADV 6305: Advanced Media Planning
ADV 6325: Advertising and Social Media
ADV 6405: International Advertising
ADV 6503: Advertising Creative Strategy and Research
ADV 6505: Advertising Research Methods
ADV 6602: Advertising Management
COM 6315: Advanced Research Methods
COM 6338: Advanced Web Topics I: Advanced Design
COM 6940: Supervised Teaching
FIL 6061: History of Documentary Film I
FIL 6062: History of Documentary Film II
FIL 6101: Advanced Radio, Television, and Film Writing
FIL 6315: Writing for Documentary I
FIL 6317: Producing and Writing the Documentary
FIL 6335: Business of Documentary
FIL 6340: Issues and Problems in Documentary
FIL 6355: Documentary Pre-Production Planning
FIL 6366: Documentary Procedures II
FIL 6377: Documentary Field Production
FIL 6378: Documentary Research Methods
FIL 6380: Advanced Post-Production Techniques
JOU 5007: History of Journalism
JOU 5705: Issues and the Press
JOU 6102: Reporting Workshop
JOU 6114: Journalist Bootcamp
JOU 6309: Seminar in Journalism as Literature
JOU 6344: Journalist Toolkit 1
JOU 6349: Journalist Toolkit 2
JOU 6502: Newsroom Management
MMC 5005: Mass Communication History
MMC 5006: Introduction to Multimedia Communication
MMC 5015: Electronic Publishing
MMC 5206: Advanced Law of Mass Communication
MMC 5277: Web Design Principles
MMC 5306: International Communication
MMC 5315: Survey of Foreign Correspondence
MMC 5427: Research Methods in Digital Communication
MMC 5636: Introduction to Social Media
MMC 5708: Foundations of Intercultural Communication
MMC 6202: Legal Problems of Mass Communication
MMC 6278: Advanced Web Topics II
MMC 6307: Seminar in International Communication
MMC 6400: Mass Communication Theory
MMC 6402: Seminar in Mass Communication Theory
MMC 6405: Seminar in Mass Communication and Public Opinion
MMC 6409: Science/Health Communication
MMC 6417: Seminar in Mass Media and Health
MMC 6421: Research Methods in Mass Communication
MMC 6423: Content-Analysis Methods
MMC 6426: Seminar in Qualitative Research
MMC 6428: Collaborative Communication Research
MMC 6429: News and Numbers
MMC 6560: Seminar in History of Mass Communication
MMC 6612: New Media and a Democratic Society
MMC 6615: Race, Class, Gender, and Media
MMC 6618: Survey of Political Communication
MMC 6619: Seminar in Political Advertising
MMC 6660: Mass Communication and Society
MMC 6665: Seminar in First Amendment Theory
MMC 6666: Seminar in Research in Mass Communication Law
MMC 6667: Seminar in Advanced Topics in Mass Communication Law
MMC 6668: Seminar in Public Policy Toward Mass Media
MMC 6706: Covering the Arts
MMC 6725: Social Media and Society
MMC 6726: Social Media and Virtual Worlds
MMC 6727: Social Media Metrics
MMC 6728: Branding Using Social and Mobile Media
MMC 6730: Social Media Management
MMC 6905: Individual Work
MMC 6910: Supervised Research
MMC 6920: Communication Proseminar
MMC 6929: Communication Colloquium
MMC 6930: Seminar in Mass Communication Teaching
MMC 6936: Special Topics in Mass Communication
MMC 6949: Professional Internship
MMC 6951: Masters Project Seminar
MMC 6971: Research for Master's Thesis
MMC 6973: Project in Lieu of Thesis
MMC 7979: Advanced Research
MMC 7980: Research for Doctoral Dissertation
PUR 5507: Persuasion Theory and Research
PUR 6005: Theories of Public Relations
PUR 6006: Public Relations Foundations
PUR 6403: Crisis and Risk Management
PUR 6416: Public Relations and Fund Raising
PUR 6446: Public Relations and Philanthropy
PUR 6506: Public Relations Research
PUR 6607: Public Relations Management
PUR 6608: International Public Relations
PUR 6934: Problems in Public Relations
RTV 5702: Telecommunication Regulation
RTV 6105: Writing for Electronic Media
RTV 6309: Advanced TV Reporting
RTV 6508: Audience Analysis
RTV 6801: Telecommunication Management
RTV 6807: Telecommunication Outlet Systems and Practices
Fredric G. Levin College of Law

Dear: R. Jerry II

Complete faculty listings: Follow this link.

The University of Florida Levin College of Law has a longstanding tradition of producing national leaders, including current American Bar Association President Stephen Zack, and is one of the nation's best values in legal education.

For more information, please see our website: http://www.law.ufl.edu

Comparative Law Department

Director and Graduate Coordinator: P.A. Malavet.

The LL.M. in Comparative Law degree is designed for graduates of foreign law schools who want to enhance their understanding of the American legal system and the English common law system from which it evolved. Requirements for this degree are given in the General Information section of this catalog.

The program begins with Introduction to American Law, a 4-credit summer course that gives students a foundation in the American legal process. It also helps students acclimate to the College of Law and the University community before the start of the academic year. During the fall and spring terms, and with the director's approval, students choose their remaining 22 credits from more than 100 Juris Doctor and LL.M. in Taxation courses and seminars. For admission information consult the College of Law Prospectus or write to the Comparative Law Office P.O. Box 117643, University of Florida, Gainesville, FL 32611-7643 USA.

LAW 7801: Introduction to the Legal System of the United States for LL.M. in Comparative Law, Part II

LAW 7805: Legal Writing and Research for LL.M. in Comparative Law

LAW 7906: Directed Research for LL.M. in Comparative Law

LAW 7932: Introduction to the Legal System of the United States for LLM in Comparative Law, Part I

Environmental and Land Use Law Department

Director and Graduate Coordinator: Christine A. Klein

Florida's sensitive, varied and beautiful natural environment makes the University of Florida a natural choice for students who want to focus on the national and global issues of land use and environmental law. Florida provides a perfect setting to study first-hand the efforts to reconcile growth and conservation.

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

For more information, please see the program page below and our website: http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law.

LAW 7493: LL.M. Research: Selected Topics in Environmental & Land Use Law

LAW 7916: Research Methods and Environmental Land Use Law

Taxation Department

Chair and Graduate Coordinator: M. K. Friel.

University of Florida » 2014-2015 Graduate Catalog
Graduate study in the field of taxation leading to the Master of Laws in Taxation degree or to the Master of Laws in International Tax degree is available in the College of Law. Applicants for admission to the Graduate School for these degrees must hold a law degree from an accredited law school or in the case of international students, from a recognized foreign university but need not submit scores on the Graduate Record Examination. For further information concerning admission consult the Graduate Tax Program Catalog, or write the Tax Office, 320 Holland Law Center.

LAW 7602: Taxation of Property Transactions
LAW 7604: Timing Issues in Taxation
LAW 7611: Corporate Taxation I
LAW 7613: Corporate Taxation II
LAW 7614: U.S. International Tax I
LAW 7615: U.S. International Tax II
LAW 7617: Partnership Taxation
LAW 7623: Taxation of Gratuitous Transfers
LAW 7625: Income Taxation of Trusts and Estates
LAW 7626: Estate Planning
LAW 7632: Deferred Compensation
LAW 7633: Tax Exempt Organizations
LAW 7640: Civil Tax Procedure
LAW 7641: Procedures in Tax Fraud Cases
LAW 7650: State and Local Taxation
LAW 7660: Tax Policy
LAW 7680: Comparative Taxation
LAW 7682: Income Tax Treaties
LAW 7683: Transfer Pricing
LAW 7905: Independent Study
LAW 7910: Supervised Research
LAW 7911: Federal Tax Research
LAW 7931: Current Federal Tax Problems

Graduate Certificates and Interdisciplinary Concentrations and Research Centers

The information in this catalog is current as of July 2013. Please contact individual programs for any additional information or changes.
College of Medicine

Dear M.L. Good

Complete faculty listings: Follow this link.

The College of Medicine offers training opportunities leading to either the Doctor of Philosophy or Master of Science degree in medical sciences. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog. For more information, please see our website: http://med.ufl.edu.

The interdisciplinary program (IDP) in biomedical sciences is the major focus leading to the Doctor of Philosophy degree. Other graduate courses and programs are listed under departmental headings. For further information, visit http://idp.med.ufl.edu.

Departments and Programs within the College of Medicine

College of Medicine Courses

ENU 6652: Clinical Rotation in Diagnostic Radiology
ENU 6657: Diagnostic Radiological Physics
GMS 5604: Medical Human Embryology
GMS 5605: Medical Anatomy
GMS 5606L: Medical Anatomy Lab
GMS 5613: Medical Human Anatomy by Diagnostic Imaging
GMS 5630: Medical Histology
GMS 5905: Special Topics in Biomedical Sciences
GMS 6001: Fundamentals of Biomedical Sciences I
GMS 6003: Fundamentals of Graduate Research and Professional Development
GMS 6004: IDP Practical Laboratory
GMS 6005: Fundamentals of Developmental Biology
GMS 6006: Fundamentals of Immunology and Microbiology
GMS 6007: Fundamentals of Neuroscience
GMS 6008: Fundamentals of Physiology and Functional Genomics
GMS 6009: Principles of Drug Action
GMS 6010: Yeast Genetics
GMS 6011: Mouse Genetics
GMS 6012: Human Genetics
GMS 6013: Developmental Genetics
GMS 6014: Applications of Bioinformatics to Genetics
GMS 6015: Human Genetics II
GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
GMS 6023: Principles of Neuroscience III – Molecular Neuropharmacology and its Clinical Application
GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
GMS 6029: Brain Journal Club
GMS 6031: Molecular Immunology
GMS 6032: Mechanisms of Host Defense
GMS 6033: Immunity in Health and Disease
GMS 6034: Advanced Virology I: Genetics and RNA
GMS 6035: Advanced Virology II: RNA Viruses
GMS 6036: Molecular Virology III: DNA Viruses
GMS 6038: Bacterial Genetics and Physiology
GMS 6039: Bacterial Pathogenesis
GMS 6040: Host-Pathogen Interactions
GMS 6051: Signal Transduction
GMS 6052: Ion Channels of Excitable Membranes
GMS 6053: Cancer Biology and Therapeutics
GMS 6059: Gene Therapy from Bench to Bedside
GMS 6061: Nuclear Structure and Dynamics
GMS 6062: Protein Trafficking
GMS 6063: Mechanisms of Aging
GMS 6064: Tumor Biology
GMS 6065: Fundamentals of Cancer Biology
GMS 6072: Neuroendocrinology and Neuroimmunology
GMS 6073: Developmental Neurobiology
GMS 6078: Synaptic Function and Plasticity
GMS 6079: Computers in Biology
GMS 6080: Basic Magnetic Resonance Imaging
GMS 6081: Biological Imaging Techniques
GMS 6090: Research in Medical Sciences
GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
GMS 6099: Foundations in Aging and Geriatric Research
GMS 6121: Infectious Diseases
GMS 6140: Principles of Immunology
GMS 6145: Immunology of Gene Transfer
GMS 6151: Genetic Analysis Using Model Systems
GMS 6155: DNA Microarray Data Analysis
GMS 6160: Introduction to Oral Biology I
GMS 6161: Introduction to Oral Biology II
GMS 6173: Stomatognathic System: Form and Function
GMS 6176: Biology of Tooth Supporting Structures I
GMS 6177: Biology of Tooth Supporting Structures II
GMS 6181: Special Topics in Microbiology
GMS 6191: HIV Journal Club
GMS 6193: Research Conference in Oral Biology
GMS 6196: Virology Journal Club
GMS 6198: Bacterial Pathogenesis Journal Club
GMS 6223: Drosophila Neurogenetics: from Development to Function
GMS 6231: Genomics and Bioinformatics
GMS 6232: Advanced Applications of Bioinformatics in Genetics
GMS 6234: Introduction to phylodynamics: A practical approach to molecular phylogenetics of pathogens
GMS 6290: Genetics/Genomics Program Graduate Seminar
GMS 6331: Stem Cell Biology
GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
GMS 6337: B Cell Development in Health and Disease
GMS 6381: Special Topics in Pathology
GMS 6382: Special Topics in Immunology
GMS 6383: Current Topics in Immunotherapy
GMS 6394: Seminar in Mammalian Genetics
GMS 6400C: Principles of Physiology
GMS 6403: Advanced Endocrinology
GMS 6405: Fundamentals of Endocrine Physiology
GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
GMS 6408: Fundamentals of Renal Physiology
GMS 6410: Physiology of the Circulation of Blood
GMS 6411: Fundamentals of Cardiovascular Physiology
GMS 6412: Human Physiology for Biomedical Engineering
GMS 6413: Advances in Hypertension Research
GMS 6414: Advanced Renal Physiology
GMS 6415: Fundamentals of Gastrointestinal Physiology
GMS 6416: Human Endocrinology and Anatomy of Reproduction
GMS 6417: Integrative Aging Physiology
GMS 6421: Cell Biology
GMS 6471: Fundamentals of Physiology and Functional Genomics I
GMS 6472: Fundamentals of Physiology and Functional Genomics II
GMS 6473: Fundamentals of Physiology and Functional Genomics III
GMS 6483: Theories of Aging
GMS 6484: Geriatric and Age Related Diseases
GMS 6485: Population Based Research on Aging
GMS 6486: Fundamentals of Biological Aging
GMS 6490C: Research Methods in Physiology
GMS 6491: Journal Club in Physiology
GMS 6495: Seminar in Physiology
GMS 6496: Recent Advances in Physiology
GMS 6497: Seminar on Vision
GMS 6500: Introduction to Pharmacology
GMS 6506: Biologic Drug Development
GMS 6563: Molecular Pharmacology
GMS 6590: Seminar in Pharmacology
GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
GMS 6607C: Musculoskeletal Systems
GMS 6609: Advanced Gross Anatomy
GMS 6621: Vision
GMS 6622: Mitochondrial Biology in Aging and Disease
GMS 6635: Organization of Cells and Tissues
GMS 6642: Morphogenesis: Organ Systems I
GMS 6643: Morphogenesis: Organ Systems II
GMS 6644: Apoptosis
GMS 6647: Transcriptional and Translational Control of Cell Growth and Proliferation
GMS 6683: Fundamentals of Vascular Physiology and Pathology
GMS 6690: Molecular Cell Biology Journal Club
GMS 6691: Special Topics in Cell Biology and Anatomy
GMS 6692: Research Conference in Anatomy and Cell Biology
GMS 6705: Functional Human Neuroanatomy
GMS 6709: Current Topics in Vision
GMS 6711: Neurobiology of Pain
GMS 6715: Lifestyle Interventions in Aging I: Behavioral Aspects & Clinical Outcomes
GMS 6717: Lifestyle Interventions in Aging II: Physiologic Aspects
GMS 6719: Fundamentals of Computational Neuroscience
GMS 6735: Neuropharmacology
GMS 6750: Molecular Pathobiology of Neural Disease
GMS 6760: Comparative Biology of Cell Signaling
GMS 6761: Clinical Neuroscience of Aging
GMS 6780: Addiction: Neuroscience and Trends
GMS 6791: Visual Neuroscience Journal Club
GMS 6792: Neuroscience Graduate Research Seminar
GMS 6800: Fundamentals of Epidemiology
GMS 6804: Medical Informatics
GMS 6810: Intermediate Epidemiology Methods
GMS 6814: Molecular and Genetic Epidemiology
GMS 6820: Advanced Epidemiology Methods
GMS 6845: Clinical & Translational Research Practicum
GMS 6872: Science and Ethics of in Vitro Fertilization
GMS 6876: Law & Ethics of Aging
GMS 6881: Special Studies in Epidemiology and Health Policy Research
GMS 6883: Practicum Experience in Epidemiology and Health Policy
GMS 6895: CTS Journal Club
GMS 6901: Seminar in Biology of Disease
GMS 6903: Manuscript and Abstract Writing for Clinician/Scientists
GMS 6905: Independent Studies in Medical Sciences
GMS 6910: Supervised Research
GMS 6920: Genetics Journal Colloquy
GMS 6921: Immunology/Microbiology Journal Colloquy
GMS 6931: Ethical and Policy Issues in Clinical Research
GMS 6940: Supervised Teaching
GMS 6970: Individual Study
GMS 6971: Research for Master’s Thesis
GMS 7001: Fundamentals of Biomedical Science Education
Biochemistry and Molecular Biology Department

Chair: James B. Flanegan.
Graduate Coordinator: Kevin Brown

Complete faculty listing by department: Follow this link.

Biochemistry and Molecular Biology Department faculty mentor Ph.D. students in the College of Medicine interdisciplinary program (IDP) in medical sciences. Students interested in pursuing a doctoral degree can view specific features of the biochemistry and molecular biology concentration at http://biochem.med.ufl.edu/ and http://idp.med.ufl.edu. For admission information, visit the IDP website. Department faculty also mentor Ph.D. students in other college programs and participate actively in the research and teaching functions of various centers such as the Center for Epigenetics and the Center for Structural Biology. The Department offers a wide variety of courses for graduate students studying in the life sciences. The research expertise of the faculty spans the areas from cell biology, metabolism, and molecular biology to physical biochemistry/structural biology. Current research interests include viral protease inhibitors, viral RNA replication, bioenergetics and proton translocation, X-chromosome structure and function, cytoskeletal assembly and dynamics, enzyme mechanism and control, chromatin structure, gene expression and regulation, mitochondrial biogenesis and evolution, the genetics of inherited disease, nutrient membrane transporters, protein site-directed mutagenesis, ribosome structure and function, signal transduction, structural biology and dynamics of macromolecules, proteins-macromolecular interactions, transgenic animal models, and virus crystal structure. Prospective graduate students should have adequate training in chemistry and biology. Minor deficiencies may be made up immediately after entering graduate school. Previous undergraduate experience in a research laboratory is highly recommended. Doctoral students are required to take a core IDP course in fall term of their first year; and beginning in spring term, students take advanced classes in areas of interest. Specific advanced-level courses may be recommended by the student's supervisory chair and committee. The following courses are open to all graduate students and advanced undergraduates. Additional courses are listed in the Advanced Concentration in Biochemistry and Molecular Biology section under Medical Sciences.

BCH 5413: Mammalian Molecular Biology and Genetics

BCH 6040: Research Discussion in Biochemistry and Molecular Biology

BCH 6107: Biophysical Techniques in Proteomics and Protein Science

BCH 6206: Advanced Metabolism

BCH 6207: Advanced Metabolism: Role of Membranes in Signal Transduction and Metabolic Control

BCH 6208: Advanced Metabolism: Regulation of Key Reactions in Carbohydrate and Lipid Metabolism

BCH 6209: Advanced Metabolism: Regulation of Key Reactions in Amino Acid and Nucleotide Metabolism

BCH 6415: Advanced Molecular and Cell Biology

BCH 6740: Physical Biochemistry/Structural Biology

BCH 6741C: Magnetic Resonance Imaging and Spectroscopy in Living Systems

BCH 6744: Molecular Structure Determination by X-ray Crystallography

BCH 6744L: Molecular Structure Determination by X-Ray Crystallography Laboratory

BCH 6745: Molecular Structure and Dynamics of NMR Spectroscopy

BCH 6745L: Molecular Structure and Dynamics by NMR Spectroscopy Laboratory

BCH 6746: Structural Biology: Macromolecular Structure Determination
BCH 6747: Structural Biology/Advanced Physical Biochemistry: Spectroscopy and Hydrodynamics

BCH 6749C: Numerical Methods in Structural Biology

BCH 6875: Crystallography and Cryo-Electron Microscopy

BCH 6876: Recent Advances in Membrane Biology

BCH 6877: Recent Advances in Structural Biology

BCH 6878: Recent Advances in Cytoskeletal Processes

BCH 6905: Independent Studies in Biochemistry and Molecular Biology

BCH 6910: Supervised Research

BCH 6936: Biochemistry Seminar

BCH 6971: Research for Master's Thesis

BCH 7410: Advanced Gene Regulation

BCH 7412: Epigenetics of Human Disease and Development

BCH 7414: Advanced Chromatin Structure

BCH 7515: Structural Biology/Advanced Physical Biochemistry: Kinetics and Thermodynamics

BCH 7979: Advanced Research

BCH 7980: BioChem Doctoral Research

GMS 6195: Epigenetics Journal Club

Biostatistics Department

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration in biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/](http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/).

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.
Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/](http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/).

**GMS 6818: Design and Conduct Clinical Trials I**

**GMS 6661: Applied Biostatistics I**

**GMS 6862: Applied Biostatistics II**

**GMS 6863: Analysis and Study Design for High Dimension, Low Sample Size Data**

### Epidemiology Department

*College of Public Health and Health Professions*  
*College of Medicine*

*Chair:* Linda Cottler  
*Ph.D. Program Director:* Cindy Prins  
*M.S. Program Director:* Catherine Woodstock Striley

Complete faculty listing by department: [Follow this link](http://epidemiology.phhp.ufl.edu).

The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the [Graduate Degrees](http://epidemiology.phhp.ufl.edu) section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: [http://epidemiology.phhp.ufl.edu](http://epidemiology.phhp.ufl.edu).

**GMS 6801: Epidemiology, Prevention, and Control of Infectious Diseases**

**GMS 6813: Clinical Trials**

**GMS 6819: Design and Conduct Clinical Trials II**

**GMS 6827: Advanced Clinical Trial Methods**

**GMS 6841: Design and Analysis of Translational Research in Biomedical Sciences**

**GMS 6882: Directed Readings in Epidemiology and Health Policy**

**GMS 6884: Research in Epidemiology and Health Policy**

**PHC 6008: Cardiovascular Epidemiology**

**PHC 6034: Epidemic Investigation**

**PHC 7007: Cancer Epidemiology**

**PHC 7902: Epidemiology Supervised Research Writing Circle**

**PHC 7934: Seminar I: Epidemiology Past, Present, and Future**

### Health Outcomes and Policy Department

*College of Medicine*

*Chair:* Betsy Shenkman  
*Graduate Coordinator:* Jill Herndon

Complete faculty listing by department: [Follow this link](http://epidemiology.phhp.ufl.edu).

Students can pursue either a Master of Science degree or a Graduate Certificate.

There is increasing emphasis on assessing health outcomes throughout the lifespan in a variety of health care and community settings. Nationally, the National Institute of Health and other federal and state agencies focus on the development of evidence-based programs to promote health, improve health care delivery, and enhance health outcomes.

Outcomes research generates evidence that informs health care program design in clinical and community settings, the promotion of effective clinical and community interventions, quality of care, cost-effective and clinically appropriate choices for patients in allocation of health care resources (clinical effectiveness), and incorporation of best practice models into health-related programs and policies. Outcomes research also provides mechanisms to understand how to translate research into practice and policy, how to improve the quality and efficiency of health programs, and how to achieve equitable and appropriate delivery of health programs and clinical care, particularly for underserved and vulnerable populations.

Our graduate programs are designed to train professionals in the health care and health research fields about the science that supports the development and evaluation of evidence-based clinical...
and community-based programs focused on improving health outcomes. Further, our programs emphasize methods for translating research into practice and policy. The unique combination of courses offered through these graduate programs will give trainees the tools needed to examine health outcomes and policies in a variety of settings across different age spans and to examine the individual, social, health system, and health policy factors that influence health outcomes.

In addition to traditional graduate students, both programs are available to medical students, post-doctoral students, fellows, residents, Ph.D. students, and junior faculty.

GMS 6802: Examining Health Outcomes for Chronic Diseases in Clinical and Community-based Research

GMS 6803: Data Management for Clinical Research

GMS 6811: Grant Writing Skills for Clinical Research

GMS 6812: Cancer Health Outcomes Assessment

GMS 6816: Pediatric Child Health Outcomes Assessment for Clinical and Community-Based Research

GMS 6821: Measuring and Analyzing Health Outcomes I

GMS 6822: Measuring and Analyzing Health Outcomes II

GMS 6823: Methods for Evaluating Health Care Outcomes and Costs: Module 1

GMS 6824: Methods for Evaluating Health Care Outcomes and Costs: Module 2

GMS 6825: Methods for Evaluating Health Care Outcomes and Costs: Module 3

GMS 6826: Advanced Design and Methodology for Case-Control Studies in Clinical Research

GMS 6829: Longitudinal Research Design

GMS 6830: Health Outcomes Research and Policy Development

GMS 6832: Economic Methods for Evaluating Value in Health

GMS 6833: Health Care Policy and Vulnerable Populations

GMS 6834: Health Policy and Formulation of Payment Mechanisms for Health Care

GMS 6835: Health Policy Issues in Children's Health

GMS 6842: Translational Research Methods

GMS 6844: Experimental and Quasi-Experimental Research Designs for Community Settings

GMS 6846: Meta-Analysis in Clinical, Health Services Research and Public Health

GMS 6851: Health Outcomes Research

GMS 6852: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies

GMS 6853: Applied Topics in Dissemination and Implementation Science

GMS 6854: Applied Topics in Clinical Effectiveness Research

GMS 6885: Research Designs in Health Outcomes and Policy

GMS 6893: Clinical and Translational Science Seminar Series

GMS 6896: Health Outcomes and Policy Seminar

GMS 7886: Health Outcomes and Policy PhD Seminar: Applied Research

GMS 7887: Health Outcomes & Policy PhD Research Seminar

Molecular Genetics and Microbiology Department
Chair: H. V. Baker.
Graduate Coordinator: A. S. Lewin.

Complete faculty listing by department: Follow this link.

The Graduate Faculty of the Department of Molecular Genetics and Microbiology participate in the interdisciplinary program (IDP) in medical sciences, leading to the Doctor of Philosophy degree, with specialization in one of the six advanced concentration areas of the IDP (see Medical Sciences). Departmental areas of research associated with the IDP focus on topical problems in molecular genetics, viral genetics, and viral and bacterial pathogenesis. Faculty in the Department of Molecular Genetics and Microbiology also participate in the M.S. programs (see Medical Sciences). In addition to courses associated with the IDP, the Department of Molecular Genetics and Microbiology maintains the courses listed below.

Biotechnology: This Master of Science program is for students seeking careers in the biomedical industry as research or managerial associates; students seeking careers as teachers or educators at any level, but primarily high school or junior college; or students seeking an in-depth understanding of modern biology and scientific research as an end in itself or in preparation for further graduate study. The foundation of the M.S. program is a basic understanding of molecular and cell biology and the performance of a high-quality research project, culminating in a thesis, under the direction of a skilled mentor, with supervision by a committee composed of members of the Graduate Faculty. Specialization may be in any of the fields of research being pursued at the College of Medicine including but not limited to molecular genetics, gene therapy, bacterial or viral pathogenesis, protein structure, toxicology, mammalian genetics, wound healing, and congenital eye diseases.

For more information contact the Master's Program Coordinator, Molecular Genetics and Microbiology, P.O. Box 100266, College of Medicine, Gainesville, FL 32610, Telephone (352)392-3314.

BME 5704: Advanced Computational Methods for Biomedical Engineering
GMS 6153: Advanced Bacterial Genetics
GMS 6169: Antimicrobial Strategies
GMS 6190: Seminar
GMS 6221: Ethics in Genetics
GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
GMS 6251: Molecular Therapy I – Vectors and Molecular Mechanisms
GMS 6252: Molecular Therapy II – Disease Targets and Applications
GMS 6253: Molecular Therapy III – Immunology of Gene Transfer
GMS 6338: Recent Advances in Cancer Metastasis
GMS 6943: Master's Translational Biotechnology Internship
GMS 7093: Introduction to Clinical and Translational Research
GMS 7191: Research Conference
GMS 7194: Biotechnology Seminar
PCB 5235L: Experiments in Immunology

Nursing Courses - filtered

College of Nursing

Dean: A.M. McDaniel

Complete faculty listings: Follow this link.

The nationally ranked College of Nursing offers the graduate degrees of Master of Science in Nursing, Doctor of Nursing Practice, and Doctor of Philosophy in nursing sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog. Students may request special review by the College of Nursing Admissions Committee if they believe they are strong candidates for graduate study but do not fully meet all criteria.

The College offers the master's degree and post-master's certification for nurse midwifery and the following nurse practitioner roles: adult acute care, adult, family, pediatric, and neonatal. Additional offerings include

- Psychiatry/mental clinical nurse specialists/nurse practitioners
- Clinical Nurse Leader

For additional information about the Nursing programs, visit http://www.nursing.ufl.edu or call (352) 273-6331.

College of Nursing Courses
NGR 5934: Cultural Influences on Health Care
NGR 6002C: Advanced Health Assessment
NGR 6006: Principles of Clinical Outcomes Management
NGR 6052C: Adult Nursing: Diagnostics and Procedures
NGR 6054C: Advanced Neonatal Health Assessment and Diagnostic Reasoning
NGR 6101: Theory and Research for Nursing
NGR 6140: Physiology and Pathophysiology for Advanced Nursing Practice
NGR 6172: Pharmacotherapeutics for Advanced Practice Nursing
NGR 6230C: Acute Care Nurse Practitioner: Diagnostics and Procedures for the Critically Ill
NGR 6240: Primary Care for Adults
NGR 6241: Adult Nursing: Common Health Problems
NGR 6241L: Adult Nurse Practitioner: Common Health Problems Laboratory
NGR 6243: Acute Care Nurse Practitioner: Critically Ill Adult
NGR 6243L: Acute Care Nurse Practitioner: Critically Ill Adult Laboratory
NGR 6244: Adult Nursing: Chronic Health Problems
NGR 6244L: Adult Nurse Practitioner: Chronic Health Problems Laboratory
NGR 6247: Complex High Prevalence Illnesses Of Adults
NGR 6247L: Complex High Prevalence Illnesses Of Adults
NGR 6248: Adult Acute Care Nurse Practitioner 3
NGR 6248L: Adult Acute Care Nurse Practitioner 3 Laboratory
NGR 6255: Advanced Nursing Care of Older Adult
NGR 6301: Advanced Child Health Nursing I
NGR 6301L: Advanced Child Health Nursing I Laboratory
NGR 6302: Advanced Child Health Nursing II
NGR 6302L: Advanced Child Health Nursing II Laboratory
NGR 6307: Advanced Child Health Nursing III
NGR 6307L: Advanced Child Health Nursing III Laboratory
NGR 6320C: Neonatal Care I
NGR 6321C: Neonatal Care II
NGR 6323C: Neonatal Care III
NGR 6350: Family Nurse Practitioner: Women, Adolescents, And Children
NGR 6350L: Family Nurse Practitioner: Women, Adolescents, And Children Laboratory
NGR 6360C: Nurse-Midwifery Care I
NGR 6361C: Nurse-Midwifery Care II
NGR 6364: Seminar: The Nurse Midwife
NGR 6371: Pharmacotherapeutics for Advanced Neonatal Nursing
NGR 6372C: Advanced Pediatric Procedures and Diagnostics
NGR 6500C: Individual and Family Therapy for Psychiatric-Mental Health Nursing
NGR 6501C: Group Therapy and Community Interventions for Psychiatric-Mental Health Nursing
NGR 6538: Psychopharmacology for Psychiatric Nursing
NGR 6612: Family Nurse Practitioner: Complex Family Health Care (Focus On Gerontology)
NGR 6612L: Family Nurse Practitioner: Complex Family Health Care (Focus On Gerontology)
NGR 6636: Wellness Promotion and Disease Prevention
NGR 6726: Management of the Care Environment II
NGR 6727: Management of the Care Environment I
NGR 6740: Role Transition: Issues in Advanced Practice Nursing
NGR 6770: Leadership/Role of Clinical Nurse Leader
NGR 6771: Clinical Nurse Leader Role Seminar
NGR 6773: Clinical Nurse Leader Residency/Internship
NGR 6815: Foundations of Qualitative Research in Nursing
NGR 6840: Applied Statistical Analysis I
NGR 6845: Applied Statistical Analysis II
NGR 6850: Research Methods and Utilization for Nursing
NGR 6892: Health Care Policy and Organizational Delivery
NGR 6905: Individual Study
NGR 6930: Special Topics in Nursing
NGR 6941: Practicum in Nursing
NGR 6944: Individual Clinical Practice
NGR 6970: Research for Master’s Project
NGR 6971: Research for Master’s Thesis
NGR 7003: Advanced Diagnostic Reasoning
NGR 7115: Philosophy of Nursing Science
NGR 7124: Theory Development in Nursing
NGR 7176: Advanced Topics in Pharmacotherapeutics in Nursing
NGR 7700: Leadership and Role Development in Advanced Nursing Practice
NGR 7709: Nurse Scientist and Scholar I
NGR 7814: Field Methods for Health Related Research
NGR 7816: Quantitative Research Design and Measurement in Nursing
NGR 7827: Outcomes Research and Evaluation
NGR 7831: Quality Indicators in Nursing Systems
NGR 7835: Nurse Scientist and Scholar II
NGR 7871: Nursing Informatics and Data
NGR 7882: Ethical Theories and Rational Decision Making in Health
NGR 7891: Health Policy and Finance in Advanced Nursing Practice
College of Pharmacy

Dear: J. Johnson

Complete faculty listings: Follow this link.

The College of Pharmacy offers the Doctor of Philosophy and the Master of Science in Pharmacy degrees in the pharmaceutical sciences, with concentrations in medicinal chemistry, pharmacodynamics, pharmaceutical outcomes and policy, and pharmacy which includes pharmaceutics. There are two additional concentrations in the Master of Science in Pharmacy program in pharmaceutical sciences: forensic drug chemistry, and forensic serology and DNA. Both offered in a distance-learning, nonthesis format. Complete descriptions of the minimum requirements for the M.S.P. and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

The Graduate Faculty and courses offered are listed under department headings in this catalog. The courses listed below consist of seminar, supervised teaching and research, and research for thesis or doctoral dissertation. These courses are offered in each of the departments.

Students who wish to pursue graduate studies in the College of Pharmacy must have an undergraduate degree in pharmacy, chemistry, biology, or related sciences.

Satisfactory completion of a thesis or dissertation based on research is a requirement for a graduate degree in the pharmaceutical sciences.

Inquiries regarding applications and general information about the graduate programs are processed through the Office of Research and Graduate Studies, College of Pharmacy, P.O. Box 100484, Health Science Center.

For more information, please see our website: http://pharmacy.ufl.edu.

Departments and Programs within the College of Pharmacy
College of Pharmacy Courses

PHA 5171: Pharmaceutical Biotechnology
PHA 6115: Equilibria, Complexations, and Interactions of Drugs
PHA 6235: Advanced Pharmaceutical Law
PHA 6910: Supervised Research
PHA 6935: Selected Topics in Pharmacy
PHA 6936: Advanced Topics in Pharmaceutical Sciences
PHA 6938: Research Seminar
PHA 6940: Supervised Teaching
PHA 6971: Research for Master’s Thesis
PHC 6404: Gender, Sexuality, and Health
PHC 6913: Biostatistics Project
PHC 6930: Integrated Public Health Seminar

Medicinal Chemistry Department

College of Pharmacy

Chair: M. O. James.
Graduate Coordinator: H. Luessch

Complete faculty listing by department: Follow this link.

The College of Pharmacy offers the Doctor of Philosophy degree in pharmaceutical sciences with a concentration in medicinal chemistry. Medicinal chemistry is a unique blend of the physical
and biological sciences. The scope of the field is sufficiently broad to give students with many different science backgrounds a rewarding and challenging program of study. Areas of active research include organic synthesis of medicinal agents, metal chelate design, prodrugs and topical drug delivery, drug metabolism, molecular toxicology, molecular biology, combinatorial chemistry, analytical chemistry, molecular modeling, natural products, and drug discovery.

The applicant should have an undergraduate degree in pharmacy, chemistry, biology, or premedical sciences. A background in calculus and physical and organic chemistry is required. In addition to graduate medicinal chemistry courses in the College of Pharmacy, graduate courses in chemistry and biochemistry are required for the program.

The College also offers the Master of Science in Pharmacy degree in pharmaceutical sciences (nonthesis option) with concentrations in both forensic drug chemistry and forensic serology and DNA in a distance learning format. Minimum requirements for the M.S.P. and Ph.D. degrees are described in the General Information section of this catalog.

The Department participates in the interdisciplinary concentration in toxicology. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

PHA 5475: Synthesis of Prodrugs
PHA 6354: Natural Medicinal Products
PHA 6356: Structure Determination of Complex Natural Products
PHA 6357: Herbal & Dietary Supplements
PHA 6417: Pharmaceutical Analysis II
PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
PHA 6432: Fundamentals of Pharmaceutical Chemistry
PHA 6444: Pharmaceutical Chemistry I
PHA 6447: Drug Design
PHA 6448: High Throughput Drug Discovery
PHA 6471: Synthetic Medicinal Chemistry
PHA 6534: Toxicology of Chemical Weapons
PHA 6535: Principles of Nucleotide Activity
PHA 6543: Pharmaceutical Chemistry II
PHA 6556: Introduction to Clinical Toxicology
PHA 6557: Clinical Toxicology I
PHA 6840: Medicinal Chemistry of Drugs of Abuse
PHA 6850: Principles of Forensic Science
PHA 6851: Forensic Analysis of DNA
PHA 6852: Mammalian Molecular Biology
PHA 6853: Biological Evidence and Serology
PHA 6854: Forensic Immunology
PHA 6855: Forensic Genetics
PHA 6856: Blood Spatter and Distribution
PHA 6905C: Research Procedures in Medicinal Chemistry
PHA 6934: Seminar in Medicinal Chemistry

Pharmaceutics Department

Chair: H. C. Derendorf.
Graduate Coordinator: A. Palmieri III.

Complete faculty listing by department: Follow this link.

The Department of Pharmaceutics offers the Doctor of Philosophy in pharmaceutical sciences. Pharmaceutics is the scientific endeavor concerned with the design, formulation, evaluation, and use of drug delivery systems. A foundation in physical chemistry, chemistry, mathematics, and in the life sciences, is necessary. Its domain extends from studies of the physiochemical properties of drugs and related molecules to investigations of the mechanisms of physiological processes affecting drug delivery and therapeutic effectiveness. The Department's general focus involves studying the design and evaluation of traditional and novel dosage forms for delivering drug molecules and macromolecules. The design involves physical chemical studies and development of analytical techniques involving spectroscopy and chromatography. Evaluation includes development of sensitive analytical techniques for the drug in biological fluids and subsequent biopharmaceutical and clinical pharmacokinetic studies.

PHA 6116: In Vivo and In Vitro Stability of Drugs
PHA 6118: Molecular Diversity
PHA 6125: Pharmacokinetics and Biopharmaceutics
PHA 6170C: Pharmaceutical Product Formulation
PHA 6183: Pharmaceutical Gene Delivery
PHA 6185: Pharmaceutical Drug Development
PHA 6416: Pharmaceutical Analysis I
PHA 6427: Pharmacogenetics of Drug Metabolism
PHA 6440: Seminar in Drug Discovery
PHA 6449: Pharmacogenomics
PHA 6630: Medication Therapy Management: A Hematologic Focus
PHA 6631: Foundations of Medication Therapy Management I
PHA 6632: Foundations of Medication Therapy Management II
PHA 6633: Medication Therapy Management: A Cardiovascular Focus
PHA 6634: Medication Therapy Management: An Endocrine Focus
PHA 6635: Medication Therapy Management: A Renal Focus
PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
PHA 6637: Medication Therapy Management: A Psychiatric Focus
PHA 6638: Medication Therapy Management: A Neurologic Focus
PHA 6639: Medication Therapy Management: A Respiratory Focus
PHA 6894: Introduction to Graduate Studies
PHA 6896: Preclinical Drug Evaluation

Pharmacodynamics Department

Chair: M. Keller-Wood.
Interim Graduate Coordinator: Joanna Peris

Complete faculty listing by department: Follow this link.

The Department of Pharmacodynamics offers the Doctor of Philosophy in the pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the interdisciplinary toxicology concentration (see Interdisciplinary Graduate Studies in this catalog). Pharmacodynamics is an integrated field of study involving pharmacology, physiology, and toxicology in a holistic approach to drug action in living systems. The Department focuses on neuroendocrinology, cardiovascular pharmacology, and neuropharmacology with diverse research interests in aging, hypertension, reproduction, glaucoma, neurotoxicity, and environmental physiology.

An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.
PHAR 5531: Neurotoxicology

PHAR 6508: Systems Physiology and Pathophysiology I

PHAR 6509: Systems Physiology and Pathophysiology II

PHAR 6512L: Experiential Research Training in Pharmacodynamics

PHAR 6521C: Research Techniques in Pharmacodynamics

PHAR 6522L: ICBR Molecular Techniques Laboratory

PHAR 6540: Neurochemical Foundation of Pharmacodynamics

PHAR 7939: Journal Colloquy in Pharmacodynamics

**Pharmaceutical Outcomes and Policy Department**

**Chair:** R. Segal  
**Graduate Coordinator:** A. Winterstein

Complete faculty listing by department [Follow this link.](#)

The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree. Complete descriptions of the requirements for these degrees are provided in the [Graduate Degrees](#) section of this catalog.

**PHA 5270:** Health Care and Patient Safety

**PHA 5271:** Health Care Risk Management

**PHA 5272:** Risk Management, Liability and Compliance

**PHA 6206:** Introduction to Pharmaceutical Microeconomics

**PHA 6227:** Institutional Pharmacy Leadership I

**PHA 6228:** Institutional Pharmacy Leadership II

**PHA 6236:** Health Sciences Liability Law

**PHA 6250:** Patient Responsibility in Health Care

**PHA 6264:** Pharmacoeconomics and Health Technology Assessment

**PHA 6265:** Introduction to Pharmaceutical Outcomes and Policy I

**PHA 6266:** Introduction to Pharmaceutical Outcomes and Policy II

**PHA 6268:** Pharmacoepidemiology and Patient Safety

**PHA 6269:** Pharmaceutical Products and Public Policy

**PHA 6273:** Structure, Process, and Outcomes of Regulation

**PHA 6274:** Federal Regulations of Drugs and Pharmacy

**PHA 6275:** Federal Regulations of Controlled Substances

**PHA 6276:** Regulating Pharmaceutical Access and Costs

**PHA 6277:** Ethics in Drug Development Production and Use

**PHA 6278:** State Regulation of Drugs and Pharmacy

**PHA 6279:** Pharmaceutical Outcomes and Policy Seminar
PHA 6280: Medicare and Medicaid
PHA 6281: Practices and Procedures of Administrative Agencies
PHA 6282: Pharmaceutical Policy Process
PHA 6283: Commercial Applications of Pharmacoeconomics
PHA 6286: Pharmaceutical Microeconomics
PHA 6287: Pharmaceutical Health Economics
PHA 6288: Critical Review of Research Methods
PHA 6289: Regulating Clinical Research
PHA 6290: Pharmaceutical Fraud and Abuse
PHA 6291: Pharmaceutical Health Care Systems
PHA 6717: Measurement in Pharmacy Administration Research
PHA 6793: Evidentiary Basis of Pharmaceutical Use
PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
PHA 6798: The Use and Abuse of Statistics in Drug Regulation
PHA 6799: Patient Safety Program Evaluation
PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
PHA 6806: Pharmacoeconomic Modeling
PHA 6860: Prevention of Pharmaceutical Crimes
PHA 6891: Introduction to Pharmacoepidemiology
PHA 6892: Practices and Procedures of the IRB
PHA 6893: Research Ethics
PHA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
PHA 6937: Topics in Pharmaceutical Administration

Pharmacotherapy and Translational Research Department

For a full list of faculty, please follow this link.

Description to be added

PHA 7979: Advanced Research
PHA 7980: Research for Doctoral Dissertation

PHHP college-owned courses

College of Public Health and Health Professions

Dean: Michael G. Perri
Executive Associate Dean: Stephanie L. Hanson

Complete faculty listings: Follow this link.
The University of Florida College of Public Health and Health Professions has established a new educational model that focuses on the integration of public health problem-solving and individual patient care. The college's mission is to preserve, promote and improve the health and well-being of populations, communities and individuals. To fulfill this mission, we foster collaborations among public health and the health professions in education, research and service.

For more information, please see our website: http://phhp.ufl.edu

Departments and Programs within the College of Public Health and Health Professions

College of Public Health and Health Professions Courses

HSC 5938: Special Topics
HSC 6905: Independent Study
HSC 6939: Special Topics
HSC 6940: Supervised Teaching
PHC 6000: Epidemiology Methods I
PHC 6001: Principles of Epidemiology in Public Health
PHC 6002: Epidemiology of Infectious Diseases
PHC 6003: Epidemiology of Chronic Diseases and Disability
PHC 6009: Biology and Epidemiology of HIV/AIDS
PHC 6011: Epidemiology Methods II
PHC 6016: Social Epidemiology in Public Health
PHC 6036: Environmental Infectious Diseases: A Molecular Approach
PHC 6050: Statistical Methods for Health Sciences Research I
PHC 6102: Introduction to Public Health Administrative Systems
PHC 6103: Systems Thinking for Public Health
PHC 6104: Evidence-Based Management of Public Health Programs
PHC 6146: Public Health Program Planning and Evaluation
PHC 6153: Public Policy and Aging
PHC 6183: Disaster Preparedness and Emergency Response
PHC 6194: Spatial Epidemiology
PHC 6220: Overview of Long-Term Care
PHC 6251: Assessment and Surveillance in Public Health
PHC 6301: Aquatic Systems and Environmental Health
PHC 6309: Environmental Justice Issues in Public Health
PHC 6312: Water Quality and Human Health
PHC 6313: Environmental Health Concepts in Public Health
PHC 6317: Risk Communication for Public Health Practice
PHC 6346: Occupational and Environmental Health Among Agriculture Workers
PHC 6370: Public Health Biology
PHC 6403: Adolescence, Risk Taking and Health
PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
PHC 6413: Critical Incidents and Violence in Communities
PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
PHC 6419: Biomedical and Psychological Aspects of Very Late Life
PHC 6421: Public Health Law and Ethics
PHC 6441: Health Disparities in the United States
PHC 6445: Global Public Health and Development II
PHC 6447: Ecology of HIV/AIDS in the Rural South
PHC 6512: Environmental Management of Vector-Borne Diseases
PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
PHC 6519: Zoonotic Diseases in Humans and Animals
PHC 6520: Foodborne Diseases
PHC 6530: Public Health Issues of Mothers and Children
PHC 6543: Community Practice of Behavioral Health Risk Prevention
PHC 6544: Health Behavior Interventions in Practice
PHC 6561: Public Health Laboratory Techniques
PHC 6585: Health Promotion and Disease Prevention
PHC 6586: Interventions for Public Health
PHC 6601: Seminar in Contemporary Public Health Issues
PHC 6700: Social and Behavioral Research Methods
PHC 6702: Exposure Measurement and Assessment
PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
PHC 6762: International Public Health
PHC 6905: Independent Study
PHC 6917: Supervised Research Project
PHC 6931: Seminars in Public Health
PHC 6937: Special Topics in Public Health
PHC 6945: Public Health Practicum
PHC 6946: Public Health Internship
PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
PHC 7038: Psychiatric Epidemiology
PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
PHC 7979: Advanced Research
PHC 7980: Research for Doctoral Dissertation
PHT 5156: Exercise Physiology
PHT 6125C: Concepts in Clinical Biomechanics
PHT 6127C: Control of Gait and Posture
PHT 6167C: Applied Neurophysiology for Physical Therapy
PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
PHPT 6316: Neurological Aspects of Orthopedic Rehabilitation
PHPT 6615L: Research Instrumentation in Physical Therapy
PHPT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
RSD 6110: Rehabilitation Science Theory and Application I
RSD 6112: Rehabilitation Science Theory and Application II
RSD 6114: Rehabilitation in the United Kingdom
RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
RSD 6700: Rasch Measurement: Introduction and Application
RSD 6705: Research Methods in Rehabilitation
RSD 6706: Scientific Writing for the Rehabilitation Professional
RSD 6900: College Classroom: Teaching Process and Practice
RSD 6905: Individual Work
RSD 6910: Supervised Research
RSD 6930: Special Topics in Rehabilitation Science
RSD 6940: Supervised Teaching
RSD 7979: Advanced Research
RSD 7980: Research for Doctoral Dissertation

PHHP Courses - filtered

College of Public Health and Health Professions

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PHC 6586: Interventions for Public Health
PHC 6601: Seminar in Contemporary Public Health Issues

PHC 6700: Social and Behavioral Research Methods

PHC 6702: Exposure Measurement and Assessment

PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective

PHC 6762: International Public Health

PHC 6905: Independent Study

PHC 6917: Supervised Research Project

PHC 6931: Seminars in Public Health

PHC 6937: Special Topics in Public Health

PHC 6945: Public Health Practicum

PHC 6946: Public Health Internship

PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods

PHC 7038: Psychiatric Epidemiology

PHC 7901: Epidemiology Literature Review and Critique (Journal Club)

PHC 7979: Advanced Research

PHC 7980: Research for Doctoral Dissertation

PHT 5156: Exercise Physiology

PHT 6125C: Concepts in Clinical Biomechanics

PHT 6127C: Control of Gait and Posture

PHT 6167C: Applied Neurophysiology for Physical Therapy

PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy

PHT 6316: Neurological Aspects of Orthopedic Rehabilitation

PHT 6615L: Research Instrumentation in Physical Therapy

PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation

RSD 6110: Rehabilitation Science Theory and Application I

RSD 6112: Rehabilitation Science Theory and Application II

RSD 6114: Rehabilitation in the United Kingdom

RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science

RSD 6700: Rasch Measurement: Introduction and Application

RSD 6705: Research Methods in Rehabilitation

RSD 6706: Scientific Writing for the Rehabilitation Professional

RSD 6900: College Classroom: Teaching Process and Practice

RSD 6905: Individual Work

RSD 6910: Supervised Research

RSD 6930: Special Topics in Rehabilitation Science

RSD 6940: Supervised Teaching
Behavioral Science and Community Health Department

Chair: B. Curbow
Complete faculty listing by department: Follow this link

The Department of Behavioral Science & Community Health (BSCH) is one of nine academic departments housed in the School of Public Health and Health Professions at the University of Florida. This department offers a Doctor of Philosophy (PhD) degree (SBS track). For more information about the program, please visit the link below.

GEY 5935: Topics in Gerontology
GEY 6220: Overview of Geriatric Care Management
GEY 6646: Issues and Concepts in Gerontology
GEY 6905: Independent Study in Gerontology
GEY 6936: Professional Development in Gerontology/Geriatrics
PHC 6195: Health information for Diverse Populations: Theory & Methods
PHC 6316: Health, Risk, and Crisis Communication
PHC 6607: Critical Issues in Public Health
PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
PHC 7752: Seminar in Instrument Development for Public Health
PHC 7907: Social and Behavioral Science Journal Club
RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
RCS 6066: Rehabilitation Issues in Human Growth and Development
RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
RCS 6412: Rehabilitation Counseling Theory and Practice
RCS 6470: Human Sexuality and Disability
RCS 6601: Forensic Rehabilitation Consultation I
RCS 6602: Forensic Rehabilitation Consultation II
RCS 6625: Community Counseling and Case Management
RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
RCS 6740: Rehabilitation Research
RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
RCS 6801: Rehabilitation Counseling Practicum
RCS 6825: Internship in Rehabilitation Counseling
Biostatistics Department

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to:

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/](http://biostat.ufl.edu/education/phd-in-biostatistics/).

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/](http://biostat.ufl.edu/education/ms-in-biostatistics/).

PHC 6020: Clinical Trial Methods
PHC 6050C: Biostatistical Methods I
PHC 6051: Biostatistical Methods II
PHC 6053: Regression Methods for the Health and Life Sciences
PHC 6055: Biostatistical Computing Using R
PHC 6063: Biostatistical Consulting
PHC 6080: SAS for Public Health - Data
PHC 6081: SAS for Public Health - Analysis
PHC 7013: Bias in Observational Research
PHC 7056: Analysis of Longitudinal Data
Clinical and Health Psychology Department

The Department of Clinical and Health Psychology is a unit of the College of Public Health and Health Professions. The department's programs are its doctoral clinical psychology studies leading to the Ph.D. degree in psychology, an American Psychological Association accredited doctoral internship program, and postdoctoral studies and research. Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

The clinical psychology doctoral curriculum adheres to the scientist-practitioner model of education and training. Program strengths include research, education, and professional training in health care psychology, with organized areas of concentration in clinical health psychology, clinical child/pediatric psychology, neuropsychology, neurorehabilitation and clinical neuroscience, and emotion neuroscience/psychopathology. Education and training experiences are also available in rural psychology. Interested students can apply for acceptance into the Public Health Program and obtain dual M.P.H./Ph.D. degrees.

Progress in the program is determined by departmental policies which are consistent with American Psychological Association accreditation standards. The curriculum has been continuously accredited by the American Psychological Association since 1953.

Admission to the Department is through appropriate application to the Department’s admission committee. A bachelor’s degree is generally adequate preparation for graduate admission. It should include undergraduate courses in both experimental psychology and statistics, along with at least three courses from the following psychology areas: developmental, learning, perception, personality, physiological, and social.

For more information, please see the program page below and our website: http://chp.phhp.ufl.edu.

CLP 5316: Health Psychology

CLP 5426: Introduction to Neuropsychology

CLP 6304: Psychological Foundations of Clinical Psychology I

CLP 6307: Human Higher Cortical Functioning

CLP 6308: Psychological Foundations of Clinical Psychology II

CLP 6309: Psychological Foundations of Clinical Psychology III

CLP 6344C: Lifespan Foundations of Behavioral Health and Illness I

CLP 6345: Lifespan Foundations of Behavioral Health and Illness II

CLP 6375: Introduction to Clinical Psychology

CLP 6407: Psychological Treatment I

CLP 6417: Psychological Treatment II
CLP 6425: Seminar in Clinical Neuropsychology
CLP 6430: Clinical Psychological Assessment
CLP 6434C: Clinical Psychology Assessment I
CLP 6435C: Clinical Psychology Assessment II
CLP 6446C: Psychological Assessment of Children
CLP 6447C: Psychological Assessment of Adults
CLP 6476: Lifespan Psychopathology
CLP 6497: Psychopathological Disturbances
CLP 6527C: Measurement, Research Design, and Statistical Analysis in Clinical Psychology I
CLP 6528C: Measurement, Research Design, and Statistical Analysis in Clinical Psychology II
CLP 6529: Applied Multivariate Methods in Psychology
CLP 6905: Individual Work
CLP 6910: Supervised Research
CLP 6940: Supervised Teaching
CLP 6943: Core Practicum in Clinical Psychology
CLP 6945: Advanced Practicum in Neuropsychology
CLP 6946: Advanced Practicum in Applied Medical Psychology
CLP 6947: Practicum in Intervention
CLP 6948: Advanced Practicum in Clinical Child Psychology
CLP 6971: Research for Master’s Thesis
CLP 7317: Advanced Health Psychology and Behavior Medicine
CLP 7404C: Special Issues, Methods, and Techniques in Psychological Treatment
CLP 7427C: Neuropsychological Assessment of Children
CLP 7428C: Neuropsychological Assessment of Adults
CLP 7934: Special Topics In Clinical Psychology
CLP 7949: Internship
CLP 7979: Advanced Research
CLP 7980: Research for Doctoral Dissertation
DEP 6216: Psychological Disturbances of Children
GEY 6306: Interpersonal Communication Within the Aging Network
GEY 7408: Psychotherapy with Older Adults

Environmental and Global Health Department
The Department of Environmental and Global Health focuses upon environmental factors that impact human health. Department faculty, scientists, and students employ numerous disciplines in studying these environmental factors: virology, bacteriology, parasitology, entomology, toxicology, epidemiology, water sciences, veterinary health, environmental engineering, aerosol biology, wildlife health, etc. Research work often involves international travel and collaboration. A central theme for the department is the interdisciplinary thinking called One Health which reflects the collaborations necessary to tackle public health's most difficult problems. Faculty, students and staff often perform research in the laboratories in the Emerging Pathogens Institute, the Center for Environmental and Human Toxicology, or the Aquatic Pathobiology Laboratory.

The Department of Environmental and Global Health offers graduate work leading to the degrees of Doctor of Philosophy, Master of Health Science, and Master of Public Health.

PHC 6006: An Introduction to One Health Problem Solving

PHC 6722: Environmental and Global Health Research Methods Rotation

PHC 6900: Environmental and Global Health Journal Club

PHC 6947: Occupational Health Field Research Experience

**Epidemiology Department**

College of Public Health and Health Professions
College of Medicine

Chair: Linda Cottler
Ph.D. Program Director: Cindy Prins
M.S. Program Director: Catherine Woodstock Striley

Complete faculty listing by department: [Follow this link](#)

The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described [here](#)). Minimum requirements for these degrees are described in the [Graduate Degrees](#) section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: [http://epidemiology.phhp.ufl.edu](http://epidemiology.phhp.ufl.edu)

PHC 6010: Data Management and Statistical Computing for Epidemiology

PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II

PHC 6052: Introduction to Biostatistical Methods

PHC 6070: Epidemiology of Aging

PHC 6405: Theoretical Foundations of Public Health

PHC 6517: Public Health Concepts in Infectious Diseases

PHC 6711: Measurement in Epidemiology and Outcomes Research

PHC 6716: Survey Research Methods

PHC 6912: Special Project: Independent Research

PHC 6938: Oral and Craniofacial Epidemiology

PHC 7065: Critical Skills in Epidemiological Data Management

PHC 7427: Ethics in Population Science

PHC 7727: Grant Writing for Population Health Research

PHC 7910: International Field Epidemiology

PHC 7916: National Field Epidemiology

STA 5325: Fundamentals of Probability
Health Services Research, Management, and Policy Department

Chair: Arch G. Mainous, III
Graduate Coordinator: Patricia Van Wert

Complete faculty listing: Follow this link.

The Department of Health Services Research, Management, and Policy offers degree programs at both the master's and doctoral level. The Master of Health Administration (M.H.A.) prepares individuals for management positions in the health care field. The Department also participates in the Master of Public Health (M.P.H.) degree by offering a concentration in Public Health Management and Policy (more information available here).

At the doctoral level, the Department offers the Ph.D. degree in Health Services Research. This full-time program prepares graduates to investigate and evaluate the complexities of health care systems in the U.S. and elsewhere. Health services research is a multidisciplinary field that examines the delivery, organization, financing, and outcomes of health care services.

Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below and our website: http://hsrmp.phhp.ufl.edu.

HSA 5103: Introduction to the U.S. Health Care System
HSA 5174: Fundamentals of Health Care Finance
HSA 6105: Professional Skills Seminar
HSA 6114: U.S. Health Care System
HSA 6115: Introduction to Management of Health Services Organizations
HSA 6126: U.S. Health Insurance System
HSA 6152: Overview of U.S. Health Policy
HSA 6175: Health Care Financial Management
HSA 6177: Advanced Health Care Finance
HSA 6179: Introduction to Health Care Finance
HSA 6188: Strategic Management in Health Administration
HSA 6196: Health Services Operations Management
HSA 6197: Information Management in Health Administration
HSA 6198: Information Management in Health Administration
HSA 6342: Human Resource Management for Health Services Managers
HSA 6385: Performance Management for Health Care Managers
HSA 6427: Legal and Ethical Issues in Health Administration
HSA 6855: Internship in Health Administration
HSA 6858: Internship in Health Services Research
HSA 6878: Externship in Legal Aspects of Health Services Administration
HSA 6905: Individual Study in Health Administration
HSA 6910: Supervised Research
HSA 6911: Research Seminar in Health Services Research
HSA 6930: Special Topics in Health Services Administration
HSA 6935: Seminar in Health Administration
HSA 6939: Capstone Seminar in Health Administration

HSA 6940: Supervised Teaching

HSA 6946: Internship in Public Health Management and Policy

HSA 7106: Seminar in Health Care Access and Utilization

HSA 7116: Health Services Organizational Research

HSA 7157: Research Foundations of Health Policy

HSA 7414: Society, Health, and Medical Care

HSA 7437: Advanced Health Economics

HSA 7707: Health Services Research Methods I

HSA 7708: Health Services Research Methods II

HSA 7759: Quality and Outcomes in Health Services Research

HSA 7795: Advanced Individual Study in Health Services Research

HSA 7796: Seminar in Health Care Costs and Financing

HSA 7798: Advanced Seminar in Health Services Research

HSA 7799: Advanced Research

HSA 7905: Advanced Individual Study in Health Services Research

HSA 7936: Seminar in Health Care Costs and Financing

HSA 7938: Advanced Seminar in Health Services Research

HSA 7979: Advanced Research

HSA 7980: Research for Doctoral Dissertation

Occupational Therapy Department

Chair: W. C. Mann.
Graduate Coordinator: C. A. Velozo, J.J. Foss.

Complete faculty listing by department: Follow this link.

The Department of Occupational Therapy offers graduate programs in occupational therapy leading to the Master of Health Science (M.H.S.) degree (on-campus nonthesis and thesis options and distance learning nonthesis option) and the entry-level Master of Occupational Therapy (M.O.T.) degree. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

Master of Health Science: This program is designed for students who have earned an undergraduate degree in Occupational therapy. The thesis option requires four semesters of course work and a formal research thesis, while the nonthesis option requires three semesters of course work and a research project. The program emphasizes research and advanced theories related to occupational therapy practice. Preparation for teaching, administrative, and other occupational therapy roles is supplemented through elective courses. A coherent series of elective courses related to occupational therapy must be approved by the supervisory committee chairperson before the second semester of work.

In addition to the requirements of the Graduate School, admission requires the candidate to have completed a curriculum in occupational therapy accredited by the American Occupational Therapy Association or by the World Federation of Occupational Therapists.

The distance learning degree option for the Master of Health Science is specifically intended to meet the needs of the working professional. The nonthesis program is designed to improve the knowledge and skills of working occupational therapists for practice in a complex and challenging health care system. It provides preparation for new practice areas, leadership roles, and independent practice and is delivered through the Internet. In addition to the departmental requirements listed above, applicants to the distance learning program must have basic personal computer competency and access to a computer that meets minimal configuration requirements.

Additional information about the Master of Health Science is available at http://www.hp.ufl.edu or http://gradschool.rgp.ufl.edu or by telephone at (352)273-6817. For distance learning, see http://otdlm.phhp.ufl.edu/ or call toll free (866)878-3297.

Master of Occupational Therapy: This entry-level degree program is designed for students who do not have an undergraduate degree in occupational therapy. The program provides students with a holistic perspective, including an understanding of the philosophical and theoretical bases for practice in the current health care environment. The M.O.T. program provides a strong background in theory, assessment, and therapeutic interventions. Before their professional preparation in the M.O.T. program, students receive a liberal education in their preprofessional baccalaureate studies, including several courses specifically focused for students planning to enter the M.O.T. program. Students may enroll in courses in the Bachelor of Health Science degree program at the bachelor's level, or they may complete these courses on a postbaccalaureate level before starting the M.O.T. program. Students are only admitted into the M.O.T. program in summer term and graduate at the end of the fall term after 1.33 years of full-time study (5 semesters) and 58 credits.

Admission requirements include completion of an undergraduate degree and the prerequisite course work. Three letters of reference and a letter of application are required by the Department. Additional information is available at http://www.phhp.ufl.edu/ot and http://gradschool.rgp.ufl.edu or by telephone (352)273-6817.

This program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association. The address for ACOTE is 4720 Montgomery Lane, Box 31220, Bethesda, MD, 20814-1220. The phone number is (301) 652-2632. Graduates of the program are eligible to sit for the national certification exam administered by the National Board for Certification in Occupational Therapy (NBCOT). The website address of NBCOT is www.nbcot.org.

OTH 5002: Foundations of Occupational Therapy
OTH 5115C: Therapeutic Skills II: Areas of Occupation

OTH 5324: Psychosocial Intervention

OTH 5435: Therapeutic Skills I

OTH 5722: Professional Development in Occupational Therapy

OTH 5726C: Service Delivery and OT Management

OTH 5770C: Research for Occupational Therapy

OTH 5812: Practicum I

OTH 5816: Practicum II

OTH 5848: Internship I

OTH 5849: Internship II

OTH 6008: Neuroscience of Human Occupation

OTH 6106: Assistive Technology and Occupational Performance

OTH 6539: Occupational Therapy Theory

OTH 6635: Principles of Occupational Therapy Screening and Evaluation I

OTH 6636: Principles of Occupational Therapy Screening and Evaluation II

OTH 6641: Occupational Therapy Interventions I

OTH 6642: Occupational Therapy Interventions II

OTH 6707: OT Manager

OTH 6708: Issues in Occupational Therapy Practice I

OTH 6709: Issues in Occupational Therapy Practice II

OTH 6720: Trends and Issues in Health Care

OTH 6763: Evidence Based Practice

OTH 6861: Specialty Internship

OTH 6905: Individual Work

OTH 6907: Professional Development Project

OTH 6933: Special Topics in Occupational Therapy

OTH 6971: Research for Master's Thesis

Speech, Language and Hearing Sciences Department

Chair: Scott K. Griffiths
Graduate Coordinators: Kenneth J. Logun and Alice Holmes

Complete faculty listing by department: [Follow this link](#).

Graduate programs in the Department lead to Master of Arts and Doctor of Philosophy degrees in Communication Sciences and Disorders and to the Doctor of Audiology degree. Requirements for these degrees are given in the [Graduate Degrees](#) section of this catalog.

Graduate specializations and programs in speech-language pathology and audiology are accredited by the Council on Academic Accreditation/American Speech-Language-Hearing Association.

The [Doctor of Audiology (Au.D.) Program](#) in the Department of Speech, Language, and Hearing Sciences is a four-year graduate degree. Graduate students take course work in theoretical...
and applied audiologic sciences and research. There are no specific undergraduate courses required for admission to the Au.D. degree program, although applicants with a strong science background are encouraged to apply. Graduates of this program are eligible for the Certificate of Clinical Competence in Audiology (CCC-A) administered by the American Speech-Language-Hearing Association, Board Certification in Audiology administered by the American Academy of Audiology, and for state licensure in audiology. For more information, contact Alice Holmes, Ph.D. (aholmes@ufl.edu).

The Ph.D. Program in Communication Sciences and Disorders provides a state-of-the-art education in research practices in speech-language pathology and audiology with a strong interdisciplinary focus. Our goal is to prepare the next generation of researchers who are specialized in basic and applied science that relates to a range of speech, language, hearing, and swallowing functions. The program is designed to develop researchers who are skilled at independently designing and conducting original research that adds to the body of knowledge in the field. Students are individually mentored and pursue individually designed programs of study tailored to their interests and needs, which incorporate training in appropriate adjacent fields such as engineering, dentistry, gerontology, linguistics, psychology, medicine and special education. For more information, contact Lori Altmann, Ph.D. (laltmann@ufl.edu).

The Master of Arts (M.A.) Program offers comprehensive academic training and clinical experience for students who are interested in a career in speech-language pathology. The five-semester program culminates in the completion of either a clinical externship or a Master's thesis, and it provides graduates with a solid foundation for obtaining employment in a variety of work settings. Students have the opportunity to complete clinical practice at sites within the University of Florida's Health Science Center and at other medical, rehabilitative, and educational facilities on or near the campus. These sites allow students to gain experience with providing clinical services to a range of patient populations.

Applicants to the Master's program must demonstrate successful completion of pre-requisite coursework in both normal bases of communication and introductory concepts in communication disorders. Additional information about these pre-requisites is available on the Department website. Graduates of the program are eligible for the Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP) from the American Speech-Language-Hearing Association as well as state licensure in speech-language pathology. For more information, contact Kenneth J. Logan, Ph.D. (klogan@ufl.edu).

For more information, please see the program pages below and our website: [http://slhs.phhp.ufl.edu](http://slhs.phhp.ufl.edu).

- **ASL 5406:** Manual Communication with the Hearing Impaired
- **LAE 6505:** Applied Preschool Language Disorders: Diagnosis and Treatment
- **SPA 5051:** Clinical Observation in Audiology
- **SPA 5102:** Auditory Anatomy and Physiology
- **SPA 5128:** Speech Perception
- **SPA 5204:** Phonological Disorders
- **SPA 5211:** Voice Disorders
- **SPA 5225:** Principles of Speech Pathology: Stuttering
- **SPA 5245:** Communicative Disorders Related to Cleft Palate
- **SPA 5254:** Neurocognitive Language Disorders
- **SPA 5304:** Principles of Audiological Evaluation
- **SPA 5315:** Peripheral and Central Auditory Disorders
- **SPA 5401:** Speech Pathology Language Disorder
- **SPA 5405:** Language Disorders II
- **SPA 5553:** Instrumentation and Diagnosis in Speech-Language Pathology
- **SPA 5563:** Psychosocial Aspects of Hearing Loss
- **SPA 5646:** Speech and Language of the Deaf and Hard of Hearing
- **SPA 6008:** Medical Aspects of Speech-Language Pathology
- **SPA 6010:** Basic Auditory Sciences
- **SPA 6117:** Science of Singing
- **SPA 6133L:** Hearing Aid Analysis Laboratory
- **SPA 6207:** Applied Phonological Disorders: Diagnosis and Treatment
SPA 6211: Applied Voice Disorders: Diagnosis and Treatment

SPA 6217: Vocal Health and Habilitation

SPA 6229: Applied Fluency Disorders: Diagnosis and Treatment

SPA 6233: Speech Motor Control Disorders

SPA 6270: Auditory Processing Disorders

SPA 6305: Pediatric Audiology

SPA 6311: Medical Audiology

SPA 6312: Advanced Audiology and Neuro-Otology

SPA 6317: Vestibular Disorders

SPA 6323: Audiologic Rehabilitation for Adults

SPA 6324: Audiologic Rehabilitation for Children

SPA 6340: Amplification I

SPA 6341: Amplification II

SPA 6342: Amplification III

SPA 6390: Proseminar: Speech-Language Pathology and Audiology

SPA 6410: Adult Language Disorders

SPA 6416: Applied Neurogenic Disorders: Diagnosis and Treatment

SPA 6430: Applied Developmental Disorders: Diagnosis and Treatment in Speech and Language

SPA 6436: Issues in Autism Spectrum Disorders

SPA 6506: Clinical Clerkship in Audiology

SPA 6507: Applied Augmentative and Alternative Communication

SPA 6521: Practicum in Speech-Language Diagnostics: UFSHC

SPA 6524: Practicum in Speech-Language Therapy: UFSHC

SPA 6531: Clinical Practice in Hearing Assessment

SPA 6533: Clinical Practice in Aural Rehabilitation

SPA 6559: Alternative and Augmentative Communication

SPA 6564: Communication and Aging

SPA 6565: Seminar in Dysphagia

SPA 6568: Clinical Evaluation in Medical Speech-Language Pathology

SPA 6570: Seminar: Professional Aspects of Speech-Language Pathology

SPA 6581: Special Clinical

SPA 6805: Introduction to Graduate Research

SPA 6830: Communication Disorders in Medically Complex Pediatric Populations
SPA 6905: Individual Study
SPA 6910: Supervised Research
SPA 6930: Proseminar in Speech-Language Pathology and Audiology
SPA 6935: Applied Reading Disabilities: Diagnosis and Treatment
SPA 6936: Special Topics
SPA 6940: Supervised Teaching
SPA 6942: Externship in Speech-Language Pathology
SPA 6971: Research for Master’s Thesis
SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
SPA 7306: Audiologic Assessment in a Medical Setting
SPA 7318: Clinical Auditory Electrophysiology
SPA 7319: Balance Disorders: Evaluation and Treatment
SPA 7325: Audiologic Rehabilitation
SPA 7343: Cochlear Implants and Assistive Devices
SPA 7348: Principles of Amplification
SPA 7353: Environmental Hearing Conservation
SPA 7354: Seminar in Audiology: Hearing Conservation and Noise Control
SPA 7391: Business and Professional Issues in Audiology
SPA 7415: Neurolinguistics of Adult Language Disorders
SPA 7500: Public School Practicum
SPA 7523: Practicum in Speech Pathology in a Medical/Dental Setting
SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
SPA 7566: Counseling Individuals with Hearing Losses
SPA 7833: Audiology Research Project
SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
SPA 7945: Graduate Practicum in Audiology
SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology
SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology
SPA 7958: Clinical Externship
SPA 7979: Advanced Research
SPA 7980: Research for Doctoral Dissertation

Programs
University of Florida

Other

University Writing Program

The University Writing Program at the University of Florida cultivates effective communication for engaged citizens, supporting their work in academic, business, and international spheres. The UWP prepares students and faculty to meet their academic and professional writing goals by delivering broad-based instruction in composition, by providing a writing studio for individualized help, and by hosting faculty and student workshops. The UWP houses coursework in First-Year Writing, Second-Year Analytical Thinking and Writing, Third-Year Professional Writing in the Disciplines, and Graduate-Level Scholarship and Publication.

Engaging with students and faculty at all levels of writing and at every stage in the writing process, the UWP develops fundamental concepts of critical reasoning and effective communication. ENC 5319: Scholarly Writing for Publication is a “service course” to other Graduate-level programs: graduate students learn how to transform research in their field of study into publishable articles, drafting, editing, and revising their work with the guidance of instructor feedback and peer review. With sufficient data, students can produce an article ready for submission to a scholarly journal in their field of study over the course of the semester.

For more information, please see our website: http://writing.ufl.edu.

University Writing Program Courses

- ENC 5319: Scholarly Writing for Publication

College of Agricultural and Life Sciences

Dear Elaine Turner

Complete faculty listings: Follow this link.

The College of Agricultural and Life Sciences offers academic programs and grants advanced degrees in 17 departments and the Schools of Forest Resources and Conservation, and Natural Resources and Environment. These academic units are all a part of the Institute of Food and Agricultural Sciences (IFAS). Additional components of IFAS include 16 research centers located throughout the state and cooperative extension offices in each of the 67 counties of the state.

The following courses are offered under the supervision of the office of the dean by an interdisciplinary faculty and deal with material of concern to two or more IFAS academic units. The courses are also open to students of other colleges, with the permission of the course instructor.

For more information, please see our website: http://cals.ufl.edu.

Departments and Programs within the College of Agricultural and Life Sciences

College of Agricultural and Life Sciences Courses

Other

Genetics and Genomics

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Medicine

Genetics and Genomics Program

Chair: C. Mulligan
Graduate Coordinator: J. Bungert

Complete faculty listing: Follow this link or visit media.news.health.ufl.edu/misc/mgm/UFGI/search/members-list4.php

The University of Florida Genetics Institute is a multi-college, multi-faceted research center. Good geneticists are integrative geneticists, who incorporate many different subfields of genetics into their work. The core mission is to improve the quality of life of people throughout the world via integrative, genetics-based research. Accordingly, faculty interests and graduate research opportunities include a wide range of areas from advances in gene therapy to understanding the maintenance of genetic variation, from understanding plant immune responses to developing improved algorithms for identifying regulatory motifs in DNA sequences, and from the challenges of bioethics to strategies for controlling malaria.

The highlight of the first year core training is the research rotations program. Student laboratory rotations are a particularly exciting feature of the genetics and genomics doctoral program, and epitomize the philosophy that good geneticists are broadly trained and integrative. Many current Graduate Faculty members still vividly recall the transforming effects of their rotations during graduate school—they didn't always end up where they expected! Rotations can open students' eyes to areas of genetics that they had never considered and entice them into considering brand new career opportunities. Each student will sample the breadth and depth of genetics research at UF by carrying out three 8-week modules consisting of design, implementation, and analysis of genetics experiments. Each rotation is conducted in close association with a Graduate Faculty member. To ensure that students fully experience the impressive breadth of genetics research
at UF, their rotations are hosted by Graduate Faculty in at least two different colleges. Students will also take PCB 5065, Advanced Genetics; GMS 6181, Special Topics in Microbiology (among the topics are genomics and bioinformatics, and ethics for genetics research); STA 6166, Statistical Methods I; and other electives as desired. In addition, throughout their tenure in the program, students participate in the Genetics Seminar, which is an opportunity to present their rotation plans and results of research to faculty and other students.

Prospective students should have strong backgrounds in biology and other hard sciences. Exceptional students with other backgrounds will also be considered. The research statement required as part of the application has a particularly important part in the admissions decision. Each applicant must describe his/her research interests, so that Graduate Faculty can evaluate knowledge of the discipline, fit to the program, and ability to articulate and motivate an interesting research problem. The required letters of recommendation are also extremely important in helping identify applicants with exceptional aptitude for genetics, and with research experience and promise.

For more information, write to the Genetics and Genomics Graduate Program, Attn: Graduate Secretary, Genetics Institute, University of Florida, PO Box 100196, Gainesville, FL 32610-0196.

Expanded information can be found at [http://www.ufgi.ufl.edu](http://www.ufgi.ufl.edu).

Degrees Offered with a Major in Genetics and Genomics

Doctor of Philosophy

Doctor of Philosophy - Clinical and Translational Science

Courses

- AGR 6322: Advanced Plant Breeding
- ANG 6532: Molecular Genetics of Disease
- ANG 7979: Advanced Research
- ANG 7980: Research for Doctoral Dissertation
- BCH 6415: Advanced Molecular and Cell Biology
- BCH 7410: Advanced Gene Regulation
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5805: Computer Simulation Concepts
- CIS 6930: Special Topics in CIS
- COT 5405: Analysis of Algorithms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6101: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6920: Genetics Journal Colloquy
- GMS 7979: Advanced Research
- GMS 7980: Research for Doctoral Dissertation
- HCS 6201: Breeding Perennial Cultivars
- PCB 5065: Advanced Genetics
- PCB 5235L: Experiments in Immunology
- PCB 5615: Molecular Evolution and Systematics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 5332: Statistical Methods in Research I
- STA 6166: Statistical Methods in Research II
- STA 6178: Genetic Data Analysis
- STA 6208: Basic Design and Analysis of Experiments
- STA 6329: Matrix Algebra and Statistical Computing
- STA 6934: Special Topics in Statistics
- STA 7979: Advanced Research
- STA 7980: Research for Doctoral Dissertation
- ZOO 6927: Special Topics in Zoology
- ZOO 7979: Advanced Research
- ZOO 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine

Agricultural and Biological Engineering Department

College of Agricultural and Life Sciences

Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

Other

Agricultural and Biological Engineering (CALS)

College

- College of Agricultural and Life Sciences
- College of Engineering

Department/School

Agricultural and Biological Engineering Department

Agricultural and Biological Engineering Program

The degrees of Master of Science, Master of Engineering, and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences.

Requirements for these degrees are given in the Graduate Degrees section of this catalog. Additional information can also be found on the graduate studies pages on the department website at www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

Agricultural production includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

Biological engineering includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

Information systems includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

Land and water resources includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.
Degrees Offered with a Major in Agricultural and Biological Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Agricultural and Biological Engineering Courses

- ABE 5015: Empirical Models of Crop Growth and Yield Response
- ABE 5038: Recent Developments and Applications in Biosensors
- ABE 5152: Electro-Hydraulic Circuits and Controls
- ABE 5332: Advanced Agricultural Structures
- ABE 5442: Advanced Agricultural Process Engineering
- ABE 5643C: Biological Systems Modeling
- ABE 5646: Biological and Agricultural Systems Simulation
- ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials
- ABE 5663: Advanced Applied Microbial Biotechnology
- ABE 5707C: Agricultural Waste Management
- ABE 5815C: Food and Bioprocess Engineering Design
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Agricultural Education and Communication Department

Chair: E. W. Osborne
Graduate Coordinator: B. E. Myers

Complete faculty listing by department: Follow this link.

The Department of Agricultural Education and Communication offers the degrees of Master of Science and Doctor of Philosophy. Graduate students who obtain a degree in Agricultural Education and Communication will focus their study in one of four areas of specialization. The areas of specialization are agricultural communication, agricultural education, extension education, and leadership development. These degree programs are individually tailored to meet the student’s unique needs for professional development. The requirements for each degree are described in the Graduate Degrees section of the University of Florida Graduate Catalog. More information about our program can be found by following the link below.

Other

Agricultural Education and Communication

College

College of Agricultural and Life Sciences

Department/School
Agricultural Education and Communication Department

Agricultural Education and Communication Program

The Master of Science program is designed to prepare graduates for domestic and international teaching, research, extension, administrative and leadership positions in both the public and private sectors. Courses are taught in an agricultural and natural resources context and are broadly applicable in educational, business, government, and agency settings. The Master of Science program is delivered on-campus and online via the AEC e-Learning Institute (eLI). The Doctor of Philosophy degree program is primarily designed to prepare graduates for academic positions in teaching, research, and extension within the realm of Agricultural Education and Communication. In addition, graduates may obtain positions in administration, human resource management, or training and development.

The Agricultural Communication specialization prepares students for professional communication careers in or dealing with agriculture and agribusiness. It is intended primarily for students who enter with a bachelor’s degree in journalism, agricultural communication/journalism, advertising, broadcasting, public relations, or related fields. Graduates of this option are employed in: (1) communication or management positions with the numerous commodity or special-interest associations in agriculture and related fields; (2) communication support positions in agricultural extension and research information departments of land-grant universities, agencies of USDA, state Departments of Agriculture, and agricultural development projects overseas; (3) advertising and public relations positions with agribusiness firms or commodity associations; and (4) media positions involved in reporting on agriculture, agribusiness, and natural resource issues. Students in Agricultural Communication also develop strong skills/application in media writing, production, campaign strategies and/or Web design/desktop publishing. Graduates become prepared for positions in both public and private sectors in both industry and educational settings.

The Agricultural Education specialization is designed to enhance the careers of those employed in the educational professions in agriculture and natural resources. Regardless if one is employed in public school teaching, community college instruction, or training and development in agribusiness, students gain valuable knowledge and experience in designing, implementing, and evaluating educational programs. In addition, graduates of the program command tremendous depth in the understanding of the teaching and learning process. This specialization may be designed to allow students to complete the requirements of teacher certification while completing their master’s degree program. The PhD is a research-oriented degree that has a primary focus of preparing candidates to assume faculty positions in colleges or university teacher education programs. Candidates develop an individual program of study that provides a comprehensive knowledge of teaching and learning processes. The degree also seeks to extend the candidate’s development by providing instruction, research opportunities, and experiences that enhance the depth and breadth of the candidate’s prior learning opportunities.

The Extension Education specialization is designed to prepare students for careers in the Cooperative Extension service, outreach education, and/or international agencies. Through coursework and research, students will gain valuable knowledge and experience in designing, implementing, and evaluating educational programs. Extension graduate students choose between a domestic or international focus in regards to coursework and/or research. In addition, graduates of the program command tremendous depth in the teaching and learning process. Candidates who select the Extension Education specialization develop an individual program of study that focuses on such topics as program development, experiential education, the change process, educational technologies and extension, program evaluation and organizational accountability, administration and leadership, and international extension. Graduates become prepared for a variety of positions including extension specialists, county and district extension directors, outreach education coordinators for private and public agencies, 4-H Extension agents and specialists, and educator specialists with international agencies.

The Leadership Development specialization is designed to prepare students for educational leadership, training, and outreach positions in agricultural, extension, community and governmental agencies. Course work in the major will focus on a core of agricultural courses along with emphasis in designing educational/training programs, professional presentation enhancement, leadership development, teaching/training methods, and interpersonal communication. Candidates who select the Leadership Development specialization develop an individual program that focuses on leadership theory and measurement, critical and creative thinking, and leadership in cross-cultural settings. Students will encompass a strong research and theory-based program with a strong knowledge of training and development, and human resource management. Graduates become prepared for positions in both public and private sectors in both industry and educational settings.

Degrees Offered with a Major in Agricultural Education and Communication

Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development

Master of Science

without a concentration

concentration in Tropical Conservation and Development
Agricultural Education and Communication Courses

- AEC 5032: Agricultural Media Writing
- AEC 5037: Agricultural Media Production
- AEC 5060: Public Opinion and Agricultural and Natural Resource Issues
- AEC 5074: Agriculture, Resources, People, and the Environment: A Global Perspective
- AEC 5201: Teaching in Colleges of Agricultural and Life Sciences
- AEC 5203: Advanced Teaching in Colleges of Agricultural and Life Sciences
- AEC 5208: Teaching Methods in Agricultural Education
- AEC 5227: Teaching in Agricultural Education Laboratory Facilities
- AEC 5302: Professional Skill Development in Agriscience Education I
- AEC 5324: Philosophy and Development of Agricultural Education
- AEC 5454: Leadership Development for Extension and Community Nonprofit Organizations
- AEC 5501: Professional Skill Development in Agriscience Education II
- AEC 5541: Communication and Instructional Technologies in Agricultural and Life Sciences
- AEC 5544: Curriculum Development and Assessment Techniques in Emerging Agricultural Technologies
- AEC 5545: Special Methods in Teaching Agriculture
- AEC 5546: Program Planning in Agricultural Education
- AEC 5605: Advanced Curriculum and Teaching Methods
- AEC 6210: Designing Educational Programs in Agricultural Settings
- AEC 6211: Delivering Educational Programs in Agricultural Settings
- AEC 6212: Teacher Education in Agriculture
- AEC 6229: Laboratory Instruction: Theory and Practice
- AEC 6300: Methodology of Planned Change
- AEC 6316: From America to Zimbabwe: An Overview of International Extension Systems
- AEC 6321: The Land Grant University and University Governance
- AEC 6325: History and Philosophy of Agricultural Education
- AEC 6419: Communication and Competencies for Global Leadership
- AEC 6426: Development of a Volunteer Leadership Program
- AEC 6512: Program Development in Extension Education
- AEC 6540: Agricultural and Natural Resources Communications Theory and Strategies
- AEC 6543: Teaching and Learning Theory: Applications in Agricultural Education
- AEC 6552: Evaluating Programs in Extension Education
- AEC 6611: Agricultural and Extension Adult Education
- AEC 6704: Extension Administration and Supervision
- AEC 6767: Research Strategies in Agricultural Education and Communication
- AEC 6905: Problems in Agricultural and Extension Education
- AEC 6910: Supervised Research
- AEC 6912: Nonthesis Research in Agricultural and Extension Education
- AEC 6933: Seminar in Agricultural Education and Communication
- AEC 6940: Supervised Teaching
- AEC 6945: Practicum in Agricultural Education and Communication
- AEC 6947: Experiential Learning in Agricultural Education
- AEC 6971: Research for Master's Thesis
- AEC 7979: Advanced Research
- AEC 7989: Research for Doctoral Dissertation
- AGG 5504: Critical and Creative Thinking in Problem Solving and Decision Making

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Agronomy Department

Chair: R. A. Gilbert
Graduate Coordinator: L. E. Sollenberger
Complete faculty listing by department: Follow this link

The Agronomy Department offers the degrees of Doctor of Philosophy and Master of Science (thesis and non-thesis options) in agronomy with specializations in plant physiology, ecology, management and nutrition, weed science (terrestrial and aquatic), and plant breeding and genetics. Requirements for these degrees are given in the Graduate Degrees section of this catalog.
Graduate programs emphasize the development and subsequent application of basic principles in each specialization to the management of agricultural and natural ecosystems in Florida and throughout the world. The continuing need for increased plant production for food, fiber and energy to meet the demands of a rapidly escalating population is reflected in departmental research programs. When compatible with a student’s program and permitted by prevailing circumstances, some thesis and dissertation research may be conducted wholly or in part in one or more of several countries.

Students seeking a graduate program in the Agronomy Department should hold a Bachelor of Science degree from an accredited college or university with a major in an area of plant science, or closely related discipline. A science background with basic courses in biology, botany, mathematics, chemistry, and physics is required of new graduate students.

Other

Agronomy

College

College of Agricultural and Life Sciences

Department/School

Agronomy Department

Agronomy Program Information

The Agronomy Department offers the degrees of Doctor of Philosophy and Master of Science (thesis and non-thesis option) in agronomy with specializations in plant physiology, ecology, management and nutrition, weed science (terrestrial and aquatic), and plant breeding and genetics. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate programs emphasize the development and subsequent application of basic principles in each specialization to the management of agronomic plants in Florida and throughout the world. The continuing need for increased plant production for food, fiber and energy to meet the demands of a rapidly escalating population is reflected in departmental research programs. When compatible with a student’s program and permitted by prevailing circumstances, some thesis and dissertation research may be conducted wholly or in part in one or more of several countries.

Students seeking a graduate program in the Agronomy Department should hold a Bachelor of Science degree from an accredited college or university with a major in an area of plant science, or closely related discipline. A science background with basic courses in biology, botany, mathematics, chemistry, and physics is required of new graduate students.

Degrees Offered with a Major in Agronomy

Doctor of Philosophy

without a concentration

concentration in Toxicology

concentration in Tropical Conservation and Development

Master of Science

without a concentration
Agronomy Departmental Courses

- AGR 5215C: Integrated Field Crop Science
- AGR 5230C: Florida Grassland Agroecosystems
- AGR 5268C: Field Plot Techniques
- AGR 5277C: Tropical Crop Production
- AGR 5307: Molecular Genetics for Crop Improvement
- AGR 5321C: Genetic Improvement of Plants
- AGR 5444: Ecophysiology of Crop Production
- AGR 5511: Crop Ecology
- AGR 6233: Tropical Grassland Agroecosystems
- AGR 6237C: Research Techniques in Forage Evaluation
- AGR 6311: Population Genetics
- AGR 6322: Advanced Plant Breeding
- AGR 6325L: Plant Breeding Techniques
- AGR 6325: Cyto genetics
- AGR 6422C: Environmental Crop Nutrition
- AGR 6442C: Physiology of Agronomic Plants
- AGR 6905: Agronomic Problems
- AGR 6910: Supervised Research
- AGR 6932: Topics in Agronomy
- AGR 6933: Graduate Agronomy Seminar
- AGR 6940: Supervised Teaching
- AGR 6971: Research for Master's Thesis
- AGR 7979: Advanced Research
- AGR 7980: Research for Doctoral Dissertation
- ALS 5155: Global Agroecosystems
- IPM 5305: Principles of Pesticides
- PL S 5632C: Integrated Weed Management
- PL S 5652: Advanced Weed Science
- PL S 6623: Weed Ecology
- PL S 6626: Invasive Plant Ecology
- PL S 6655: Plant/Herbicide Interaction

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6926: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link.

For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb.

Other
Animal Molecular and Cellular Biology

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine

Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
- Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program's website at http://www.animal.ufl.edu/amcb/.

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5905: Individual Study
- ALS 6046: Grant Writing
- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
- ANS 6668L: Molecular and Cellular Research Methods
- ANS 6702: Lactation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
- PCB 6816: Thermal Physiology
- ANS 6707: Growth Physiology in Farm Animals
- ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
- ANS 6715: Gastrointestinal and Feed Microbiology
- ANS 6716: Physiology in Farm Animals
- ANS 6718: Nutritional Physiology of Domestic Animals
- ANS 6723: Mineral Nutrition and Metabolism
- ANS 6745: Introduction to Statistical Genetics
- ANS 6750: Reproductive Physiology in Farm Animals
- ANS 6751: Physiology of Reproduction
- ANS 6751C
- ANS 6767: Molecular Endocrinology
- ANS 6905: Problems in Animal Science
- ANS 6910: Supervised Research
- ANS 6932: Special Topics in Animal Science
- ANS 6933: Graduate Seminar in Animal Science
Animal Sciences Department

Chair: G. E. Dahl
Graduate Coordinator: G. Adesogan

Complete faculty listing by department: [Follow this link](http://example.com/)

Animal Sciences is an academic department of the College of Agricultural and Life Sciences (CALS), a unit of the Institute of Food and Agricultural Sciences (IFAS). Creating new solutions to tomorrow's problems underlies everything we do in the Animal Sciences Program. In the areas of teaching, research, and extension, our faculty integrates the most modern technologies available with personal expertise and attention to the needs of students and our industry. For more information about the Animal Sciences program, please follow the link below.

Other
Animal Sciences

College

College of Agricultural and Life Sciences

Department/School

Animal Sciences Department

Animal Sciences Program

The Department of Animal Sciences offers the degrees of Master of Science and Doctor of Philosophy in animal sciences with emphasis in beef or dairy cattle, swine, or equine. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The following specializations are available:

- Breeding and genetics
- Management
- Nutrition (nutritional physiology, nutrient metabolism, and feedstuff utilization)
- Physiology (environmental, lactational, and reproductive)
- Molecular biology (embryology, endocrinology, and genetics)
- Meat science (meat processing, meat quality, muscle biology, and food safety)

A student may work on a problem covering more than one area of study. Animal resources (beef cattle, dairy cattle, horses, swine, sheep, and laboratory animals) are available for use in various research programs. Nutrition, physiology, and meats laboratories are available for detailed chemical and carcass quality evaluations, and excellent computer facilities are available. Special arrangements may be made to conduct research at the various branch agricultural experiment stations throughout Florida.

Departmental and program prerequisites for admission to graduate study include a sound science background, with basic courses in microbiology, biology, mathematics, and chemistry. All courses in the animal sciences program area are acceptable for graduate credit as part of the candidate's major.

The Graduate School restricts graduate students from pursuing minors in academic units that contribute major credit toward their degree program. Therefore, graduate students majoring in Animal Sciences cannot pursue a minor in Food and Resource Economics, Food Science and Human Nutrition, Medicine-Biochemistry, and Veterinary Medical Sciences. In addition, undergraduate credits at the 3000-4000 level in the major of any of these listed academic units are not eligible to count toward degree requirements.

Degrees Offered with a Major in Animal Sciences

Doctor of Philosophy

without a concentration

concentration in Animal Molecular and Cellular Biology

Master of Science

without a concentration

Animal Sciences Departmental Courses
• ANS 5312C: Applied Ruminant Reproductive Management  
• ANS 5446: Animal Nutrition  
• ANS 5935: Reproductive Biology Seminar and Research Studies  
• ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research  
• ANS 6313: Current Concepts in Reproductive Biology  
• ANS 6314: Experimental Embryology  
• ANS 6447: Ruminant Nutrition  
• ANS 6449: Vitamins  
• ANS 6452: Principles of Forage Quality Evaluation  
• ANS 6458: Advanced Methods in Nutrition Technology  
• ANS 6636: Meat Technology  
• ANS 6702: Lactation Physiology of Farm Animals  
• ANS 6704: Mammalian Endocrinology  
• ANS 6705: Muscle Physiology  
• ANS 6707: Growth Physiology in Farm Animals  
• ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology  
• ANS 6715: Gastrointestinal and Feed Microbiology  
• ANS 6716: Physiology in Farm Animals  
• ANS 6718: Nutritional Physiology of Domestic Animals  
• ANS 6723: Mineral Nutrition and Metabolism  
• ANS 6750: Reproductive Physiology in Farm Animals  
• ANS 6751: Physiology of Reproduction  
• ANS 6767: Molecular Endocrinology  
• ANS 6775: Essentials of Livestock Immunology  
• ANS 6905: Problems in Animal Science  
• ANS 6910: Supervised Research  
• ANS 6932: Special Topics in Animal Science  
• ANS 6933: Graduate Seminar in Animal Science  
• ANS 6936: Graduate Seminar in Animal Molecular and Cell Biology  
• ANS 6939: Animal Molecular and Cellular Biology Journal Colloquy  
• ANS 6940: Supervised Teaching  
• ANS 6971: Research for Master's Thesis  
• ANS 7979: Advanced Research  
• ANS 7980: Research for Doctoral Dissertation  
• PCB 6816: Thermal Physiology  

Additional Courses for Major Credit in Animal Sciences  

• AEB 5326: Agribusiness Financial Management  
• AEB 6385: Management Strategies for Agribusiness Firms  
• AEB 7182: Agricultural Risk Analysis and Decision Making  
• FOS 5205: Current Issues in Food Safety and Sanitation  
• FOS 5225C: Principles in Food Microbiology  
• FOS 5437C: Food Product Development  
• FOS 5732: Current Issues in Food Regulations  
• FOS 5126C: Psychophysical Aspects of Foods  
• FOS 6226C: Advanced Food Microbiology  
• FOS 6315C: Advanced Food Chemistry  
• FOS 6317C: Flavor Chemistry and Technology  
• FOS 6355C: Instrumental Analysis and Separations  
• FOS 6428C: Advanced Food Processing  
• FOS 6455C: Industrial Food Fermentations  
• HUN 5474: Nutrition and Immunity  
• HUN 6245: Advanced Human Nutrition  
• HUN 6301: Nutritional Aspects of Lipid Metabolism  
• HUN 6305: Nutritional Aspects of Carbohydrates  
• HUN 6321: Proteins and Amino Acids in Nutrition  
• VME 5162C: Avian Diseases  
• VME 5244: Physiology: Organ Systems  

College of Agricultural and Life Sciences Courses  

• ALS 5106: Food and the Environment  
• ALS 5364C: Molecular Techniques Laboratory  
• ALS 5905: Individual Study  
• ALS 5932: Special Topics  
• ALS 6046: Grant Writing  
• ALS 6921: Colloquium on Plant Pests of Regulatory Significance  
• ALS 6925: Integrated Plant Medicine  
• ALS 6930: Graduate Seminar  
• ALS 6931: Plant Medicine Program Seminar  
• ALS 6942: Principles of Plant Pest Risk Assessment and Management  
• ALS 6943: Internship in Plant Pest Risk Assessment and Management  
• BCH 5045: Graduate Survey of Biochemistry  

Entomology and Nematology Department
College of Agricultural and Life Sciences

Chair: John L. Capinera.
Graduate Coordinator: Heather J. McAuslane.

Complete faculty listing by department: Follow this link.

The Entomology and Nematology Department offers the Master of Science (thesis and nonthesis options) and Doctor of Philosophy degrees in entomology and nematology with the following specializations: entomology, nematology, and pest management. Minimum requirements for the M.S. and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

The Department also offers a cooperative Doctor of Philosophy degree with Florida A&M University and distance education courses leading to the M.S. degree. Members of the Graduate Faculty include the department resident faculty, faculty located on University of Florida campuses away from Gainesville, scientists with other State of Florida agencies such as the Division of Plant Industry and Florida Department of Agriculture and Consumer Services, and scientists of the U.S. Department of Agriculture. The Graduate Faculty is qualified to direct graduate students in all specialties of entomology, nematology, and acarology.

New graduate students should have backgrounds in biology, chemistry, physics, and mathematics. Minor deficiencies may be made up after entering graduate school.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

For more information, please see the program page below, and visit our website: http://entnemdept.ufl.edu.

Other

Entomology and Nematology

College

College of Agricultural and Life Sciences

Department/School

Entomology and Nematology Department

Entomology and Nematology Program Information

The Entomology and Nematology department offers research-based M.S. (thesis) and Ph.D. degrees in entomology and in nematology. Our large faculty in Gainesville and at Research and Education Centers around the state allow for study in many important areas, including behavior, ecology, systematics, biological control, nematology, pest management, and medical, veterinary, and urban entomology. Molecular, whole organism and population ecology studies are all within the range of supported research in the Entomology and Nematology department, and our nematology program is one of the most comprehensive in the nation.

The M.S. degree can be taken in a non-thesis format, in Gainesville or entirely online, with a specialization in either entomology or pest management. Online M.S. degrees are designed to accommodate place-bound students interested in biological science with emphasis on insects and other arthropods, including extension faculty and other educators; state and federal employees in agricultural, environmental and regulatory positions; consultants; pest control industry personnel; and others who want to further their education.

Certificates, comprising 15 credit hours of specific coursework, are available online or to residential students with concentrations in urban pest management, landscape pest management or medical entomology. These certificates document specialization and proficiency in sub-disciplines within entomology for enrolled graduate students and provide evidence of expertise for non-degree seeking students.

Students entering graduate programs in entomology and nematology should have a strong science background, including biology, chemistry, and algebra. Physics and statistics are recommended. Admissions criteria can be found on the Graduate School's Admission page.

Degrees Offered with a Major in Entomology and Nematology

Doctor of Philosophy

Master of Science

Entomology and Nematology Departmental Courses
• ALS 5156: Agricultural Ecology Principles and Applications
• ALS 5166: Exotic Species and Biosecurity Issues
• ALS 6935: Topics in Biological Invasions
• ENY 5006: Graduate Survey of Entomology
• ENY 5006L: Graduate Survey of Entomology Laboratory
• ENY 5031C: Insect Field Biology
• ENY 5151C: Techniques in Insect Systematics
• ENY 5160C: Survey of Science with Insects
• ENY 5164: Graduate Survey of Invertebrate Field Biology
• ENY 5212: Insects and Wildlife
• ENY 5223C: Biology and Identification of Urban Pests
• ENY 5228C: Principles of Urban Pest Management
• ENY 5332: Graduate Survey of Urban Vertebrate Pest Management
• ENY 5236: Insect Pest and Vector Management
• ENY 5241: Biological Control
• ENY 5245: Agricultural Acarology
• ENY 5405: Insects as Vectors of Plant Pathogens
• ENY 5516: Turf and Ornamental Entomology
• ENY 5566: Tropical Entomology
• ENY 5567: Tropical Entomology Field Laboratory
• ENY 5572: Advanced Apiculture
• ENY 5611: Immature Insects
• ENY 5820: Insect Molecular Genetics
• ENY 6166: Insect Classification
• ENY 6203: Insect Ecology
• ENY 6203L: Insect Ecology Laboratory
• ENY 6248: Termite Biology and Control
• ENY 6401: Insect Physiology
• ENY 6401L: Insect Physiology Laboratory
• ENY 6454: Behavioral Ecology and Systematics of Insects
• ENY 6591C: Advanced Mosquito Identification
• ENY 6593: Advanced Mosquito Biology
• ENY 6651C: Insect Toxicology
• ENY 6665: Advanced Medical and Veterinary Entomology
• ENY 6665L: Advanced Medical and Veterinary Entomology Laboratory
• ENY 6706: Forensic Entomology
• ENY 6706L: Forensic Entomology Laboratory
• ENY 6821: Insect Microbiology
• ENY 6822C: Molecular Biology Techniques with Invertebrates and Their Pathogens
• ENY 6905: Problems in Entomology
• ENY 6910: Supervised Research
• ENY 6931: Entomology Seminar
• ENY 6932: Special Topics in Entomology
• ENY 6934: Selected Studies in Entomology
• ENY 6940: Supervised Teaching
• ENY 6942: Insect Diagnostics
• ENY 6943: Entomology Internship
• ENY 6944: Entomology Extension Internship
• ENY 6971: Research for Master's Thesis
• ENY 7979: Advanced Research
• ENY 7980: Research for Doctoral Dissertation
• NEM 5004C: Graduate Survey of Nematology
• NEM 5707C: Plant Nematology
• NEM 6101C: Nematode Morphology and Anatomy
• NEM 6102: Nematode Systematics and Molecular Phylogeny
• NEM 6102L: Nematode Systematics and Molecular Phylogeny Laboratory
• NEM 6103: Insect Parasitic Nematodes
• NEM 6104L: Insect Parasitic Nematodes Laboratory
• NEM 6201: Nematode Ecology
• NEM 6708: Field Plant Nematology
• NEM 6905: Problems in Nematology
• NEM 6931: Nematology Seminar
• NEM 6932: Special Topics in Nematology
• NEM 6934: Selected Studies in Nematology
• NEM 6940: Supervised Teaching
• NEM 6942: Nematode Diagnostics
• NEM 6943: Nematode Internship
• NEM 6944: Nematode Extension Internship
• NEM 6971: Research for Master's Thesis
• NEM 7979: Advanced Research
• NEM 7980: Research for Doctoral Dissertation
• PMA 5205: Citrus Pest Management
• PMA 6228: Field Techniques in Integrated Pest Management

College of Agricultural and Life Sciences Courses

• ALS 5106: Food and the Environment
• ALS 5364C: Molecular Techniques Laboratory
• ALS 5905: Individual Study
• ALS 5932: Special Topics
Plant Medicine

College

College of Agricultural and Life Sciences

Department/School

Entomology and Nematology Department

Plant Medicine Program Information

Coordinator: Amanda C. Hodges

The Doctor of Plant Medicine (DPM) program is an intensive doctorate-level graduate level training program for students interested in plant health diagnosis and management. Requirements for the degree can be found in the Graduate Degrees section of this catalog.

DPM students complete rigorous coursework and intensive internships. Only DPM students jointly enrolled in one of our discipline department M.S. or Ph.D. programs complete a thesis or dissertation. DPM students often participate in applied research within laboratory programs, and may participate in the publication of peer-reviewed scientific and extension papers. More information regarding the latest policies for the DPM program is available in the DPM graduate handbook.

The DPM program is a partnership among faculty mentors and teaching faculty within the following primary departments:

- Entomology and Nematology Department
- Department of Plant Pathology
- Agronomy Department
- Horticulture Sciences Department
- Environmental Horticulture Department
- Soil and Water Sciences Department
- Food Science and Human Nutrition Department

For more information, please see the DPM website: [http://dpm.ifas.ufl.edu](http://dpm.ifas.ufl.edu).

Degrees Offered with a Major in Plant Medicine

Doctor of Plant Medicine

without a concentration

concentration in Tropical Conservation and Development

Agronomy Departmental Courses

- AGR 5215C: Integrated Field Crop Science
- AGR 5230C: Florida Grassland Agroecosystems
- AGR 5266C: Field Plot Techniques
- AGR 5277C: Tropical Crop Production
- AGR 5307: Molecular Genetics for Crop Improvement
Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
- BOT 5725C: Taxonomy of Vascular Plants
- BOT 6508C: Proteomics Theory and Practice
- BOT 6516: Plant Metabolism
- BOT 6566: Plant Growth and Development
- BOT 6716C: Advanced Taxonomy
- BOT 6726C: Principles of Systematic Biology
- BOT 6905: Individual Studies in Botany
- BOT 6910: Supervised Research
- BOT 6927: Advances in Botany
- BOT 6935: Special Topics
- BOT 6936: Graduate Student Seminar
- BOT 6940: Supervised Teaching
- BOT 6943: Internship in College Teaching
- BOT 6971: Research for Master's Thesis
- BOT 7979: Advanced Research
- BOT 7980: Research for Doctoral Dissertation
- PCB 5046C: Advanced Ecology
- PCB 5338: Principles of Ecosystem Ecology
- PCB 5356: Tropical Ecology
- PCB 6675C: Evolutionary Biogeography
- PLP 6656C: Fungal Biology

Entomology and Nematology Departmental Courses

- ALS 5156: Agricultural Ecology Principles and Applications
- ALS 6046: Grant Writing
- ALS 6166: Exotic Species and Biosecurity Issues
- ALS 6935: Topics in Biological Invasions
- ENV 5006: Graduate Survey of Entomology
- ENV 5006L: Graduate Survey of Entomology Laboratory
- ENV 5031C: Insect Field Biology
- ENV 5151C: Techniques in Insect Systematics
- ENV 5160C: Survey of Science with Insects
- ENV 5164: Graduate Survey of Invertebrate Field Biology
- ENV 5212: Insects and Wildlife
- ENV 5223C: Biology and Identification of Urban Pests
- ENV 5226C: Principles of Urban Pest Management
- ENV 5332: Graduate Survey of Urban Invertebrate Pest Management
- ENV 5236: Insect Pest and Vector Management
- ENV 5241: Biological Control
- ENV 5245: Agricultural Acarology
- ENV 5405: Insects as Vectors of Plant Pathogens
- ENV 5516: Turf and Ornamental Entomology
ENY 5566: Tropical Entomology
ENY 5567: Tropical Entomology Field Laboratory
ENY 5572: Advanced Apiculture
ENY 5611: Immature Insects
ENY 5820: Insect Molecular Genetics
ENY 6166: Insect Classification
ENY 6203: Insect Ecology
ENY 6203L: Insect Ecology Laboratory
ENY 6248: Termite Biology and Control
ENY 6401: Insect Physiology
ENY 6401L: Insect Physiology Laboratory
ENY 6454: Behavioral Ecology and Systematics of Insects
ENY 6591C: Advanced Mosquito Identification
ENY 6593: Advanced Mosquito Biology
ENY 6651C: Insect Toxology
ENY 6655: Advanced Medical and Veterinary Entomology Laboratory
ENY 6665L: Advanced Medical and Veterinary Entomology Laboratory
ENY 6706: Forensic Entomology
ENY 6706L: Forensic Entomology Laboratory
ENY 6821: Insect Microbiology
ENY 6822C: Molecular Biology Techniques with Invertebrates and Their Pathogens
ENY 6906: Problems in Entomology
ENY 6910: Supervised Research
ENY 6931: Entomology Seminar
ENY 6932: Special Topics in Entomology
ENY 6934: Selected Studies in Entomology
ENY 6940: Supervised Teaching
ENY 6942: Insect Diagnostics
ENY 6943: Entomology Internship
ENY 6944: Entomology Extension Internship
ENY 6971: Research for Master's Thesis
ENY 7979: Advanced Research
ENY 7980: Research for Doctoral Dissertation
NEM 5004C: Graduate Survey of Nematology
NEM 5707C: Plant Nematology
NEM 6101C: Nematode Morphology and Anatomy
NEM 6102: Nematode Systematics and Molecular Phylogeny
NEM 6102L: Nematode Systematics and Molecular Phylogeny Laboratory
NEM 6103: Insect Parasitic Nematodes
NEM 6104L: Insect Parasitic Nematodes Laboratory
NEM 6201: Nematode Ecology
NEM 6708: Field Plant Nematology
NEM 6906: Problems in Nematology
NEM 6931: Nematology Seminar
NEM 6932: Special Topics in Nematology
NEM 6934: Selected Studies in Nematology
NEM 6940: Supervised Teaching
NEM 6942: Nematode Diagnostics
NEM 6943: Nematode Internship
NEM 6944: Nematode Extension Internship
NEM 6971: Research for Master's Thesis
NEM 7979: Advanced Research
NEM 7980: Research for Doctoral Dissertation
PMA 5205: Citrus Pest Management
PMA 6228: Field Techniques in Integrated Pest Management

School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mapping
- SUR 5385: Remote Sensing Applications
- SUR 5386: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
- SUR 5425: Cadastral Information Systems
- SUR 5525: Least Squares Adjustment Computations
- SUR 6375: Terrain Analysis and Mapping
- SUR 6395: Topics in Geographic Information Systems
- SUR 6427: Land Tenure and Administration
- SUR 6535: GPS-INS Integration
- SUR 6905: Special Problems in Geomatics
- SUR 6934: Topics in Geomatics

Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6564: Ecohydrology
- FOR 5157: Ecosystem Restoration Principles and Practice
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5181: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6628: Community Forest Management
- FOR 6885: Landscape Planning for Ecotourism
- FOR 6905: Research Problems in Forest Resources and Conservation
- FOR 6910: Supervised Research
- FOR 6933: Seminar
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 6940: Supervised Teaching
- FOR 6971: Research for Master's Thesis
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6555: Introduction to Quantitative Genetics

Horticultural Sciences Departmental Courses

- ALS 5934: Graduate Professional Development Seminar
- HOS 5085C: Principles of Postharvest Horticulture
- HOS 5115C: Horticultural Plant Morphology and Identification
- HOS 5242: Genetics & Breeding of Vegetable Crops
- HOS 5306: Molecular Biology of Plant Hormones
- HOS 5330: Postharvest Technologies for Horticultural Crops
- HOS 5432: Advanced Nutritional Management of Ornamental Crops
- HOS 5515C: Greenhouse and Nursery Operations
- HOS 5516C: Advanced Production of Greenhouse and Nursery Crops
- HOS 5555: Tropical Fruit Production and Research in Florida
- HOS 5711: Phytochemicals in Food & Health
- HOS 6201: Breeding Perennial Cultivars
- HOS 6236: Molecular Marker Assisted Plant Breeding
- HOS 6331: Postharvest Biology
- HOS 6345: Environmental Physiology
- HOS 6412: Nutrition of Horticultural Crops
- HOS 6523: Research and Development in Turfgrass Science
- HOS 6545: Advanced Citriculture I
- HOS 6546: Advanced Citriculture II
Plant Pathology Departmental Courses

- PLP 5005C: General Plant Pathology
- PLP 5102: Theory and Practice of Plant Disease Control
- PLP 5115C: Citrus Pathology
- PLP 5155: Microbiological Control of Plant Diseases and Weeds
- PLP 6656C: Fungal Biology
- PLP 6223C: Viral Pathogens of Plants
- PLP 6241C: Bacterial Plant Pathogens
- PLP 6262C: Fungal Plant Pathogens
- PLP 6291: Plant Disease Diagnosis
- PLP 6303: Host-Parasite Interactions II
- PLP 6404: Epidemiology of Plant Disease
- PLP 6502: Host-Parasite Interactions I
- PLP 6621C: Pop Genetics Microbes
- PLP 6905: Problems in Plant Pathology
- PLP 6910: Supervised Research
- PLP 6921: Colloquium in Principles of Plant Pathology
- PLP 6932: Seminar in Plant Pathology
- PLP 6940: Supervised Teaching
- PLP 6942: Professional Internship in Plant Disease Clinic
- PLP 6971: Research for Master's Thesis
- PLP 7946: Plant Pathology Internship
- PLP 7979: Research for Doctoral Dissertation

Soil and Water Science Departmental Courses

- ALS 5027: Reusable Learning Objects
- ALS 5155: Global Agroecosystems
- CWR 6537: Contaminant Subsurface Hydrology
- SWS 5050: Soils for Environmental Professionals
- SWS 5050L: Soils for Environmental Professionals Laboratory
- SWS 5115: Environmental Nutrient Management
- SWS 5132: Tropical Soil Management
- SWS 5182: Earth System Analysis
- SWS 5208: Sustainable Agricultural and Urban Land Management
- SWS 5234: Environmental Soil, Water, and Land Use
- SWS 5235: South Florida Ecosystems
- SWS 5224: Environmental Biogeochemistry
- SWS 5246: Water Resource Sustainability
- SWS 5247: Hydric Soils
- SWS 5248: Wetlands and Water Quality
- SWS 5305C: Soil Microbial Ecology
- SWS 5308: Ecology of Waterborne Pathogens
- SWS 5406: Soil and Water Chemistry
- SWS 5424C: Soil Chemical Analysis
- SWS 5551: Soils, Water, and Public Health
- SWS 5605C: Environmental Soil Physics
- SWS 5716C: Environmental Pedology
- SWS 5721C: GIS in Land Resource Management
- SWS 5805: Environmental Soil and Water Monitoring Techniques
- SWS 6134: Soil Quality
- SWS 6136: Soil Fertility
- SWS 6161: Bioavailability of Soil Nutrients
- SWS 6262: Soil Contamination and Remediation
- SWS 6323: Advanced Microbial Ecology
College of Agricultural and Life Sciences Courses

- SWS 6325: Rhizosphere Biochemistry
- SWS 6366: Biodegradation and Bioremediation
- SWS 6448: Biogeochemistry of Wetlands and Aquatic Systems
- SWS 6454: Advanced Soil and Water Chemistry
- SWS 6456: Advanced Biogeochemistry
- SWS 6464C: Soil Mineralogy
- SWS 6622: Vadose Zone Hydrology
- SWS 6722: Soil-Landscape Modeling
- SWS 6905: Special Problems
- SWS 6910: Supervised Research
- SWS 6931: Seminar
- SWS 6932: Topics in Soils
- SWS 6940: Supervised Teaching
- SWS 6971: Research for Master's Thesis
- SWS 7979: Advanced Research
- SWS 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Family, Youth, and Community Sciences Department

Interim Chair: Tracy Irani
Graduate Coordinator: Larry F. Forthun

Complete faculty listing by department: Follow this link

The FYCS graduate program is an interdisciplinary social science program that prepares students for advanced degrees (e.g., Ph.D.) and careers in such areas as family and youth services, Extension and community-based education, community development and nonprofit management, program planning and evaluation, and social policy. Graduates find careers in both the public and private sectors including:

- Community Development Practice in local and regional government, private nonprofit organizations (such as chambers of commerce, local development corporations, and local, national and international foundations) and citizen's groups;
- Nonprofit Organizational Management, such as management of community based, nonprofit organizations;
- Family and Social Services, such as family preservation programs, assistance for abused and neglected children and other public assistance programs; and
- Cooperative Extension Service in such areas as youth development, family and consumer sciences and community development.

Contact the graduate coordinator for more information.

Other

Family, Youth, and Community Sciences

College

College of Agricultural and Life Sciences

Department/School

Family, Youth, and Community Sciences Department

Master of Science in Family, Youth and Community Sciences

The Master of Science in FYCS offers two degree options—a thesis and a non-thesis. Both options prepare students for advanced professional positions. FYCS students in either option may complete the FYCS Concentration in Nonprofit Organizational Development, the Certificate in Nonprofit Organizational Development, or the Certificate in Personal & Family Financial Planning.
Thesis Option prepares students to conduct independent research needed to develop science-based solutions to problems, issues and policies that affect families, youth and communities. Students develop expertise in a subject matter area directly relevant to the problem or need they want to address with the thesis research.

Non-Thesis Project Option provides the student with a broad base of knowledge and skills in the discipline. Students complete a non-thesis project determined in consultation with the supervisory committee. Projects vary in nature and may include directed research, program evaluation, or other empirically-based projects.

The Minor in Family, Youth and Community Sciences provides students with knowledge about the theories and body of research that explain how families, youth and communities develop and interact. The minor consists of nine hours of study.

The Minor in Organizational Leadership for Nonprofits provides students with an understanding of how to develop not-for-profit organizations to address problems facing families, youth and communities. The minor consists of six hours of study (nine hours for doctoral students).

Concentration in Nonprofit Organizational Development The nonprofit organizational development concentration will prepare students to work with tax exempt nonprofit organizations and formal community based groups that serve a charitable purpose for the public good. The concentration includes the study of the historical development of nonprofits in the US that enable students to understand the unique aspects of nonprofits and their growing importance and impact on our society. It provides students with a knowledge base for aspiring nonprofit organizational leaders and proven competencies for practicing professionals in the nonprofit sector.

The Graduate Certificate in Nonprofit Leadership will prepare students to work with all 501 (c) nonprofit organizations, tax exempt and others. Courses provide an in depth understanding for developing and sustaining and efficient and effective nonprofit organization. Core competencies in governance, strategic planning, fund raising, and risk management are included as well as other tools.

The Graduate Certificate in Personal and Family Financial Planning addresses the Certified Financial Planner™ (CFP) Board of Standards education requirement for sitting for the CFP examination, including insurance, personal investing, retirement planning, tax planning, behavioral finance, financial planning practice management and foundational family economic theories. The CFP designation is the leading standard in financial planning and our program is registered with the CFP Board of Standards enabling students to sit for the exam upon completion of the certificate.

Degrees Offered with a Major in Family, Youth, and Community Sciences

Master of Science

without a concentration

concentration in Community Studies

concentration in Family and Youth Development

concentration in Nonprofit Organization Development

Courses

- PYC 5008: Personal and Family Tax Planning
- PYC 5009: Personal and Family Insurance Planning
- PYC 5106: Personal and Family Retirement and Estate Planning
- PYC 5935: Personal and Family Financial Planning Capstone
- PYC 6020: Principles of Family, Youth, and Community Sciences
- PYC 6111: Families and Violence
- PYC 6117: Military Families in Community Context
- PYC 6131: Ethics for FYCS Practitioners
- PYC 6207: Adolescent Problematic Behavior
- PYC 6221: Grant Proposals for Community-Based Organizations
- PYC 6222: Parenting and Child Relationships
- PYC 6223: Promoting Positive Youth Development
- PYC 6224: Resilience and Positive Youth Development
- PYC 6230: Theories of Youth and Family Development
- PYC 6232
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Food and Resource Economics Department

College of Agricultural and Life Sciences

Interim Chair: Rodney L. Clouser
Acting Graduate Coordinator: Sherry Larkin

Complete faculty listing by department: Follow this link

The Food and Resource Economics Department offers the Master of Agribusiness (M.AB) (non-thesis), Master of Science with Concentration in Agribusiness (M.S.AB.) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Department participates in programs with the Center for Latin American Studies, the Center for African Studies, the Center for Tropical Agriculture, the School of Natural Resources and Environment, the College of Law, and the Florida Sea Grant College Program.

The Department programs reflect the diversity of Florida's agriculture which has more than fifty major commodities. With over thirty faculty involved in a full range of research, extension, and teaching programs in areas including Agricultural Marketing, International Trade, Policy, Production/Farm Management, International Development, Marine Economics, Natural Resource and Environmental Economics, Community/Regional Development and Labor Economics. In addition to the main campus location, the department has faculty at research centers throughout the state.

Several members of the faculty have garnered international reputations in diverse fields such as trade policy, generic advertising, citrus economics, sugar policy, business retention and expansion, leadership development, consumer attitudes towards genetically modified food, and dairy marketing.

The Department offers a combined bachelor's/master's degree program for the Master of Science and Master of Science with Concentration in Agribusiness. Contact the Graduate Program Office in 1170 McCarty Hall for information.

For more information, please see the program pages below, and see our website: http://www.fred.ifas.ufl.edu.

Other

Food and Resource Economics

College

Department/School
Food and Resource Economics Department

Food and Resource Economics Program Information

The Food and Resource Economics Department offers the Master of Agribusiness (M.AB.) (non-thesis), Master of Science with Concentration in Agribusiness (M.S.AB.) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Ph.D. in Food and Resource Economics is designed to provide the student with rigorous training in economics, statistics, and applied quantitative techniques. Each student is exposed to core theory and to fields of specialization with the purpose to prepare the candidate for a professional career in post-secondary education, government, non-governmental organizations, private business, and international agencies.

The Master of Agribusiness is designed specifically for students with no academic background in economics or agricultural economics. The program is made up of students from diverse backgrounds including Accounting, Agricultural Education and Communication, Agricultural Operations Management, Animal Science, Business Administration, Finance, Food Science, Horticulture, Management, Turfgrass, and Wildlife Ecology and Conservation. The graduate coursework complements the student's undergraduate background and prepare them for careers in financial analysis, sales, management, marketing, human resources, policy, production, and entrepreneurial pursuits working in private industry, international firms, non-profit organizations and government.

The Master of Science in the Food and Resource Economics Department provides broad training in applied economics as it relates to food production, marketing and trade, regional economics, and natural resource issues. Students are taught to use basic economic principles and quantitative methods to address empirical problems. The core consists of graduate level courses in microeconomics, policy, econometrics, statistics and survey research methods. Many students elect to continue their education with a Ph.D. degree while others opt for employment with government agencies, non-governmental organizations, foreign agencies, private consulting firms, or corporations.

The Master of Science with Concentration in Agribusiness is designed specifically for students with an educational background in economics and agricultural economics. The quantitative courses include microeconomics, policy, econometrics and survey research methods and provide solid economic theory to prepare students for careers in financial analysis, sales, management, marketing, human resources, policy, production, and entrepreneurial pursuits working in private industry, international firms, non-profit organizations and government.

For more information, please see our website: http://www.fred.ifas.ufl.edu.

Degrees Offered with a Major in Food and Resource Economics

Doctor of Philosophy

without a concentration

with a concentration in Hydrologic Sciences

with a concentration in Toxicology

with a concentration in Tropical Conservation and Development

Master of Agribusiness

without a concentration

with a concentration in Tropical Conservation and Development
Master of Science

without a concentration

with a concentration in Agribusiness

with a concentration in Hydrologic Sciences

with a concentration in Toxicology

with a concentration in Tropical Conservation and Development

Courses

- AEB 5167: Economic Analysis in Small Farm Livelihood Systems
- AEB 5188: Economics of Agribusiness Decisions
- AEB 5326: Agribusiness Financial Management
- AEB 5516: Quantitative Methods in Agribusiness Decisions
- AEB 5757: Strategic Agribusiness Human Resource Management
- AEB 6106: Microeconomic Principles and Analysis
- AEB 6139: Strategic Agribusiness Management
- AEB 6145: Agricultural Finance
- AEB 6183: Agribusiness Risk Management
- AEB 6225: Public Policy and the Agribusiness Firm
- AEB 6301: Food Wholesale and Retail Marketing
- AEB 6363: Agricultural Marketing
- AEB 6385: Management Strategies for Agribusiness Firms
- AEB 6533: Static and Dynamic Optimization Models in Agriculture
- AEB 6553: Elements of Econometrics
- AEB 6592: Mathematical Programming for Economic Analysis
- AEB 6675: International Agribusiness Marketing
- AEB 6815: Science and Research Methodology
- AEB 6817: Survey Research Methods for Economists
- AEB 6905: Problems in Food and Resource Economics
- AEB 6910: Supervised Research
- AEB 6921: Workshop in Food and Resource Economics I
- AEB 6933: Special Topics
- AEB 6934: Workshop in Food and Resource Economics II
- AEB 6942: Advanced Applications in Agribusiness Experience
- AEB 6971: Research for Master's Thesis
- AEB 7106: Microeconomic Theory II
- AEB 7174: Economic Coordination and Organizational Behavior in Agribusiness
- AEB 7182: Agricultural Risk Analysis and Decision Making
- AEB 7184: Production Economics
- AEB 7240: Macroeconomic Theory in Open Economies II
- AEB 7373: Consumer Demand and Applied Analysis
- AEB 7453: Natural Resource and Environmental Economics
- AEB 7483: Seminar in Natural Resource and Environmental Economics
- AEB 7571: Econometric Methods I
- AEB 7572: Econometric Methods II
- AEB 7645: Economic Development and Agriculture
- AEB 7979: Advanced Research
- AEB 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses
Food Science and Human Nutrition Department

College of Agricultural and Life Sciences

Chair: Susan S. Percival
Graduate Coordinators: Harry S. Sitren (M.S. in Food Science and Human Nutrition / Ph.D. in Food Science), James F. Collins (Ph.D. in Nutritional Sciences)

Complete faculty listing by department: Follow this link.

The Food Science and Human Nutrition Department (FSHN) is one of the world's largest combined academic programs where food science, nutritional sciences, and dietetics are all studied within one department. FSHN has nearly 30 full-time faculty members, 80 graduate assistants, and close to 1,000 undergraduate students. Our programs are accredited by the Institute of Food Technologists (IFT) and the Academy of Nutrition and Dietetics. After completing undergraduate degrees, our students typically move on to professional employment, further education or training in food or nutrition graduate programs, or on to professional school programs. We have a strong record of excellent placement of our graduate students in industry and professional organization employment positions, as faculty members at colleges and universities, or in postdoctoral training experiences.

Our faculty has trained at institutions from around the world; they have been widely successful in their teaching, research, and extension efforts. Throughout our programs in food science, nutrition, and dietetics, our faculty is recognized nationally and internationally as experts in their respective fields.

The Food Science and Human Nutrition Department offers programs leading to the degrees of Master of Science in Food Science and Human Nutrition, Doctor of Philosophy in Food Science, and Doctor of Philosophy in Nutritional Sciences (offered under the auspices of the Center for Nutritional Sciences). Minimum requirements for these degrees are located in the Graduate Degrees section of this catalog.

For more information please click the links to the program pages below, or see our website: http://fshn.ifas.ufl.edu.

Other

Food Science

College

College of Agricultural and Life Sciences

Department/School

Food Science and Human Nutrition Department

Food Science Program Information

The Ph.D. program in Food Science is a multidisciplinary program consisting of Food Chemistry, Food Processing and Engineering, and Food Microbiology and Safety. Students are expected to obtain a breadth of food science knowledge by taking courses in all program areas with the majority of courses stressing one of the three areas of emphasis.

For further information, please see our website at: http://fshn.ifas.ufl.edu.

Doctor of Philosophy

without a concentration
Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6938: Advanced Diabetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II
- DIE 6949: Dietetic Internship in Sports Nutrition
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5561C: Citrus Processing Technology
- FOS 5645: Functional Foods and Nutraceuticals
- FOS 5732: Current Issues in Food Regulations
- FOS 6125C: Sensory Evaluation of Food
- FOS 5126C: Psychophysical Aspects of Foods
- FOS 6215: Principles of Food Safety
- FOS 6216: Food Safety Systems
- FOS 6217: Food Safety, Sanitation, and Microbiology
- FOS 6226C: Advanced Food Microbiology
- FOS 6315C: Advanced Food Chemistry
- FOS 6317C: Flavor Chemistry and Technology
- FOS 6355C: Instrumental Analysis and Separations
- FOS 6428C: Advanced Food Processing
- FOS 6455C: Industrial Food Fermentations
- FOS 6736: Food Regulations
- FOS 6905: Problems in Food Science
- FOS 6910: Supervised Research
- FOS 6915: Research Planning
- FOS 6936: Topics in Food Science
- FOS 6938: Food Science Seminar
- FOS 6940: Supervised Teaching
- FOS 6971: Research for Master's Thesis
- FOS 7979: Advanced Research
- FOS 7980: Research for Doctoral Dissertation
- HUN 5246: Current Issues in Dietary Supplements
- HUN 5441: Metabolic Response to Enteral and Parenteral Nutrition
- HUN 5447: Nutrition and Immunity
- HUN 6245: Advanced Human Nutrition
- HUN 6255: Clinical Nutrition
- HUN 6301: Nutritional Aspects of Lipid Metabolism
- HUN 6305: Nutritional Aspects of Carbohydrates
- HUN 6321: Proteins and Amino Acids in Nutrition
- HUN 6331: Vitamins in Human Nutrition
- HUN 6356: Minerals in Nutrition
- HUN 6812C: Analytical Techniques in Nutritional Biochemistry
- HUN 6905: Problems in Nutritional Sciences
- HUN 6910: Supervised Research
- HUN 6936: Topics in Nutritional Sciences Seminar
- HUN 6938: Nutritional Sciences Seminar
- HUN 6939: Advanced Clinical Nutrition
- HUN 6940: Supervised Teaching
- HUN 6971: Research for Master's Thesis
- HUN 7979: Advanced Research
- HUN 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry
Food Science and Human Nutrition

College

College of Agricultural and Life Sciences

Department/School

Food Science and Human Nutrition Department

Food Science and Human Nutrition Program

The M.S. program offers tracks in food science and in nutritional sciences. The Institute of Food Technologists and the American Society for Nutrition recognize these concentrations. The department also offers a combined Master of Science-Dietetics Internship (MS-DI) program accredited by the Commission on Accreditation for Dietetic Education (CADE). Students who complete this program are eligible to take the national registration examination to become a registered dietitian. Only graduates from a CADE accredited/approved Didactic Program in Dietetics are eligible for the MS-DI program.

Specific areas of study include nutritional biochemistry/molecular biology, nutrient function/metabolism, medical nutrition therapy/dietetics, nutritional immunology, food processing/engineering, food chemistry/biochemistry, and food safety/microbiology/quality.

Applicants must have an adequate background in physical and biological sciences and food science or nutritional sciences. Students with specific deficiencies will be required to take prerequisite courses.

For further information, please see our website at: http://fshn.ifas.ufl.edu.

Degrees Offered with a Major in Food Science and Human Nutrition

Master of Science

without a concentration

congestion in Nutritional Sciences

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6908: Advanced Dietetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II
- DIE 6949: Dietetic Internship in Sports Nutrition
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5561C: Citrus Processing Technology
- FOS 5645: Functional Foods and Nutraceuticals
- FOS 5732: Current Issues in Food Regulations
- FOS 6125C: Sensory Evaluation of Food
- FOS 5126C: Psychophysical Aspects of Foods
- FOS 6215: Principles of Food Safety
- FOS 6216: Food Safety Systems
- FOS 6217: Food Safety, Sanitation, and Microbiology
- FOS 6226C: Advanced Food Microbiology
- FOS 6315C: Advanced Food Chemistry
The field of nutritional science has unprecedented public interest. This is fostered by evolving links between diet and health, and the impact of one's individual genetic makeup on nutrient utilization. The Ph.D. degree program in Nutritional Sciences is interdisciplinary, with participating CALS, COL, CLAS, and CVM faculty directing research of doctoral students, where the full spectrum of Nutritional Sciences is available. Emphasis areas include basic nutritional sciences, biochemistry and molecular biology, genetics, immunology, physiology, clinical nutrition, microbiology, and biostatistics.

Students are admitted to the program after the bachelor's degree or a master's degree in nutritional sciences or a related field. Applicants should have a strong undergraduate background in biological sciences and chemistry. Deficiencies may be made up during the first year of graduate study.

Additional information can be found at http://nutritionalsciences.centers.ufl.edu.

For additional information, e-mail Dr. Mitchell D. Knutson, Director at mknutson@ufl.edu or Dr. James F. Collins, Graduate Coordinator at jfcollins@ufl.edu.
Degrees Offered with a Major in Nutritional Sciences

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Nutritional Sciences Program Core Courses

- BCH 6206: Advanced Metabolism
- HUN 6938: Nutritional Sciences Seminar
- STA 6166: Statistical Methods in Research I
- HUN 6301: Nutritional Aspects of Lipid Metabolism
- HUN 6305: Nutritional Aspects of Carbohydrates
- HUN 6321: Proteins and Amino Acids in Nutrition
- HUN 6331: Vitamins in Human Nutrition
- HUN 6356: Minerals in Nutrition

Additional Course Offerings

The following courses may be taken to contribute to the overall degree award requirements.

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6938: Advanced Dietetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II
- DIE 6949: Dietetic Internship in Sports Nutrition
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5561C: Citrus Processing Technology
- FOS 5645: Functional Foods and Nutraceuticals
- FOS 5732: Current Issues in Food Regulations
- FOS 6125C: Sensory Evaluation of Food
- FOS 5126C: Psychophysical Aspects of Foods
- FOS 6215: Principles of Food Safety
- FOS 6216: Food Safety Systems
- FOS 6217: Food Safety, Sanitation, and Microbiology
- FOS 6226C: Advanced Food Microbiology
- FOS 6315C: Advanced Food Chemistry
- FOS 6317C: Flavor Chemistry and Technology
- FOS 6355C: Instrumental Analysis and Separations
- FOS 6428C: Advanced Food Processing
- FOS 6455C: Industrial Food Fermentations
- FOS 6736: Food Regulations
- FOS 6905: Problems in Food Science
- FOS 6910: Supervised Research
- FOS 6915: Research Planning
- FOS 6936: Topics in Food Science
- FOS 6938: Food Science Seminar
- FOS 6940: Supervised Teaching
- FOS 6971: Research for Master's Thesis
- FOS 7979: Advanced Research
The Horticultural Sciences Department Graduate Program at the University of Florida has a wide array of opportunities for graduate study.

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HSE) and Horticultural Sciences (HS) departments and offers graduate programs leading to the Master of Science (thesis or nonthesis options) and the Doctor of Philosophy degrees. Members of the program's Graduate Faculty include department resident faculty and faculty at University of Florida Research and Education Centers located throughout Florida.

The Horticultural Sciences Department offers a combined bachelor's/master's degree program. Please contact the graduate coordinator for information.

For admission to the HOS graduate program, apply to either the HS or HSE departments, depending on your career/research interest. Details about the program and how to apply are listed on their website: [http://hos.ufl.edu](http://hos.ufl.edu).

Other

Horticultural Sciences

College

College of Agricultural and Life Sciences

Department/School

Horticultural Sciences Department

Environmental Horticulture Department
Horticultural Sciences Program Information

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HSE) and Horticultural Sciences (HS) departments and offers graduate programs leading to the Master of Science (thesis or nonthesis options) and the Doctor of Philosophy degree. The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information. Members of the program's Graduate Faculty include department resident faculty and faculty at University of Florida Research and Education Centers located throughout Florida.

For admission to the HOS graduate program, apply to either the HS or HSE departments, depending on your career/research interest.

Requirements:

A strong undergraduate or graduate background in horticultural, biological, agronomic, or other disciplines in the life sciences and undergraduate coursework in chemistry, physics, and mathematics. A prospective graduate student need not have majored in horticulture as an undergraduate or master's student; however, students with curriculum deficiencies are required to take prerequisite subjects during the first year of graduate study. Undergraduate courses taken to correct curriculum deficiencies do not count for graduate program credit.

Specializations in the HSE department focus on vegetable and fruit crops and include
- Plant Breeding and Genetics
- Crop Production and Nutrient Management
- Postharvest Biology
- Organic Sustainable Agriculture
- Weed Science
- Physiology and Biochemistry
- Plant Molecular Biology
- Protected Agriculture

Numerous HS and HSE faculty participate in the interdisciplinary Plant Molecular and Cellular Biology Program. Students interested in molecular biology/biotechnology may pursue molecular-oriented studies in any listed specialization. Students interested in full specialization in molecular and related disciplines should contact the Plant Molecular and Cellular Biology interdisciplinary program for specific requirements.

Specializations in the HSE department:
- Breeding and Genetics
- Restoration Ecology
- Floriculture
- Foliation Production
- Plant anatomy and development
- Plant Biotechnology
- Plant Restoration Conservation Biotechnology
- Stress Physiology
- Taxonomy
- Tissue Culture
- Turfgrass Science
- Woody Plants

Graduate School Degree Program Requirements Master of Science (thesis option):

Students must earn at least 30 credits as a graduate student at UF. No more than 9 of the 30 credits (earned with a grade of A, B+, or B) may be transferred from institutions approved for this purpose by the Dean of the Graduate School. A minimum of 12 credits is required in the Horticultural Sciences major; additionally, a minimum of 6 credits in HOS 6971- Master's Research may be counted toward the total credits. See here for information on M.S. graduate degrees.

A minor may be chosen in an academic unit other than the major. If a minor is chosen, at least 6 credits of course work are required in the minor field. Two 6-credit minors may be taken with the major academic unit's permission. A 3.00 (truncated) GPA is required for minor credit. In addition, a representative from the department in which the minor is being received must be on the supervisory committee.

Master of Science non-thesis option:

This option offers additional training beyond the bachelor's degree in a horticultural specialization. Essential elements of this program include a program of courses and a comprehensive written and/or final oral qualifying examination. There is no thesis requirement. A minimum of 30 credit hours of course work is required. Courses taken for program credit must be numbered 5000 or higher with at least 15 of these credits in the Horticultural Science major. With supervisory committee and college dean approval, 6 hours of 3000- or 4000-level undergraduate courses, taught outside the major department, may count toward the minimum requirements for the degree. Click for information on all graduate degrees.

A minor may be chosen in an academic unit other than the major. If a minor is chosen, at least 6 credits of course work are required in the minor field. Two 6-credit minors may be taken with the major academic unit's permission. A 3.00 (truncated) GPA is required for minor credit. In addition, a representative from the department in which the minor is being received must be on the supervisory committee.

Doctor of Philosophy:

The Department of Philosophy is a research degree and is granted on evidence of general proficiency, distinctive attainment in a special field, and ability to conduct independent investigation as demonstrated in a dissertation presenting original research with a high degree of literary skill. Consequently, doctoral programs are more flexible and varied than those leading to M.S. degree programs. The Ph.D. degree requires at least 90 credits beyond the bachelor's degree, although specific course requirements vary from field to field and from student to student. Up to 30 credits of master's degree may be transferred to a doctoral program. Any credits counted from an M.S. degree program must have been earned within the previous seven years (or by petition). The Graduate Council does not specify the courses required for the Ph.D. degree.

General requirements for the program include
- a clear objective for research
- approval of the student's entire supervisory committee
- an appropriate number of credits of doctoral research

Click for information on all graduate degrees.

Minor:

With the supervisory committee's approval, the student may choose one or more minor fields. Minor work may be completed in any academic unit outside the major, if approved for M.S. or doctoral programs listed in this catalog. The collective grade for courses included in a minor must be "B" (3.00) or higher. If one minor is chosen, the supervisory committee member representing the minor suggests 12 to 24 credits of courses numbered 5000 or higher as preparation for a qualifying examination. Part of this credit may have been earned in the M.S. degree program. If two minors are chosen, each must include at least 8 credits. Competence in the minor area is demonstrated by written examination by the minor academic unit, or by the oral qualifying examination. Minor course work at the doctoral level may include courses in more than one academic unit; if the objective of the minor is clearly stated and the combination of courses is approved by the Graduate School (this approval is not required for a minor in one academic unit). Further requirements for the Master of Science and the Doctor of Philosophy degrees are listed under those headings in the General Information section of this catalog.

Degrees Offered with a Major in Horticultural Sciences
Doctor of Philosophy

without a concentration

concentration in Environmental Horticulture

concentration in Horticultural Sciences

concentration in Toxicology

Master of Science

without a concentration

concentration in Environmental Horticulture

concentration in Horticultural Sciences

Horticultural Sciences Program Courses

- ALS 6935: Topics in Biological Invasions
- BCH 5045: Graduate Survey of Biochemistry
- BOT 6936: Special Topics
- HOS 6934: Professional Seminar Preparation
- PLS 5222C: Propagation of Horticultural Crops
- PLS 5241C: Advanced Plant Micropropagation
- PLS 5405: Advanced Composting Technology

Additional Course Offerings

The following courses may be taken to contribute to the overall degree award requirements.

Horticultural Sciences Departmental Courses

- ALS 5934: Graduate Professional Development Seminar
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
- BOT 5725C: Taxonomy of Vascular Plants
- BOT 6508C: Proteomics Theory and Practice
- BOT 6516: Plant Metabolism
- BOT 6566: Plant Growth and Development
- BOT 6716C: Advanced Taxonomy
- BOT 6726C: Principles of Systematic Biology
- BOT 6906: Individual Studies in Botany
- BOT 6910: Supervised Research
- BOT 6927: Advances in Botany
- BOT 6935: Special Topics
- BOT 6936: Graduate Student Seminar
- BOT 6940: Supervised Teaching
- BOT 6943: Internship in College Teaching
- BOT 6971: Research for Master's Thesis
- BOT 7979: Advanced Research
• BOT 7980: Research for Doctoral Dissertation
• PCB 5046C: Advanced Ecology
• PCB 5338: Principles of Ecosystem Ecology
• PCB 5356: Tropical Ecology
• PCB 6675C: Evolutionary Biogeography
• PLP 6656C: Fungal Biology

**Microbiology and Cell Science Department**

*Chair: E. Triplett.*
*Graduate Coordinator: Tony Romeo.*

Complete faculty listing by department: [Follow this link.](http://microcell.ufl.edu/)

Graduate study is offered leading to the Master of Science and Doctor of Philosophy degrees in microbiology and cell science, with emphasis in one or more of the disciplines of biochemistry, cell biology, and microbiology.

Requirements for these degrees are provided in the [Graduate Degrees](http://microcell.ufl.edu/) section of this catalog and also at the Department webpage: [http://microcell.ufl.edu/](http://microcell.ufl.edu/).

Instruction and guidance are collaborative among faculty in the Colleges of Agricultural and Life Sciences, Liberal Arts and Sciences, and Medicine.

Research spans broad areas in the cellular and molecular aspects of bacterial, plant, and animal life functions: Areas of research include microbial biochemistry, biotechnology; biomass conversion, genetic and metabolic regulation; environmental microbiology; cell biology; molecular biology; molecular genetics; genomics and bioinformatics; immunology; virology; parasitology; host-pathogen interactions; cellular ultrastructure.

Prerequisites for admission to graduate study, in addition to those of the Graduate School, are a broad educational background including mathematics, physics, and chemistry through organic, analytical, and physical chemistry; basic courses in biology, botany, and/or zoology; and at least one course in microbiology and biochemistry. An undergraduate major in biochemistry, physical or chemical science, engineering, or general biology may be an acceptable alternative to a degree in microbiology or cell science. Receipt of an advanced degree requires detailed knowledge in microbiology, biochemistry, and chemistry; undergraduate deficiencies may necessitate additional course work prior to entry into the graduate program.

In addition, the Microbiology and Cell Science Department also offers a combined B.S./M.S. program that allows qualified students to earn both the Bachelor's and Master's degrees with 12 credit hours of jointly counted course work. This program is considered a "4/1" because students may be awarded both degrees within a five-year period. For further information on this program, follow this link: [http://microcell.ufl.edu/graduate-program/combined-degree-program/](http://microcell.ufl.edu/graduate-program/combined-degree-program/).

**Other**

**Microbiology and Cell Science**

**College**

[College of Agricultural and Life Sciences](http://microcell.ufl.edu/)

**Department/School**

[Microbiology and Cell Science Department](http://microcell.ufl.edu/)

**Degrees Offered with a Major in Microbiology and Cell Science**

**Doctor of Philosophy**

without a concentration

concentration in Medical Microbiology and Biochemistry

concentration in Toxicology
Master of Science without a concentration in Medical Microbiology and Biochemistry

Courses

- MCB 5205: Microbiology of Human Pathogens
- MCB 5252: Microbiology, Immunology, and Immunotherapeutics
- MCB 5305L: Microbial Genetics and Biotechnology Laboratory
- MCB 5408: Anaerobic Microbiology and Biotechnology
- MCB 5458: Energy Transformation in Microorganisms
- MCB 5505: General Virology
- MCB 6317: Molecular Biology of Gene Expression
- MCB 6318: Comparative Microbial Genomics
- MCB 6355: Microbial-Host Defense
- MCB 6409: Microbial Cell Structure and Function
- MCB 6417: Microbial Metabolism and Energetics
- MCB 6457: Metabolic Regulation
- MCB 6465: Microbial Metabolic Engineering
- MCB 6485: Advanced Techniques in Microbiology and Cell Science
- MCB 6772: Advanced Topics in Cell Biology
- MCB 6905: Experimental Microbiology
- MCB 6910: Supervised Research
- MCB 6930: Seminar
- MCB 6937: Special Topics in Microbiology
- MCB 6940: Supervised Teaching
- MCB 6971: Research for Master's Thesis
- MCB 69xx
- MCB 7922: Journal Colloquy
- MCB 7979: Advanced Research
- MCB 7980: Research for Doctoral Dissertation
- PCB 5136L: Techniques in Microbial and Cell Biology
- PCB 5235: Immunology

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Plant Molecular and Cellular Biology Department

College of Agricultural and Life Sciences
College of Liberal Arts and Sciences
College of Medicine

Complete faculty listing by department: Follow this link.

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology within the colleges of Agriculture and Life Sciences, Medicine, and Liberal Arts and Sciences.

Other

Plant Molecular and Cellular Biology
Plant Molecular and Cellular Biology (PCMB) is an interdisciplinary and interdepartmental graduate degree program that emphasizes understanding the molecular and cellular mechanisms that mediate plant development, adaptation, and evolution. Students can pursue an M.S. or a Ph.D. degree through the PMCB program. All students complete core courses in Advanced Genetics, Plant Molecular Biology and Genomics, Plant Cellular and Developmental Biology, and Plant Biochemistry. In addition to the core classes, students can select from a variety of courses in biochemistry, molecular biology, physiology, breeding, genetics, evolution, microbiology, and plant pathology.

New students are exposed to a variety of faculty and experimental systems while they rotate through several laboratories during their first two semesters before selecting an adviser and dissertation research area. Both M.S. and Ph.D. students take four required courses: PCB 5065 Advanced Genetics, PCB 5530 Plant Molecular Biology and Genomics, PCB 6528 Plant Cell and Developmental Biology and BOT 6935 Plant Biochemistry, as well as journal colloquium classes (PCB 7922 Journal Colloquium). Additional elective courses are taken after approval by the student's supervisory committee. For additional information see http://pmcb.ifas.ufl.edu.

Successful candidates should have a strong interest in plant molecular and cellular mechanisms controlling development, metabolism, adaptation, and evolution. Applicants typically have a B.S. or M.S. in the agricultural, forestry, biological or chemical sciences with advanced undergraduate coursework in genetics, molecular and cellular biology, and biochemistry. However, outstanding students from a broad range of science disciplines are actively considered.

 Degrees Offered with a Major in Plant Molecular and Cellular Biology

Doctor of Philosophy

without a concentration

concentration in Toxicology

Master of Science

 Plant Molecular and Cellular Biology Courses

- BOT 6936: Special Topics
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6910: Supervised Research
- PCB 6937: Special Topics in Plant Molecular and Cellular Biology
- PCB 6971: Research for Master's Thesis
- PCB 7922: Journal Colloquium in Plant Molecular and Cellular Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Plant Pathology Department

Chair: R. Loria
Graduate Coordinators: J. Jones

Complete faculty listing by department: [Follow this link](#)

The Department of Plant Pathology offers graduate studies leading to the Master of Science (thesis and nonthesis option) and Doctor of Philosophy degrees. The Department also participates in the Doctor of Plant Medicine interdisciplinary professional degree.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Plant Pathology

College

College of Agricultural and Life Sciences

Department/School

[Plant Pathology Department](#)

Plant Pathology Program Information

A student may pursue studies in one of several basic areas of plant pathology. These areas include fungal plant pathology, plant bacteriology, plant virology, diagnostics, control, and also molecular and biochemical aspects of host-pathogen systems, epidemiology, etiology, genetics of host-pathogen systems, plant taxonomy, and soil microbiology. In Florida, the variety of cultivated plants, coupled with an environment ideal for plant disease development, offers the student opportunities to study diseases of many crops as they develop. First-hand knowledge can be gained of diseases of field, fruit, ornamental, pasture, range, turf, and vegetable crops in temperate, subtropical, and tropical environments.

Students who anticipate study in plant pathology at the University of Florida should include in their undergraduate programs training in botany, chemistry (through biochemistry), genetics, and microbiology.

Courses in nematology are offered by the Department of Entomology and Nematology.

Degrees Offered with a Major in Plant Pathology

Doctor of Philosophy

without a concentration
concentration in Toxicology

Master of Science

Plant Pathology Departmental Courses

- PLP 5005C: General Plant Pathology
- PLP 5102: Theory and Practice of Plant Disease Control
- PLP 5115C: Citrus Pathology
- PLP 6656C: Fungal Biology
- PLP 6223C: Viral Pathogens of Plants
- PLP 6241C: Bacterial Plant Pathogens
- PLP 6262C: Fungal Plant Pathogens
- PLP 6291: Plant Disease Diagnosis
- PLP 6303: Host-Parasite Interactions II
- PLP 6404: Epidemiology of Plant Disease
- PLP 6502: Host-Parasite Interactions I
- PLP 6621C: Pop Genetics Microbes
- PLP 6905: Problems in Plant Pathology
- PLP 6910: Supervised Research
- PLP 6921: Colloquium in Principles of Plant Pathology
- PLP 6932: Seminar in Plant Pathology
- PLP 6940: Supervised Teaching
- PLP 6942: Professional Internship in Plant Disease Control
- PLP 6971: Research for Master's Thesis
- PLP 7946: Plant Pathology Internship
- PLP 7960: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5903: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

School of Forest Resources and Conservation

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Joint program: Students may simultaneously earn a juris doctorate from the College of Law and a graduate degree (M.F.R.C., M.S., or Ph.D.) in Forest Resources and Conservation.

Combined programs: The School offers a combined bachelor's/master's degree program, which allows qualified students to earn both a bachelor's degree and a master's degree with a savings of 1 semester. Ph.D. students may pursue a co-major with the Department of Statistics (see below).

Concentration in geomatics: Students completing 15 or more credits with an SUR designation, as part of an SFRC graduate degree, may earn the concentration in geomatics. Geomatics is the collection, analysis, and management of spatial information and includes such fields as surveying, mapping, land tenure, cadastral systems, geographic information systems, and remote sensing.

Concentration in ecological restoration: This concentration is available to M.S. non-thesis students. To earn this concentration a student must complete Ecosystem Restoration Principles and Practice and four of the following courses: Ecological Distribution and Management of Invasive Plants, Ecology and Restoration of Invasive Ecosystems, Ecology and Restoration of Longleaf Pine Ecosystem, Watershed Restoration and Management, Natural Resource Policy and Administration, or Agroforestry in the Southeastern U.S. Ecological restoration seeks to
return ecosystems to a close approximation of condition before a disturbance.

**Statistics co-major:** Ph.D. students with the School may elect the co-major offered jointly with the Department of Statistics. Students focusing on forest genetics, tree improvement, and other statistics-intensive aspects of natural resource management are potential candidates for this option.

**Certificates:** The School administers the Graduate Certificate in Agroforestry, and SFRC students regularly earn certificates in Geographic Information Systems and in Environmental Education and Communication. Requirements are described under *Interdisciplinary Graduate Certificates and Concentrations* in this catalog.

For additional information, please visit the School's web page at [http://sfrc.ufl.edu](http://sfrc.ufl.edu).

For details on what terms courses will be offered, please visit [https://sfrc.ufl.edu/gradcourses.html](https://sfrc.ufl.edu/gradcourses.html).

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**Other**

**Fisheries and Aquatic Sciences**

**College**

[College of Agricultural and Life Sciences](http://www.ufl.edu/)

**Department/School**

[School of Forest Resources and Conservation](http://sfrc.ufl.edu/)

**Fisheries and Aquatic Sciences Program**

*Director:* T. L. White  
*Graduate Coordinator:* William J. Lindberg

*Complete faculty listing by department:* [Follow this link](http://sfrc.ufl.edu/).

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional master's degrees), as well as concentrations and certificates in a diversity of specific areas.

The School's program in Fisheries and Aquatic Sciences leads to the Master of Science, Master of Fisheries and Aquatic Sciences (nonthesis), and Doctor of Philosophy degrees with a program in Fisheries and Aquatic Sciences. Minimum requirements for these degrees are given in the *Graduate Degrees* section of this catalog.

The Fisheries and Aquatic Sciences program also offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

The School of Forest Resources and Conservation's program in Fisheries and Aquatic Sciences conducts research, teaching, and extension programs in four broad areas:

- Sustainable fisheries
- Aquaculture
- Aquatic animal health
- Conservation and management of aquatic environments

Faculty encompass both freshwater and marine environments, as well as managed aquaculture systems. Collaborators include the UF College of Veterinary Medicine, National Biological Survey, National Marine Fisheries Service, Harbor Branch Oceanographic Institute, Mote Marine Laboratory, the US Geologic Survey, the Florida Fish and Wildlife Conservation Commission, and others. Academic programs are structured to emphasize direct engagement of students with faculty. Further information, including specific degree options, faculty biographies, and information on the admissions process, is available at [http://sfrc.ufl.edu](http://sfrc.ufl.edu).

**Degrees Offered with a Major in Fisheries and Aquatic Sciences**

**Doctor of Philosophy**

*without a concentration*

*concentration in Geographic Information Systems*
concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

Master of Fisheries and Aquatic Sciences

without a concentration

concentration in Geographic Information Systems

concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mpping
- SUR 5385: Remote Sensing Applications
- SUR 5386: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
- SUR 5425: Cadastral Information Systems
- SUR 5525: Least Squares Adjustment Computations
- SUR 6375: Terrain Analysis and Mapping
- SUR 6395: Topics in Geographic Information Systems
- SUR 6427: Land Tenure and Administration
- SUR 6535: GPS-INS Integration
Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5276C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5901: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Phycology
- FAS 6256: Fish and Aquatic Invertebrate Histology
- FAS 6272: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6932: Special Topics in Fisheries and Aquatic Sciences
- FAS 6933: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
- FAS 6940: Supervised Teaching
- FAS 6971: Research for Master's Thesis
- FAS 7979: Advanced Research
- FAS 7980: Research for Doctoral Dissertation

Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6564: Ecohydrology
- FOR 5157: Ecosystem Restoration Principles and Practice
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6628: Community Forest Management
- FOR 6665: Landscape Planning for Ecotourism
- FOR 6905: Research Problems in Forest Resources and Conservation
- FOR 6910: Supervised Research
- FOR 6933: Seminar
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 6940: Supervised Teaching
- FOR 6971: Research for Master's Thesis
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6555: Introduction to Quantitative Genetics

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
Forest Resources and Conservation

College

College of Agricultural and Life Sciences

Department/School

School of Forest Resources and Conservation

Forest Resources and Conservation Program Information

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas.

The SFRC offers graduate programs leading to the Master of Forest Resources and Conservation (professional, non-thesis), Master of Science (thesis and non-thesis), and Doctor of Philosophy degrees in Forest Resources and Conservation. The Master of Science non-thesis degree may be taken entirely online. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Forest Resources and Conservation program prepares students to work with the ecological, economic, and social aspects of natural resources, including the management of spatial information gathered through traditional surveying as well as remote sensing. Faculty have a wide variety of specializations, including fire ecology, land tenure, tree genetics, recreation management, environmental education, geographic information systems, silviculture, forest economics, and environmental policy. Further information, including specific degree options, faculty biographies, and information on the admissions process, is available at: http://sfrc.ufl.edu.

Degrees Offered with a Major in Forest Resources and Conservation

Doctor of Philosophy

without a concentration

congestion in Agroforestry

congestion in Geographic Information Systems

congestion in Geomatics

congestion in Hydrologic Sciences

congestion in Natural Resource Policy and Administration
concentration in Tropical Conservation and Development

concentration in Toxicology

concentration in Wetland Sciences

Master of Forest Resources and Conservation

without a concentration

concentration in Agroforestry

concentration in Geographic Information Systems

concentration in Geomatics

concentration in Natural Resource Policy and Administration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Agroforestry

concentration in Ecological Restoration
concentration in Geographic Information Systems

concentration in Geomatics

concentration in Hydrologic Sciences

concentration in Natural Resource Policy and Administration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mapping
- SUR 5385: Remote Sensing Applications
- SUR 5386: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
- SUR 5425: Cadastral Information Systems
- SUR 5525: Least Squares Adjustment Computations
- SUR 6375: Terrain Analysis and Mapping
- SUR 6395: Topics in Geographic Information Systems
- SUR 6427: Land Tenure and Administration
- SUR 6535: GPS-INS Integration
- SUR 6905: Special Problems in Geomatics
- SUR 6934: Topics in Geomatics

Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5276C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5901: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Phycology
- FAS 6256: Fish and Aquatic Invertebrate Histology
- FAS 6272: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6932: Special Topics in Fisheries and Aquatic Sciences
- FAS 6933: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
- FAS 6940: Supervised Teaching
- FAS 6971: Research for Master's Thesis
- FAS 7979: Advanced Research
- FAS 7980: Research for Doctoral Dissertation
Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6564: Ecohydrology
- FOR 5157: Ecosystem Restoration Principles and Practice
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6628: Community Forest Management
- FOR 6665: Landscape Planning for Ecotourism
- FOR 6905: Research Problems in Forest Resources and Conservation
- FOR 6910: Supervised Research
- FOR 6933: Seminar
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 6940: Supervised Teaching
- FOR 6971: Research for Master’s Thesis
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6555: Introduction to Quantitative Genetics

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5906: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

School of Natural Resources and Environment

Graduate coordinator: T. Frazer

Complete faculty listing by department: Follow this link.

The University of Florida School of Natural Resources and Environment offers interdisciplinary coursework in the basic and applied science of ecology, the related social sciences, and sustainability, leading to M.S. and Ph.D. degrees. Choose from about 450 courses, 280 faculty advisors, and 44 participating departments. Research areas of ecology graduate students range across natural resource ecology, environmental policy and management, and sustainable development.

Environmental problems are fundamentally human problems and should be understood in terms of human motivations and actions in a biophysical context. Their solution requires holistic thinking about dynamic ecological systems and the social, economic, and political forces driving human action. To this end, the goal of the Interdisciplinary Ecology graduate program is to provide advanced training in ecosystem thinking and the main theories and methodologies of the biophysical and social sciences to foster integrative approaches to complex real-world problems. Interdisciplinary Ecology students are intensely interested in the sustainability problem, and they welcome the challenge of addressing it through more than one traditional discipline.

Other

Interdisciplinary Ecology

College
Interdisciplinary Ecology Program

Director of Academic Programs and Graduate Coordinator: T. Frazer

Graduate students are advised by one of the 280 members of the School’s affiliate faculty and have a supervisory committee with interdisciplinary composition. For the list of Graduate Faculty, see [https://sfrc.ufl.edu/fishpeople/](https://sfrc.ufl.edu/fishpeople/). Graduate students are hosted in one of 44 participating academic units.

The School offers a program of study leading to the Master of Science (thesis and non-thesis options), and Doctor of Philosophy degrees in interdisciplinary ecology. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog. The course work requirements and curriculum are described in more detail at [http://www.snre.ufl.edu/](http://www.snre.ufl.edu/). Choices among 450 courses are custom-fitted by the student and the supervisory committee to meet the student's specific needs and interests.

The Interdisciplinary Ecology program views the social-ecological system as the proper framework for addressing the full scope of complex, adaptive systems comprising humans in the natural world. The degree program challenges students to understand both natural and human dynamics to obtain a holistic view and to foster integration of human activities with natural resources and the environment. The learning outcomes of the program are to develop a thorough understanding of the components, processes, and interactions of the social-ecological system, competence in scientific research methodologies, and experience in professional interaction with peers.

The degree programs combine 1) course work in the science of ecology and additional natural and social sciences; and 2) competence in a recognized discipline in one of these fields of study. The former is achieved with a core-course and distribution requirement and the latter by extra course work for the master's and a concentration for the doctoral degree. A thesis or dissertation provides first-hand experience creating scientific knowledge. The non-thesis master's option provides rapid, advanced preparation for the job market in 3 to 4 semesters, without research experience. Course requirements are 36 semester hours for the thesis option, 38 hours for the non-thesis option, and 60 hours beyond the master's degree for the doctoral degree.

Degrees Offered with a Major in Interdisciplinary Ecology

Doctor of Philosophy

without a concentration

concentration in Agricultural and Biological Engineering

concentration in Agricultural Education and Communication

concentration in Agronomy

concentration in Anthropology

concentration in Architecture

concentration in Biochemistry and Molecular Biology
concentration in Botany

concentration in Business Administration

concentration in Chemistry

concentration in Civil Engineering

concentration in Climate Science

concentration in Coastal and Oceanographic Engineering

concentration in Economics

concentration in English

concentration in Entomology and Nematology

concentration in Environmental Engineering Sciences

concentration in Family, Youth and Community Sciences

concentration in Farming Systems

concentration in Fisheries and Aquatic Sciences

concentration in Food and Resource Economics

concentration in Food Science
concentration in Forest Resources and Conservation

concentration in Foundations of Education

concentration in Geographic Information Systems

concentration in Geography

concentration in Geology

concentration in Health and Human Performance

concentration in Horticultural Sciences

concentration in Hydrologic Sciences

concentration in Landscape Architecture

concentration in Mathematics

concentration in Microbiology and Cell Science

concentration in Nuclear and Radiological Engineering

concentration in Philosophy

concentration in Political Science
concentration in Religion

concentration in Sociology

concentration in Soil and Water Science

concentration in Statistics

concentration in Tropical Conservation and Development

concentration in Urban and Regional Planning

concentration in Veterinary Medical Sciences

concentration in Wetland Sciences

concentration in Wildlife Ecology and Conservation

concentration in Women's/Gender Studies

concentration in Zoology

Master of Science

without a concentration

concentration in Agricultural and Biological Engineering

concentration in Agricultural Education and Communication
concentration in Agronomy

concentration in Anthropology

concentration in Architecture

concentration in Biochemistry and Molecular Biology

concentration in Botany

concentration in Business Administration

concentration in Chemistry

concentration in Civil Engineering

concentration in Climate Science

concentration in Coastal and Oceanographic Engineering

concentration in Economics

concentration in English

concentration in Entomology and Nematology

concentration in Environmental Engineering Sciences

concentration in Family, Youth and Community Sciences
concentration in Farming Systems

concentration in Fisheries and Aquatic Sciences

concentration in Food and Resource Economics

concentration in Food Science

concentration in Forest Resources and Conservation

concentration in Foundations of Education

concentration in Geographic Information Systems

concentration in Geography

concentration in Geology

concentration in Health and Human Performance

concentration in Horticultural Sciences

concentration in Hydrologic Sciences

concentration in Landscape Architecture

concentration in Mathematics
concentration in Microbiology and Cell Science

concentration in Nuclear and Radiological Engineering

concentration in Philosophy

concentration in Political Science

concentration in Religion

concentration in Sociology

concentration in Soil and Water Science

concentration in Statistics

concentration in Tropical Conservation and Development

concentration in Urban and Regional Planning

concentration in Veterinary Medical Sciences

concentration in Wetland Sciences

concentration in Wildlife Ecology And Conservation

concentration in Women's/Gender Studies

concentration in Zoology
Courses

- www.snre.ufl.edu/graduate/curriculum.htm
- EVR 5322: Scientific Processes in Conservation and Development
- EVR 5705: Natural Resources and Innovation Systems
- EVR 6320: Sustainable Natural Resource Management
- EVR 6933: Seminar
- EVR 6934: Internship
- EVR 6979: Nonthesis Master's Project
- PCB 6971: Research for Master's Thesis
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Soil and Water Science Department

Chair: K. Ramesh Reddy
Graduate Coordinator: Max Teplitski

Complete faculty listing by department: Follow this link.

The Soil and Water Science Department offers Master of Science (thesis or professional non-thesis option) and Doctor of Philosophy degrees in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The Department also offers Master of Science (thesis or professional option) specialization in environmental science via distance education for place bound students (http://soils.ifas.ufl.edu/distance). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Soil and Water are vital resources in urban, agricultural, and natural ecosystems. The Soil and Water Science Department (SWSD) provides highly visible leadership in teaching, research, and extension/outreach programs as related to improving the productivity of agriculture with environmentally sound management practices, improving water quality, and protection and conservation of natural resources. Our department is one of the few in the nation that offers a comprehensive research and educational programs (molecular to landscape level) involving terrestrial, wetlands and aquatic ecosystems of the landscape. In addition to traditional on-campus educational programs, we use innovative e-technologies to offer educational programs to place-bound students. Our graduates and postdoctoral fellows are well placed at universities, state and federal agencies, and private industry.

The SWSD programs are designed to meet the changing needs of our clientele at state, national and international levels. To meet new challenges and explore new opportunities, the SWSD's research, teaching, and extension programs are focused in five areas, with broader implication to water quality, carbon sequestration, greenhouse gases, and climate change:

- Nutrient, Pesticide, and Waste Management
- Soil, Water, and Aquifer Remediation
- Carbon Dynamics and Ecosystem Services
- Landscape Analysis and Modeling
- Wetlands and Aquatic Ecosystems

The Department offers graduate level certificates in Biodegradation and Remediation, Sustainable Land Resource and Nutrient Management, Soil Ecosystem Services, and Wetland and Water Resource Management for both on-campus students and via distance education for place bound students (http://soils.ifas.ufl.edu/academics/degree-certificates.shtml).

An additional option offered by the Department is a combined bachelor's/master's degree program that permits a B.S in Soil and Water Science or Interdisciplinary Studies – Environmental Management in Agriculture and Natural Resources and M.S. Degree to be completed in five years. Contact the graduate coordinator for more information.

For more information, please see the program page below and our website: http://soils.ifas.ufl.edu.

Other

Soil and Water Science

College

College of Agricultural and Life Sciences
Department/School

Soil and Water Science Department

Soil and Water Science Program Information

The Soil and Water Science Department offers Master of Science (thesis or professional non-thesis option) and Doctor of Philosophy degrees in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The department also offers Master of Science (thesis or professional option) specialization in environmental science via distance education for place bound students (http://soils.ifas.ufl.edu/distance). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Students can also develop specializations in several interdisciplinary areas including biogeochemistry, ecology, geographic information systems, hydrologic science, tropical agriculture, turfgrass management, and wetland science. The Department emphasizes (but is not limited to) the following research areas:

- Nutrient, Pesticide, and Waste Management
- Soil, Water, and Aquifer Remediation
- Carbon Dynamics and Ecosystem Services
- Landscape Analysis and Modeling
- Wetlands and Aquatic Ecosystems

Interests of the student and faculty, the facilities, and funding available will determine the student's research area. A specific program of study is prepared by an appointed supervisory committee for each student. Students will present a thesis or dissertation in their major field (M.S. thesis option and Ph.D.). In addition, Ph.D. candidates must pass a qualifying examination covering several areas of soil and water science and related fields.

Prerequisites: Students who expect to do graduate work in the Soil and Water Science Department should hold a bachelor's degree from an accredited college or university with a major in soil and water science or the equivalent background in another field of science. Graduate students should have backgrounds in biology, chemistry, physics, and mathematics and knowledge of basic soil and water science.

For more information, please see our website: http://soils.ifas.ufl.edu.

Degrees Offered with a Major in Soil and Water Science

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration
concentration in Agroecology

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Soil and Water Science Departmental Courses

- ALS 5027: Reusable Learning Objects
- ALS 5155: Global Agroecosystems
- CWR 6537: Contaminant Subsurface Hydrology
- SWS 5050: Soils for Environmental Professionals
- SWS 5050L: Soils for Environmental Professionals Laboratory
- SWS 5115: Environmental Nutrient Management
- SWS 5132: Tropical Soil Management
- SWS 5182: Earth System Analysis
- SWS 5208: Sustainable Agricultural and Urban Land Management
- SWS 5234: Environmental Soil, Water, and Land Use
- SWS 5235: South Florida Ecosystems
- SWS 5224: Environmental Biogeochemistry
- SWS 5246: Water Resource Sustainability
- SWS 5247: Hydric Soils
- SWS 5248: Wetlands and Water Quality
- SWS 5305C: Soil Microbial Ecology
- SWS 5308: Ecology of Waterborne Pathogens
- SWS 5406: Soil and Water Chemistry
- SWS 5424C: Soil Chemical Analysis
- SWS 5551: Soils, Water, and Public Health
- SWS 6605C: Environmental Soil Physics
- SWS 5719C: Environmental Pedology
- SWS 5721C: GIS in Land Resource Management
- SWS 5805: Environmental Soil and Water Monitoring Techniques
- SWS 6134: Soil Quality
- SWS 6136: Soil Fertility
- SWS 6161: Bioavailability of Soil Nutrients
- SWS 6262: Soil Contamination and Remediation
- SWS 6323: Advanced Microbial Ecology
- SWS 6325: Rhizosphere Biochemistry
- SWS 6368: Biodegradation and Bioremediation
- SWS 6448: Biogeochemistry of Wetlands and Aquatic Systems
- SWS 6454: Advanced Soil and Water Chemistry
- SWS 6456: Advanced Biogeochemistry
- SWS 6464C: Soil Mineralogy
- SWS 6622: Vadose Zone Hydrology
- SWS 6722: Soil-Landscape Modeling
- SWS 6905: Special Problems
- SWS 6910: Supervised Research
- SWS 6931: Seminar
- SWS 6932: Topics in Soils
- SWS 6940: Supervised Teaching
- SWS 6971: Research for Master's Thesis
- SWS 7979: Advanced Research
- SWS 7980: Research for Doctoral Dissertation
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Wildlife Ecology and Conservation Department

College of Agricultural and Life Sciences

Chair: Eric C. Hellgren
Graduate Coordinator: Kathryn E. Sieving

Complete faculty listing by department: Follow this link

The Department of Wildlife Ecology and Conservation offers Master of Science (thesis and non-thesis option) and Doctor of Philosophy degrees in wildlife ecology and conservation. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Program emphases include wildlife biology, ecology, and management; landscape ecology and restoration; human dimensions; tropical and international conservation; and conservation education. Graduate students should have appropriate undergraduate training in the biological, social, and physical sciences including physics, chemistry, and mathematics. Students with inadequate backgrounds may be required to take (without credit at the graduate level) remedial undergraduate courses pertinent to their fields of interest.

For more information, please see our website: http://www.wec.ufl.edu.

Other

Wildlife Ecology and Conservation

College

College of Agricultural and Life Sciences

Department/School

Wildlife Ecology and Conservation Department

Wildlife Ecology and Conservation Program

The Department of Wildlife Ecology and Conservation offers a breadth of graduate programs that are designed to prepare students for professional employment in conservation of natural resources in a changing world. WEC faculty teach, conduct research, and provide service and extension in the following areas: avian ecology, behavioral ecology, community ecology, conservation biology, conservation education, conservation genetics, ecosystem management, environmental interpretation, habitat restoration, herpetofaunal ecology, human dimensions of wildlife management, international conservation, introduced species, landscape ecology, mammalian behavior, marine mammal ecology, plant ecology, population biology, range ecology, systems ecology, tropical conservation, urban wildlife relations, wetlands ecology, wildlife diseases, and wildlife management.

The Doctor of Philosophy (PhD) program in Wildlife Ecology and Conservation serves graduate students conducting advanced, original studies of fundamental ecological and social sciences (e.g., ecosystem, community, landscape ecology, human dimensions), usually with applications to further society's understanding of wildlife ecology and to improve conservation of wildlife resources.

The Master of Science (MS) thesis program in Wildlife Ecology and Conservation: (a) prepares graduate students for entry-level professional positions in areas of wildlife biology and ecology, natural resource management, conservation, and (b) provides a solid scientific foundation for further graduate work leading to the PhD degree.

The Master of Science, non-thesis (MS) program in Wildlife Ecology and Conservation provides advanced training for students in technical and professional aspects of wildlife management, conservation, and public education, emphasizing written and oral communication of scientific information.

For more information, please see our website: http://www.wec.ufl.edu.

Degrees Offered with a Major in Wildlife Ecology and Conservation
Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- WIS 5323C: Impact of Diseases on Wildlife Population
- WIS 5376
- WIS 5496: Research Design in Wildlife Ecology
- WIS 5521: Plant-Animal Interactions
- WIS 5550C: Conservation Biology
- WIS 6444: Advanced Wetlands Ecology
- WIS 6455: Wildlife Population Ecology
- WIS 6466: Wildlife Population Modeling
- WIS 6480C: Pattern and Process in Landscape Ecology
- WIS 6525: Environmental Interpretation
- WIS 6544: Administration in Natural Resources
- WIS 6575: Mammalian Carnivores: Conservation and Management Issues
- WIS 6578: Human Dimensions of Biological Conservation
- WIS 6905: Research Problems in Wildlife and Range Sciences
- WIS 6910: Supervised Research
- WIS 6933: Seminar
- WIS 6934: Topics in Wildlife and Range Sciences
- WIS 6940: Supervised Teaching
- WIS 6971: Research for Master's Thesis
- WIS 6943: Wildlife and Agriculture
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

College of the Arts

Dear: L. Lavelli

Complete faculty listings: Follow this link.

The arts program at UF began in the 1920s to serve the state of Florida's needs. Meeting these needs over the past 80 years has propelled the college to excel on a national and international level and has defined its mission to provide instruction for students seeking professional careers in the arts. In addition to providing rich educational experiences and programs in the arts, the college brings national and international recognition to the university through the high-level professionalism associated with the faculty and alumni, and the competence of students and graduates.

For more information about the College of the Arts, please see our website: http://www.arts.ufl.edu

Departments and Programs within the College of the Arts

College of the Arts Courses

Other

Arts in Medicine

College

Arts in Medicine Program Information

Center for Arts in Medicine Director: Jill Sonke  
Center for Arts in Medicine Graduate Advisor: Dylan Klempner

The Center for Arts in Medicine is committed to advancing research, education, and practice in the arts in healthcare, locally and globally. The Center offers an online Master of Arts in Arts in Medicine. Minimum requirements for the degree are available in the Graduate Degrees section of this catalog.

Prerequisites and Requirements: Admission to the MA in Arts in Medicine program program requires a bachelor's degree in an arts, health, or related field of study, a GRE exam score or previous graduate degree, and completion of the Introduction to the Arts in Healthcare course at UF, or completion of an Arts in Healthcare Summer Intensive, or a minimum of one year of professional experience as an artist or administrator in the field of Arts in Medicine. Requirements of the degree include completion of 35 credits of coursework with a 3.0 or higher GPA.

Commitment of time: The MA in Arts in Medicine is designed to be completed in two years when students are enrolled in one class at a time (with one 8-week semester with two courses). Students should expect to dedicate 16 hours per week to each 8-week 3-credit hour course.

For more information, please see our website: http://www.arts.ufl.edu/cam.

Degrees Offered with a Major in Arts in Medicine

Master of Arts

Arts in Medicine Courses
Core Curriculum

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- PHC 6104: Evidence-Based Management of Public Health Programs

Practicum

- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum

Electives

- ANG 6930: Special Topics in Anthropology
- GMS 6822: Measuring and Analyzing Health Outcomes II
- HSA 6114: U.S. Health Care System
- HUM 6930: Special Topics in Fine Arts
- MVV 6651: Vocal Pedagogy
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- THE 6905: Individual Study

College of the Arts Courses

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

School of Art and Art History

College of the Arts

Director: Richard C. Haipp
Graduate Coordinator: Patrick Grigsby
Complete faculty listing: Follow this link.

The School of Art and Art History offers the M.F.A. degree in art with specializations in art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. The school also offers Master of Arts degrees in art education, art history, and museology (museum studies) and the Doctor of Philosophy degree in art history. Requirements for these degrees can be found in the Graduate Degrees section of this catalog, and information about each of these graduate programs can be found at the links below.

For more information, please see our website: http://www.arts.ufl.edu/welcome/art

Other

Art

College

College of the Arts

Department/School

School of Art and Art History

Art Program
Master of Fine Arts degree: The school offers the M.F.A. degree in art with specializations in art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. Enrollment is competitive and limited. Candidates for admission should have adequate undergraduate training in art. Deficiencies may be corrected before beginning graduate study. Applicants must submit a portfolio for admission consideration (for comprehensive admission information: http://www.arts.ufl.edu/programs/grad.aspx). A minimum of 3 years residency is normally needed to complete the requirements for this degree, which for studio students culminates with an M.F.A. exhibition.

The M.F.A. requires a minimum of 60 credit hours: 24 hours must be in an area of specialization. Normal course requirements include:

- 12 hours of studio electives outside the area of specialization
- 6 hours of art history electives
- 3 hours of outside SA+AH electives (research/discipline appropriate)
- 6 hours of electives
- 6 hours of individual project or thesis research.

Although the M.F.A. is a thesis degree, students usually produce a creative project in lieu of thesis. Students should see the graduate program adviser for the School's requirements for the creative project.

Degrees Offered with a Major in Art

Master of Fine Arts

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5555: Indigenous American Art
- ARH 5567: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6202: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism, Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
- ARH 6496: Modern Art Seminar
- ARH 6596: Chinese Art Seminar
- ARH 6597: African Art Seminar
- ARH 6654: Pre-Columbian Art Seminar
- ARH 6686: Colonial Latin American Art Seminar
- ARH 6694: Nineteenth-Century Art-Seminar
- ARH 6696: American Art Seminar
- ARH 6797: Museum Education
- ARH 6836: Exhibitions Seminar
- ARH 6895: Collections Management Seminar
- ARH 6900: Independent Study in Museology
- ARH 6910: Supervised Research
- ARH 6911: Advanced Study
- ARH 6914: Independent Study in Ancient Art History
- ARH 6915: Independent Study in Medieval Art History
- ARH 6916: Independent Study in Renaissance and Baroque Art History
- ARH 6917: Independent Study in Modern Art History
- ARH 6918: Independent Study in Non-Western Art History
- ARH 6930: Special Topics in Museology
College of the Arts Courses

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Art Education

College

College of the Arts

Department/School

School of Art and Art History

Art Education Program

Master of Arts degree in Art Education: The School offers the M.A. in art education. In addition to meeting requirements of the Graduate School for admission, prospective students should:

- Hold a degree in studio art, art history, design, or art education
- Send up to 10 images of original works of art (on CD or in slide form) and a research paper, article, or other sample of academic writing
- Official transcripts from all colleges/universities previously attended
- Statement of professional goals for attending graduate school and earning an M.A. degree in art education
- Current Curriculum Vitae or Resume
- Submit three current letters of recommendation.

The M.A. in art education requires a minimum of 36 credit hours. ARE 6049, ARE 6148, and ARE 6641 are required. The basic plan of study includes 3 credits of an approved art education elective; 9 credits in studio courses; 3 credits in art history; 6 credits in art history, studio, art education, or education electives; 3 credits of ARE 6746; and 3 credits of ARE 6971 or ARE 6973.
To be admitted to candidacy, students must pass a comprehensive examination at the beginning of the second year. The program culminates in an oral examination on the thesis or project in lieu of a thesis.

Degrees Offered with a Major in Art Education

Master of Arts

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6336: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5540: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5667: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6292: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism. Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
- ARH 6496: Modern Art Seminar
- ARH 6596: Chinese Art Seminar
- ARH 6597: African Art Seminar
- ARH 6654: Pre-Columbian Art Seminar
- ARH 6666: Colonial Latin American Art Seminar
- ARH 6694: Nineteenth-Century Art–Seminar
- ARH 6696: American Art Seminar
- ARH 6797: Museum Education
- ARH 6836: Exhibitions Seminar
- ARH 6895: Collections Management Seminar
- ARH 6900: Independent Study in Museology
- ARH 6910: Supervised Research
- ARH 6911: Advanced Study
- ARH 6914: Independent Study in Ancient Art History
- ARH 6915: Independent Study in Medieval Art History
- ARH 6916: Independent Study in Renaissance and Baroque Art History
- ARH 6917: Independent Study in Modern Art History
- ARH 6918: Independent Study in Non-Western Art History
- ARH 6930: Special Topics in Museology
- ARH 6938: Seminar in Museum Studies
- ARH 6941: Supervised Internship
- ARH 6946: Museum Practicum
- ARH 6948: Gallery Practicum
- ARH 6971: Research for Master's Thesis
- ARH 7979: Advanced Research
- ARH 7980: Research for Doctoral Dissertation
- ART 5674C: Digital Fabrication
- ART 5905C: Directed Study
- ART 5930C: Special Topics
- ART 6410C: Printmaking Seminar: Mastering Process and Content
- ART 6411C: Printmaking Seminar: Transformation and Change
- ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
- ART 6413C: Printmaking Seminar: Interdisciplinary Studio
- ART 6671C: Advanced Experiments in Digital Art
College of the Arts Courses

- ART 6672: Hypermedia
- ART 6673C: Video Art
- ART 6675C: Digital Art and Animation
- ART 6691: Digital Art Studio
- ART 6794C: Vessel Aesthetic 1
- ART 6795C: Vessel Aesthetic 2
- ART 6797C: Ceramic Sculpture
- ART 6849C: Reactive Environments
- ART 6891C: Professional Practices for the Visual Artist
- ART 6926C: Advanced Study I
- ART 6927C: Advanced Study II
- ART 6928C: Advanced Study III
- ART 6929C: Advanced Study IV
- ART 6933: Area Methods: Rotating Topics
- ART 6971: Research for Master's Thesis
- DIG 6746C: Graduate Seminar in Sensors and Electronics
- IDC 6505C: Programming for Artists

College History

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Art History Program

Master of Arts and Doctor of Philosophy degrees in Art History: The School offers graduate programs leading to the M.A. and Ph.D. degrees. For complete details of the M.A. and Ph.D. degree requirements, see the Director of Graduate Studies—Art History. Art History students may participate in courses offered by the State University System's programs in Paris, London, and Florence. Other study-abroad programs may be approved by the director of graduate studies.

For the M.A. degree, the School offers areas of emphasis in Ancient, Medieval, Renaissance/Baroque, Modern, and non-Western art history (including African, Asian, and Oceanic). A minimum of 36 credit hours is required: ARH 5816 (3 credits), 27 hours of course work, and ARH 6971 (6 credits). Required course work includes a minimum of 15 hours with 5 different art history Graduate Faculty (at least 12 hours of this course work must be graduate-level seminars). Nine credits may be taken in related areas with the graduate program adviser's approval. Reading proficiency in a foreign language appropriate to the major area of study must be demonstrated before thesis research is begun. Language courses cannot apply toward degree credit.

For the Ph.D. degree, the School offers the same areas of specialization as for the M.A. degree. Up to 30 credits from the M.A. degree may apply toward the 90 credit Ph.D. degree. A program of 60 credit hours beyond the M.A. degree is required. Core courses will consist of a minimum of 30 hours in art history:

- 18 hours in a primary area (5000-level or above)
- 9 hours in a secondary area (5000-level or above)
- 3 hours of theory/methodology of art history (if ARH 5816 or its equivalent has not been taken as part of the M.A.)
- An additional 12 hours of outside electives taken in other schools or departments are required in a discipline(s) related to the primary area of study
- Finally, 27 hours of dissertation research and writing is required.

By the end of the second semester or equivalent full-time study, students should form their supervisory committee that must include a minimum of four Graduate Faculty members; one of whom must agree to serve as primary dissertation advisor and supervisory committee chair. The supervisory committee will also act as the qualifying examination committee. Normally students will take the qualifying examination during the spring term of the third year in residence. The examination is both written and oral. It will cover the major and minor art history areas of emphasis as well as the student's preliminary formulation of a dissertation topic and provisional statement of the approaches to that topic as expressed in the dissertation prospectus. On successful completion of the qualifying examination, the approval by the supervisory committee of the dissertation prospectus, and fulfilling all other course and language requirements, the student makes formal application for a change of status to Ph.D. candidacy. Normally, a student will be expected to present the completed dissertation and defend it at an oral defense conducted by the supervisory committee by the end of the sixth year in the program. For Ph.D. students, reading knowledge of two research languages other than English must be demonstrated by the end of the second year of course work, or by the end of the first semester in the case of transfer students. Language courses are not applicable toward degree credit.
Degrees Offered with a Major in Art History

Doctor of Philosophy

Master of Arts

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5667: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6292: Medieval Art Seminar
- ARH 6422: Beginnings of Modernism, Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
- ARH 6496: Modern Art Seminar
- ARH 6596: Chinese Art Seminar
- ARH 6597: African Art Seminar
- ARH 6654: Pre-Columbian Art Seminar
- ARH 6666: Colonial Latin American Art Seminar
- ARH 6694: Nineteenth-Century Art–Seminar
- ARH 6696: American Art Seminar
- ARH 6797: Museum Education
- ARH 6836: Exhibitions Seminar
- ARH 6895: Collections Management Seminar
- ARH 6900: Independent Study in Museology
- ARH 6910: Supervised Research
- ARH 6911: Advanced Study
- ARH 6914: Independent Study in Ancient Art History
- ARH 6915: Independent Study in Medieval Art History
- ARH 6916: Independent Study in Renaissance and Baroque Art History
- ARH 6917: Independent Study in Modern Art History
- ARH 6918: Independent Study in Non-Western Art History
- ARH 6930: Special Topics in Museology
- ARH 6938: Seminar in Museum Studies
- ARH 6941: Supervised Internship
- ARH 6946: Museum Practicum
- ARH 6948: Gallery Practicum
- ARH 6971: Research for Master's Thesis
- ARH 7979: Advanced Research
- ARH 7980: Research for Doctoral Dissertation
- ART 5674C: Digital Fabrication
- ART 5905C: Directed Study
- ART 5930C: Special Topics
- ART 6410C: Printmaking Seminar: Mastering Process and Content
- ART 6411C: Printmaking Seminar: Transformation and Change
College of the Arts Courses

- ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
- ART 6413C: Printmaking Seminar: Interdisciplinary Studio
- ART 6671C: Advanced Experiments in Digital Art
- ART 6672: Hypermedia
- ART 6673C: Video Art
- ART 6675C: Digital Art and Animation
- ART 6691: Digital Art Studio
- ART 6794C: Vessel Aesthetic 1
- ART 6795C: Vessel Aesthetic 2
- ART 6797C: Ceramic Sculpture 2
- ART 6835C: Research in Methods and Materials of the Artist
- ART 6849C: Reactive Environments
- ART 6897: Professional Practices for the Visual Artist
- ART 6910C: Supervised Research
- ART 6925C: Art + Technology Workshop
- ART 6926C: Advanced Study I
- ART 6927C: Advanced Study II
- ART 6928C: Advanced Study III
- ART 6929C: Advanced Study IV
- ART 6933: Area Methods: Rotating Topics
- ART 6971: Research for Master's Thesis
- ART 6973C: Individual Project
- DIG 6746C: Graduate Seminar in Sensors and Electronics
- IDC 6505C: Programming for Artists

Museology

Museology Program Information

Master of Arts degree in Museology (Museum Studies): The School offers this interdisciplinary program that consists of both academic and practical work. The curriculum allows students to do graduate work in a disciplinary emphasis (art history, anthropology, history, education, or the natural sciences, for example) and at the same time complete a concentrated study in professional museum practice. The M.A. degree in museology requires 48 credit hours including:

- 15 credits of museum studies courses (museology seminar, 3 credits; collections management, 3 credits; museum education, 3 credits; exhibitions, 3 credits; special topics, 3 credits)
- 15 graduate credits in a disciplinary focus
- 6 credits of internship
- 6 credits of electives
- 6 credits of individual credit.

Several on-campus sites provide the program with laboratories for training students in museum work, including the University Galleries, Harn Museum of Art, Florida Museum of Natural History, and the gallery at the Reitz Union. Students must complete a 6-credit internship of at least 320 hours at an approved museum. In this experience, students undertake specific projects in which they gain first-hand experience in museum work. The Harn Museum of Art or the Florida Museum of Natural History may be able to oversee a few interns, but students are encouraged to apply for internships at other U.S. institutions or abroad.

A project-in-lieu-of-thesis (or thesis) is selected, researched, and carried out under the direction of a supervisory committee.

Degrees Offered with a Major in Museology
Master of Arts

concentration in Historic Preservation

without a concentration

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5677: Colonial Andean Art
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6292: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism: Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
- ARH 6496: Modern Art Seminar
- ARH 6596: Chinese Art Seminar
- ARH 6597: African Art Seminar
- ARH 6654: Pre-Columbian Art Seminar
- ARH 6666: Colonial Latin American Art Seminar
- ARH 6694: Nineteenth-Century Art–Seminar
- ARH 6696: American Art Seminar
- ARH 6797: Museum Education
- ARH 6836: Exhibitions Seminar
- ARH 6895: Collections Management Seminar
- ARH 6900: Independent Study in Museology
- ARH 6910: Supervised Research
- ARH 6911: Advanced Study
- ARH 6914: Independent Study in Ancient Art History
- ARH 6915: Independent Study in Medieval Art History
- ARH 6916: Independent Study in Renaissance and Baroque Art History
- ARH 6917: Independent Study in Modern Art History
- ARH 6918: Independent Study in Non-Western Art History
- ARH 6930: Special Topics in Museology
- ARH 6938: Seminar in Museum Studies
- ARH 6941: Supervised Internship
- ARH 6946: Museum Practicum
- ARH 6948: Gallery Practicum
- ARH 6971: Research for Master's Thesis
- ARH 7979: Advanced Research
- ARH 7980: Research for Doctoral Dissertation
- ART 5674C: Digital Fabrication
- ART 5905C: Directed Study
- ART 5930C: Special Topics
- ART 6410C: Printmaking Seminar: Mastering Process and Content
- ART 6411C: Printmaking Seminar: Transformation and Change
- ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
**College of the Arts Courses**

- ART 6413C: Printmaking Seminar: Interdisciplinary Studio
- ART 6671C: Advanced Experiments in Digital Art
- ART 6672: Hypermedia
- ART 6673C: Digital Art and Animation
- ART 6691: Digital Art Studio
- ART 6794C: Vessel Aesthetic 1
- ART 6795C: Vessel Aesthetic 2
- ART 6797C: Ceramic Sculpture 1
- ART 6835C: Research in Methods and Materials of the Artist
- ART 6849C: Reactive Environments
- ART 6897: Professional Practices for the Visual Artist
- ART 6910C: Supervised Research
- ART 6925C: Art + Technology Workshop
- ART 6926C: Advanced Study I
- ART 6927C: Advanced Study II
- ART 6928C: Advanced Study III
- ART 6929C: Advanced Study IV
- ART 6933: Area Methods: Rotating Topics
- ART 6971: Research for Master's Thesis
- ART 6973C: Individual Project
- DIG 6746C: Graduate Seminar in Sensors and Electronics
- IDC 6505C: Programming for Artists

**Digital Worlds Institute**

College of the Arts

Director: James C. Oliverio
Graduate Coordinator: Marko Suvajdzic

Complete faculty listing: [Follow this link](#)

The Digital Worlds Institute exists to nurture leading edge education between the arts, communications, engineering and the sciences, utilizing advanced media systems and digital culture. By bringing together the diverse talents of University of Florida faculty, students, and staff in a multifaceted collaborative environment, the Institute serves as a platform for interdisciplinary research and teaching that would not have occurred within the confines of any one college or department. Through the use of interactive tools and technologies, the Institute promotes transdisciplinary creativity across classrooms, continents and cultures.

For more information, please see the program page below and our website: [http://www.digitalworlds.ufl.edu](http://www.digitalworlds.ufl.edu).

**Other**

**Digital Arts and Sciences (Arts)**

College

College of the Arts

Department/School

Digital Worlds Institute

Digital Arts and Sciences (Arts) Program Information
The Master of Arts in Digital Arts & Sciences (DAS) degree seeks to allow students from diverse academic backgrounds the opportunity to develop fluency in the technologies, design practices and collaborative interdisciplinary teamwork increasingly required by the media, communications and entertainment industries. Graduates holding the M.A. in DAS degree would typically seek employment in the creative services sector, applying digital techniques and technologies in a variety of professions. Opportunities range from traditional cinema to interactive games; from broadcast media to online international networks to emergent industries.

Although this is a thesis degree, students usually produce a creative project in lieu of thesis. Students should see the graduate coordinator for the requirements for the creative project, which are also provided in the DAS Student Handbook.

Students seeking admission are expected to have an undergraduate background including:

- A degree in one of the fine arts or liberal arts
- A body of work that demonstrates accomplishment in the intended area
- A body of work that can clearly be enhanced with skills to be acquired in the DAS program.

Deficiencies may be corrected before beginning graduate study. In addition to appropriate academic credentials and prior scholastic achievement, admission into the program requires a well-constructed Statement of Purpose and media-related support material (i.e. samples of design, programming, video, web, writing, etc.) that demonstrates both prior interest and/or achievement in New Media/Digital Arts & Sciences.

Degrees Offered with a Major in Digital Arts and Sciences

Master of Arts

Digital Worlds Departmental Courses

- DIG 5555C: Digital Media Projection Design I
- DIG 5931C: Special Topics
- DIG 6027C: Interactive Storytelling
- DIG 6028: Roots of Digital Culture
- DIG 6050C: Entertainment Technology
- DIG 6125C: Digital Design & Visualization
- DIG 6126C: Interaction Design
- DIG 6256C: Audio Design For Digital Production
- DIG 6358C: APPLIED 3D MODELING
- DIG 6556C: Digital Media Projection Design II
- DIG 6589C: Digital Portfolio
- DIG 6719: Videogame Theory and Analysis
- DIG 6744C: Movement, Media and Machines
- DIG 6746C: Graduate Seminar in Sensors and Electronics
- DIG 6751C: Protocols for Multimedia Interfaces
- DIG 6788C: Digital Production & Game Design
- DIG 6840C: Interdisciplinary Research Seminar in Digital Arts & Sciences
- DIG 6850C: Digital Arts & Sciences Convergence
- DIG 6906: Independent Study - Graduate Level
- DIG 6950C: Digital Performance Production
- DIG 6971: Research for Master's Thesis
- DIG 6973: Capstone Project in Lieu of Thesis
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers

College of the Arts Courses

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 5840: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Music Department

Director: J. A. Duff.
Graduate Coordinator: L. S. Odom.

Complete faculty listing by department: Follow this link.
The School of Music offers programs leading to the Master of Music degree in music and music education. Program concentrations in music include choral conducting, composition, instrumental conducting, musicology, ethnomusicology, music theory, performance, and sacred music. In addition, the School of Music offers the Doctor of Philosophy degree in music and in music education.

The Ph.D. program in music education emphasizes college music teaching. The Ph.D. program in music includes concentrations in:

- Music history and literature, with options in traditional musicology and ethnomusicology
- Composition, with options in acoustic and electroacoustic specialization

All Ph.D. students are encouraged to find opportunities to teach and lecture in their specializations; and with the assistance of their principal professors, to prepare papers, workshops, and clinics for presentation at professional conferences, in the public schools, and at colleges and universities. Students also are encouraged to publish their research in appropriate journals.

Minimum requirements for the M.M. and Ph.D. degrees are given in the General Information section of this catalog. The week before classes begin, students must take placement examinations in music history and in music theory. Students wanting to study privately in a performance studio must be auditioned and accepted by the appropriate area faculty. Voice students must demonstrate appropriate skills in language and diction. All deficiencies must be remedied.

For more information, please see the program pages below and our website: http://www.arts.ufl.edu/welcome/music.

Other

Music

College

College of the Arts

Department/School

Music Department

Music Program Information

The Master of Music (M.M.) degree is offered in music or music education. The music program offers the following concentrations: choral conducting, composition, electronic music, ethnomusicology, instrumental conducting, music education, music history and literature, music theory, performance, and sacred music. The M.M. degree prepares students for careers as teachers in schools, studies, and universities; performers; music historians; music critics; church musicians; composers; conductors; and accompanists.

For more information, please see our website: http://www.arts.ufl.edu/welcome/music

Degrees Offered with a Major in Music

Doctor of Philosophy

without a concentration

concentration in Composition

concentration in Music History and Literature

Master of Music
without a concentration

concentration in Choral Conducting

  optional second concentration in Composition

  optional second concentration in Instrumental Conducting

  optional second concentration in Music History and Literature

  optional second concentration in Music Theory

  optional second concentration in Performance

  optional second concentration in Sacred Music

  optional second concentration in Piano Pedagogy

  optional second concentration in Music Education

  optional second concentration in Electronic Music

  optional second concentration in Ethnomusicology

concentration in Composition

  optional second concentration in Choral Conducting

  optional second concentration in Instrumental Conducting

  optional second concentration in Music History and Literature

  optional second concentration in Music Theory

  optional second concentration in Performance

  optional second concentration in Piano Pedagogy

  optional second concentration in Music Education

  optional second concentration in Electronic Music

  optional second concentration in Ethnomusicology

concentration in Electronic Music

  optional second concentration in Choral Conducting

  optional second concentration in Composition

  optional second concentration in Instrumental Conducting

  optional second concentration in Music History and Literature

  optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Sacred Music
optional second concentration in Piano Pedagogy
optional second concentration in Music Education
optional second concentration in Ethnomusicology

concentration in Ethnomusicology
optional second concentration in Choral Conducting
optional second concentration in Composition
optional second concentration in Electronic Music
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature

optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Sacred Music
optional second concentration in Piano Pedagogy
optional second concentration in Music Education

concentration in Instrumental Conducting
optional second concentration in Composition
optional second concentration in Choral Conducting
optional second concentration in Music History and Literature

optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Sacred Music
optional second concentration in Piano Pedagogy
optional second concentration in Music Education
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

concentration in Music Education
optional second concentration in Composition
optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

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optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Music Theory

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Performance
optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Sacred Music

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Sacred Music

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Music Departmental Courses

- DIG 6288: Music and Sound Design for Digital Media
- MUC 5315: Introduction to Electroacoustic Music
- MUC 6444: Composition of Electronic Music
- MUC 6445: Electroacoustic Music Composition: Digital I
- MUC 6446: Electroacoustic Music Composition: Digital II
- MUC 6900: Secondary Graduate Composition
- MUC 6930: Graduate Composition
- MUC 6932: Composition Seminar
- MUC 7447: Advanced Seminar in Electroacoustic Music
- MUC 7931: Advanced Graduate Composition
- MUC 7938: Seminar in Digital Sound Processing, Control, and Composition
- MUE 6080: Historical and Philosophical Foundations of Music Education
- MUE 6385: Music in Higher Education
- MUE 6399: Creative Thinking in Music
- MUE 6444: Materials and Methods of String Class Teaching
- MUE 6497: Public School Orchestral Literature
- MUE 6647: Trends in Teaching and Learning Music
- MUE 6696: Technology Assisted Music Learning
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<td>Assessing Music Learning</td>
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<td>MUE 7748</td>
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<td>MUN 6495</td>
<td>Steel Drum Ensemble</td>
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<td>MUN 6496</td>
<td>World Music Ensemble</td>
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<td>MUN 6497</td>
<td>New Music Ensemble</td>
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<td>MUN 6715</td>
<td>Jazz Band</td>
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<td>MUR 6206</td>
<td>Survey of Hymnody</td>
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<td>MUR 6705</td>
<td>Sacred Music Literature</td>
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<td>MUS 5911</td>
<td>Directed Study</td>
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<td>MUS 6685</td>
<td>Psychology of Music</td>
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<td>MUS 6716</td>
<td>Methods of Musical Research and Bibliography</td>
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<td>MUS 6905</td>
<td>Projects and Problems</td>
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<td>MUS 6910</td>
<td>Supervised Research</td>
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<td>MUS 6940</td>
<td>Supervised Teaching</td>
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<td>MUS 6971</td>
<td>Research for Master's Thesis</td>
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<td>MUS 6973</td>
<td>Individual Project</td>
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<td>MUS 7656</td>
<td>Teaching Music and the Creative Process</td>
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<td>MUS 7905</td>
<td>Projects and Problems</td>
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<td>MUS 7979</td>
<td>Advanced Research</td>
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<td>MUS 7980</td>
<td>Research for Doctoral Dissertation</td>
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<tr>
<td>MUT 6051</td>
<td>Graduate Music Theory/Review</td>
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<td>MUT 6445</td>
<td>Advanced Counterpoint</td>
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<td>MUT 6531</td>
<td>Figured Bass and Continuo Performance</td>
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<td>MUT 6565</td>
<td>Late Nineteenth- and Twentieth-Century Styles</td>
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<td>MUT 6576</td>
<td>Contemporary Styles</td>
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<tr>
<td>MUT 6617</td>
<td>Approaches to Theoretical Analysis in Music Education</td>
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<tr>
<td>MUT 6624</td>
<td>Seminar in Set Theory</td>
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<tr>
<td>MUT 6627</td>
<td>Seminar in Reductive Analysis</td>
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<tr>
<td>MUT 6629</td>
<td>Analytical Techniques</td>
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<td>MUT 6751</td>
<td>Pedagogy of Music Theory</td>
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<tr>
<td>MUT 6936</td>
<td>Music Theory Seminar</td>
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<tr>
<td>MUT 7316</td>
<td>Advanced Orchestration</td>
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<tr>
<td>MUT 7585</td>
<td>Seminar in Musical Style</td>
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<tr>
<td>MUT 7760</td>
<td>History of Music Theory</td>
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<tr>
<td>MKM 5156</td>
<td>Improvisational Keyboard Skills and Related Technology</td>
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<td>MKM 6605</td>
<td>Organ Pedagogy</td>
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<tr>
<td>MKM 6651</td>
<td>Piano Pedagogy</td>
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<td>MKM 6661</td>
<td>Advanced Piano Pedagogy</td>
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<tr>
<td>MOO 6250</td>
<td>Secondary Music Performance</td>
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<tr>
<td>MOO 6480</td>
<td>Music Performance</td>
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<tr>
<td>MOO 7460</td>
<td>Music Performance</td>
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<tr>
<td>MS 6651</td>
<td>String Pedagogy</td>
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<tr>
<td>MMV 6651</td>
<td>Vocal Pedagogy</td>
</tr>
</tbody>
</table>
College of the Arts Courses

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Music Education

College

College of the Arts

Department/School

Music Department

Music Education Program Information

The Master of Music (M.M.) degree is offered in music or music education. The music education program offers the following concentrations: choral conducting, composition, electronic music, ethnomusicology, instrumental conducting, music history and literature, music theory, performance, and piano pedagogy. The M.M. degree prepares students for careers as teachers in studios, schools, and universities; performers; music historians; music critics; church musicians; composers; conductors; and accompanists.

For more information, please see our website: http://www.arts.ufl.edu/welcome/music

Degrees Offered with a Major in Music Education

Doctor of Philosophy

Master of Music

Without a Concentration

Concentration in Choral Conducting

optional second concentration in Piano Pedagogy

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory
optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Piano Pedagogy

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Electronic Music

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Ethnomusicology

Concentration in Ethnomusicology

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory
optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Piano Pedagogy

Concentration in Instrumental Conducting

optional second concentration in Piano Pedagogy

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Music History and Literature

optional second concentration in Choral Conducting

optional second concentration in Piano Pedagogy

optional second concentration in Instrumental Conducting

optional second concentration in Composition

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Music Theory

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Piano Pedagogy
optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Performance

optional second concentration in Choral Conducting

optional second concentration in Piano Pedagogy

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Composition

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Piano Pedagogy

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5695: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6942: Arts in Medicine Graduate Practicum
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management

Music Departmental Courses
• DIG 6288: Music and Sound Design for Digital Media
• MUC 5315: Introduction to Electroacoustic Music
• MUC 6444: Composition of Electronic Music
• MUC 6445: Electroacoustic Music Composition: Digital I
• MUC 6446: Electroacoustic Music Composition—Digital II
• MUC 6900: Secondary Graduate Composition
• MUC 6930: Graduate Composition
• MUC 6932: Composition Seminar
• MUC 7447: Advanced Seminar in Electroacoustic Music
• MUC 7931: Advanced Graduate Composition
• MUC 7938: Seminar in Digital Sound Processing, Control, and Composition
• MUE 6080: Historical and Philosophical Foundations of Music Education
• MUE 6385: Music in Higher Education
• MUE 6399: Creative Thinking in Music
• MUE 6444: Materials and Methods of String Class Teaching
• MUE 6497: Public School Orchestral Literature
• MUE 6647: Trends in Teaching and Learning Music
• MUE 6696: Technology Assisted Music Learning
• MUE 6747: Assessing Music Learning
• MUE 6785: Research in Music Education
• MUE 6790: Capstone Project for Music Education
• MUE 6931: Instructional Design in Music Education
• MUE 7746: Measurement and Evaluation of Music
• MUE 7938: Music Education Seminar
• MUG 6105: Graduate Conducting
• MUG 7106: Advanced Graduate Conducting
• MUH 5219: Graduate Music History Review
• MUH 5505: Introduction to Ethnomusicology
• MUH 5604: Introduction to Historical Musicology
• MUH 6526: American Vernacular Music
• MUH 6545: The Guitar in Latin American Culture
• MUH 6548: Seminar in Caribbean Music
• MUH 6549: Seminar in Brazilian Music
• MUH 6635: Seminar in American Music
• MUH 6665: History of Opera
• MUH 6671: Seminar in Renaissance Music
• MUH 6672: Seminar in Baroque Music
• MUH 6673: Seminar in Classical Music
• MUH 6674: Seminar in Nineteenth-Century Music
• MUH 6675: Seminar in Twentieth-Century Music
• MUH 6931: Nationalism in Music
• MUH 6935: Special Topics in Music History
• MUH 7411: Medieval and Renaissance Notation
• MUH 7938: Musicology Seminar
• MUL 6435: String Literature
• MUL 6486: Piano Literature
• MUL 6495: Graduate Organ Literature
• MUL 6555: Survey of Wind Literature
• MUL 6665: Chamber Music Literature
• MUL 6684: Choral Literature
• MUN 6010: Graduate Ensemble
• MUN 6125: Concert Band
• MUN 6135: Symphonic Band
• MUN 6145: Symphonic Wind Ensemble
• MUN 6215: University Orchestra
• MUN 6315: University Choir
• MUN 6325: Women's Chorale
• MUN 6335: Men's Glee Club
• MUN 6445: Percussion Ensemble
• MUN 6495: Steel Drum Ensemble
• MUN 6496: World Music Ensemble
• MUN 6497: New Music Ensemble
• MUN 6715: Jazz Band
• MUR 6206: Survey of Hymnody
• MUR 6705: Sacred Music Literature
• MUS 5911: Directed Study
• MUS 6865: Psychology of Music
• MUS 6716: Methods of Musical Research and Bibliography
• MUS 6905: Projects and Problems
• MUS 6910: Supervised Research
• MUS 6940: Supervised Teaching
• MUS 6971: Research for Master's Thesis
• MUS 6973: Individual Project
• MUS 7656: Teaching Music and the Creative Process
• MUS 7905: Projects and Problems
• MUS 7979: Advanced Research
• MUS 7980: Research for Doctoral Dissertation
• MUT 6051: Graduate Music Theory Review
• MUT 6445: Advanced Counterpoint
• MUT 6531: Figured Bass and Continuo Performance
• MUT 6565: Late Nineteenth- and Twentieth-Century Styles
• MUT 6576: Contemporary Styles
• MUT 6617: Approaches to Theoretical Analysis in Music Education
School of Theatre and Dance

Director: J. Dickey
Graduate Performance Program Coordinator: Ralf Remshardt
Graduate Design Program Coordinator: S. Kaye

The graduate program offered by the School of Theatre and Dance leads to the degree of Master of Fine Arts in Theatre. Minimum requirements for this degree are given in the General Information section of this catalog.

The M.F.A. degree prepares students for professional entry in acting, production, or teaching. Placement in the M.F.A. program is determined by audition/portfolio review, academic credentials, and personal interview. Candidates for admission should have adequate training in theatre. Deficiencies may be corrected before beginning graduate study.

The program emphasizes the study and practice of theatre as an art and discipline. Students of acting and design study concepts of theatre together while working in their areas of specialization. Focus is on the collaboration and synthesis of theatre artistry. Each incoming class is composed of approximately 12 to 18 students in acting and all design areas.

The student's artistic and academic progress will be reviewed at the end of each semester. The School of Theatre Handbook gives details on the form and focus of each review. This information is online at http://www.arts.ufl.edu/theatreanddance/pages/whatyouneedtoknow/downloads/downloads.asp.

During the final year of study, each student must successfully complete the comprehensive examination and oral defense. The project in lieu of thesis includes research, analysis, rehearsal process, and evaluation. Development and execution of the project includes public performance (acting or design). The written document and oral defense of the project which follow must demonstrate the ability to communicate the creative process.

Graduate acting students audition for all departmental productions.

Other

Theatre

College

College of the Arts

Department/School

School of Theatre and Dance

Degrees Offered with a Major in Theatre

Master of Fine Arts

College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
Warrington College of Business Administration

Dear Jamie Kraft

Complete faculty listings: Follow this link.

Graduate degrees offered by the Warrington College of Business Administration are the Doctor of Philosophy with major programs in business administration and in economics; the Master of Arts with major programs in economics, in international business, and in business administration with concentrations in insurance and marketing; the Master of Science with major programs in Information Systems and Operations Management (with a concentration in supply chain management), in finance, in management, in real estate, and in business administration, including concentrations in entrepreneurship, insurance, marketing and retail; the Master of Business Administration; and the Master of Accounting. Fields of concentration and requirements for the M.B.A. are given under Graduate Degrees of this catalog, as well as admission and degree requirements for the Ph.D., M.A., and M.S. degrees.

Master of Arts: The M.A. degree with a major in international business is designed to provide students with quantitative and application skills to be used in an international business setting. The program provides practical training with a brief study trip to a major international city, where students are required to participate actively in business tours and lectures. The students also have the opportunity to gain credits for the degree by studying at one or more foreign universities for a period of 2 weeks to 8 months.
Master of Science: The M.S. degree with a major in management targets students from nonbusiness backgrounds who would like to gain "core" business knowledge and application skills. Requirements span the traditional business disciplines to produce a sound knowledge base for students seeking a solid business foundation. Students are required to take such courses as accounting, finance, economics, entrepreneurship, management, marketing, organizational behavior, and statistics. Typical positions for graduates include managers, consultants, and analysts.

Doctor of Philosophy: For the Ph.D. in business administration, students must have a concentration in one of the following:

- Accounting
- Information Systems and Operation Management
- Finance
- Insurance
- Management
- Marketing
- Real estate and urban analysis.

Specific requirements for the various departments and specialties are given in the Graduate Degrees section in this catalog. (Requirements for the Ph.D. degree in economics are described under the Economics section of the catalog.) All candidates for the Ph.D. in business administration must satisfy the following general requirements:

**Breadth requirement:** All applicants for Ph.D. in the business administration program are expected to have completed prior business-related course work at either the advanced undergraduate or graduate level. Students entering without prior work are required to take a minimum of three graduate courses in at least two fields other than their chosen area of concentration. Most often, the appropriate courses will be found in the M.B.A. first-year core; the particular courses to be taken by a student will be decided in consultation with the student's academic adviser. After a student enters the Ph.D. program, the courses taken to satisfy the breadth requirement must be taken in the College of Business Administration.

**Research foundations requirement:** All students must complete a six-course research skills sequence that prepares them for scholarly research in their chosen area of concentration. Research foundations are defined as essential methodological tools (e.g., statistics, quantitative analysis) and/or substantive content domains (e.g., psychology, economics) outside the student's major field that are considered essential to conducting high quality research in the chosen field. The specific research skills required by each area of concentration can be found in the field descriptions in this Catalog.

**Other requirements** include satisfactory completion of graduate course work in the major field of concentration, as well as one or two minor fields designed to add depth to the student's research training. Minors are selected by the student in consultation with his or her advisory committee, and may be within or outside the College of Business Administration. Other requirements for the Ph.D. are given in the Graduate Degrees section of this catalog.

Departments and Programs within Warrington College of Business Administration

Warrington College of Business Courses

Other

Business Administration (M.A.)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Master of Arts

Accounting Departmental Courses

- ACG5005: Financial Accounting
- ACG5065: Financial and Managerial Accounting
- ACG5075: Managerial Accounting
- ACG5226: Advanced Accounting
- ACG5505: Governmental Accounting
- ACG5637: Auditing I
- ACG5647: Auditing II
- ACG5815: Accounting Regulation
- ACG6136: Accounting Theory
- ACG6175: Financial Reporting and Analysis
- ACG6207: Accounting for Risk
- ACG6265: International Accounting and Taxation
- ACG6335: Issues in Audit Practice
- ACG6685: Forensic Accounting
- ACG6691: International Auditing
- ACG6697: Information Systems Assurance
- ACG6905: Individual Work in Accounting
- ACG6935: Special Topics in Accounting
- ACG6940: Supervised Teaching
- ACG7885: Accounting Research I
- ACG7886: Accounting Research II
Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Microeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Macroeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and the Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization/Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6609: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics In Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7809: Investments
- FIN 7846: Marketing Microstructure
- FIN 7935: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6205: Primary Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
- REE 6910: Supervised Research
- REE 6930: Special Topics in Real Estate
- REE 6935: Real Estate Case Studies
- REE 6940: Supervised Teaching
- REE 6948: Capstone Seminar and Applied Project
- REE 6957: International Studies in Real Estate
- REE 7979: Advanced Research
- REE 7980: Research for Doctoral Dissertation
Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Advanced Business Systems Design and Development I
- ISM 6128: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporate Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
BUL 6891: Legal Aspects of Technology Management
BUL 6905: Individual Work
BUL 6930: Special Topics
ENT 6706: Global Entrepreneurship
MAN 5141: Leadership Skills
MAN 5245: Organizational Behavior
MAN 5246: Organizational Behavior
MAN 5265: Managing Groups and Teams
MAN 6107: Motivation in Organizational Setting
MAN 6128: Management Skills and Personal Development
MAN 6149: Developing Leadership Skills
MAN 6257: Power and Politics in Organizations
MAN 6266: Managing Groups and Teams in Organizations
MAN 6286: Managing Strategic Processes and Change in Organizations
MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management
MAN 6331: Compensation in Organizations
MAN 6351: Training and Development in Organizations
MAN 6365: Organizational Staffing
MAN 6366: Organizational Staffing
MAN 6385: Strategic Human Resource Management
MAN 6446: Negotiations
MAN 6447: Art and Science of Negotiation
MAN 6537: Managing Technology in Organizations
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar on Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

MAR 5806: Problems and Methods in Marketing Management
MAR 5806: Problems and Methods in Marketing Management
MAR 6157: International Marketing
MAR 6158: International Marketing
MAR 6237: The Art and Science of Pricing
MAR 6256: Strategy and Tactics of Pricing
MAR 6335: Building and Managing Brand Equity
MAR 6456: Business-to-Business Marketing
MAR 6508: Customer Analysis
MAR 6646: Marketing Research for Managerial Decision Making
MAR 6648: Marketing Research for Managerial Decision Making
MAR 6722: Web-Based Marketing
MAR 6725: Introduction to Electronic Commerce
MAR 6816: Advanced Marketing Management (MBA)
MAR 6818: Advanced Marketing Management
MAR 6833: Product Development and Management
MAR 6834: Marketing of Science and Technology
MAR 6835: Marketing of Science and Technology
MAR 6837: Consumer-Centered Product Design
MAR 6861: Customer Relationship Management
MAR 6862: Customer Relationship Management
MAR 6905: Individual Work
MAR 6910: Supervised Research
MAR 6930: Special Topics in Marketing
MAR 6940: Supervised Teaching
MAR 6957: International Studies in Marketing
MAR 6971: Research for Master's Thesis
MAR 6973: Project in Lieu of Thesis
MAR 7507: Perspectives on Consumer Behavior
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Business Administration (M.B.A)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Master of Business Administration

General

concentration in Competitive Strategy

concentration in Entrepreneurship

concentration in Finance

concentration in Global Management

concentration in Graham-Buffett Security Analysis
concentration in Human Resource Management

concentration in Information Systems and Operations Management

concentration in International Studies

concentration in Latin American Business

concentration in Management

concentration in Marketing

concentration in Real Estate

concentration in Sports Administration

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7865: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomics Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization; Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
• FIN 6296: Capitalism
• FIN 6306: Investment Banking
• FIN 6418: International Cash Flow Management
• FIN 6425: Corporation Finance
• FIN 6427: Measuring and Managing Value
• FIN 6429: Financial Decision Making
• FIN 6432: Asset Valuation and Corporate Finance
• FIN 6434: Private Equity
• FIN 6438: Study in Valuation
• FIN 6465: Financial Statement Analysis
• FIN 6477: Entrepreneurial Finance
• FIN 6489: Financial Risk Management
• FIN 6496: Mergers & Acquisitions
• FIN 6518: Investment Concepts
• FIN 6525: Asset Management Project
• FIN 6526: Portfolio Theory
• FIN 6528: Asset Allocation and Investment Strategy
• FIN 6537: Derivative Securities
• FIN 6545: Fixed Income Security Valuation
• FIN 6547: Interest Rate Risk Management
• FIN 6549: Special Topics in Fixed Income Securities
• FIN 6575: Emerging Markets Finance I
• FIN 6576: Emerging Markets Finance II
• FIN 6585: Securities Trading
• FIN 6595: Investment Analytics
• FIN 6596: Introduction to Computational Methods & Derivative Pricing
• FIN 6608: Financial Management of the Multinational Corporation
• FIN 6626: International Finance
• FIN 6638: International Finance
• FIN 6643: Project Analysis in a Global Environment
• FIN 6727: Economic Organizations and Markets
• FIN 6728: Capitalism and Regulation
• FIN 6729: Economics Organizations and Markets
• FIN 6785: Investment Banking and Corporate Financial Modeling I
• FIN 6786: Investment Banking and Corporate Financial Modeling II
• FIN 6905: Individual Work in Finance
• FIN 6930: Special Topics in Finance
• FIN 6935: Finance Professional Speaker Series
• FIN 6936: Special Topics in Investment Finance
• FIN 6940: Supervised Teaching
• FIN 6957: International Studies in Finance
• FIN 6958: International Finance Study Tour
• FIN 6971: Research for Master's Thesis
• FIN 7446: Financial Theory I
• FIN 7447: Financial Theory II
• FIN 7808: Corporate Finance
• FIN 7809: Investments
• FIN 7846: Marketing Microstructure
• FIN 7938: Finance Research Workshop
• FIN 7979: Advanced Research
• FIN 7980: Research for Doctoral Dissertation
• GEB 5114: Entrepreneurship and Venture Finance
• GEB 5118: New Venture Creation
• GEB 6157: Entrepreneurship Experiential Learning Project
• GEB 6366: Fundamentals of International Business
• GEB 6924: Entrepreneurship Professional Speaker Series
• REE 6045: Introduction to Real Estate
• REE 6056: Construction Considerations in Real Estate
• REE 6105: Real Estate Appraisal
• REE 6206: Primary Mortgage Markets and Institutions
• REE 6208: Secondary Mortgage Markets and Securitization
• REE 6315: Real Estate Market and Transaction Analysis
• REE 6395: Investment Property Analysis
• REE 6397: Real Estate Securities and Portfolios
• REE 6705: Geographic Information Systems and Location Analysis
• REE 6737: Real Estate Development
• REE 6905: Individual Work in Real Estate
• REE 6910: Supervised Research
• REE 6930: Special Topics in Real Estate
• REE 6935: Real Estate Case Studies
• REE 6940: Supervised Teaching
• REE 6948: Capstone Seminar and Applied Project
• REE 6957: International Studies in Real Estate
• REE 7979: Advanced Research
• REE 7990: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

• ISM 5021: Information Systems in Organizations
• ISM 6022: Management Information Systems
• ISM 6123: Systems Analysis and Design
• ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecomm Strategy and Applications I
ISM 6223: Business Telecomm Strategy and Applications II
ISM 6224: Business Telecomm Strategy and Applications III
ISM 6226: Business Telecomm Strategy and Applications
ISM 6236: Business Objects I
ISM 6239: Business Objects II
ISM 6257: Intermediate Business Programming
ISM 6258: Advanced Business Programming
ISM 6259: Business Programming
ISM 6405: Business Intelligence
ISM 6423: Data Analysis for Decision Support
ISM 6485: Electronic Commerce and Logistics
ISM 6486: eCommerce Technologies
ISM 6487: Risks and Controls in eCommerce
ISM 6942: Electronic Commerce Practicum
ISM 7166: Advanced Business Systems Design and Development III
MAN 5501: Management
MAN 5502: Production and Operations Management
MAN 6508: Management of Service Operations
MAN 6511: Production Management Problems
MAN 6528: Principles of Logistics/Transportation Systems
MAN 6573: Purchasing and Materials Management
MAN 6575: Purchasing and Supplier Relationship Management
MAN 6581: Project Management
MAN 6586: Project Management
MAN 6598: Logistics and Distribution Management
MAN 6599: Tactical Logistics Planning
MAN 6617: International Operations/Logistics
MAN 6619: International Logistics
QMB 5303: Managerial Statistics
QMB 5304: Introduction to Managerial Statistics
QMB 5305: Advanced Managerial Statistics
QMB 6358: Statistical Analysis for Managerial Decisions I
QMB 6359: Statistical Analysis for Managerial Decisions II
QMB 6607: Decision Processes Under Uncertainty I
QMB 6616: Business Process Analysis
QMB 6693: Quality Management and Control Systems
QMB 6697: Optimization in Simulation Modeling I
QMB 6755: Managerial Quantitative Analysis I
QMB 6756: Managerial Quantitative Analysis II
QMB 6905: Individual Work in Information Systems and Operations Management
QMB 6910: Supervised Research
QMB 6972: Special Topics in Information Systems and Operations Management
QMB 6974: Supervised Teaching
QMB 6975: Internship
QMB 6976: International Studies in Quantitative Methods
QMB 6977: Research for Master's Thesis
QMB 7931: Special Topics in Information Systems and Operations Management
QMB 7933: Seminar in Information Systems and Operations Management
QMB 7935: Internship
QMB 7979: Advanced Research
QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6705: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5259: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6865: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Business Administration (M.S.)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Master of Science

without a concentration

concentration in Retailing

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6891: International Auditing
- ACG 6897: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax I
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Macroeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6709: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6816: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>FIN 5437</td>
<td>Finance I: Asset Valuation, Risk, and Return</td>
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<td>FIN 5439</td>
<td>Finance II: Capital Structure and Risk Management Issues</td>
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<td>FIN 6108</td>
<td>Personal Financial Management</td>
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<tr>
<td>FIN 6246</td>
<td>Money and Capital Markets</td>
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<td>FIN 6296</td>
<td>Capitalism</td>
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<td>FIN 6306</td>
<td>Investment Banking</td>
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<td>FIN 6418</td>
<td>International Cash Flow Management</td>
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<td>FIN 6425</td>
<td>Corporate Finance</td>
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<td>FIN 6427</td>
<td>Measuring and Managing Value</td>
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<td>FIN 6432</td>
<td>Asset Valuation and Corporate Finance</td>
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<td>FIN 6434</td>
<td>Private Equity</td>
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<td>FIN 6438</td>
<td>Study in Valuation</td>
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<td>Financial Statement Analysis</td>
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<td>FIN 6496</td>
<td>Mergers &amp; Acquisitions</td>
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<td>FIN 6518</td>
<td>Investment Concepts</td>
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<td>FIN 6525</td>
<td>Asset Management Project</td>
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<td>FIN 6526</td>
<td>Portfolio Theory</td>
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<td>Asset Allocation and Investment Strategy</td>
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<td>FIN 6537</td>
<td>Derivative Securities</td>
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<td>FIN 6545</td>
<td>Fixed Income Security Valuation</td>
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<td>FIN 6547</td>
<td>Interest Rate Risk Management</td>
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<td>FIN 6549</td>
<td>Special Topics in Fixed Income Securities</td>
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<td>FIN 6575</td>
<td>Emerging Markets Finance I</td>
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<td>FIN 6576</td>
<td>Emerging Markets Finance II</td>
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<td>FIN 6585</td>
<td>Securities Trading</td>
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<td>FIN 6595</td>
<td>Investment Analytics</td>
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<td>FIN 6596</td>
<td>Introduction to Computational Methods &amp; Derivative Pricing</td>
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<td>FIN 6608</td>
<td>Financial Management of the Multinational Corporation</td>
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<td>FIN 6626</td>
<td>International Finance</td>
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<td>FIN 6643</td>
<td>Project Analysis in a Global Environment</td>
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<td>Economic Organizations and Markets</td>
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<td>FIN 6785</td>
<td>Investment Banking and Corporate Financial Modeling I</td>
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<td>FIN 6786</td>
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<td>FIN 6905</td>
<td>Individual Work in Finance</td>
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<td>Finance Professional Speaker Series</td>
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<td>Special Topics in Investment Finance</td>
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<td>Supervised Teaching</td>
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<td>FIN 6957</td>
<td>International Studies in Finance</td>
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<td>FIN 6958</td>
<td>International Finance Study Tour</td>
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<td>FIN 6971</td>
<td>Research for Master's Thesis</td>
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<td>FIN 7446</td>
<td>Financial Theory I</td>
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<td>FIN 7474</td>
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<td>GEB 5114</td>
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<tr>
<td>GEB 5118</td>
<td>New Venture Creation</td>
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<tr>
<td>GEB 6157</td>
<td>Entrepreneurship Experiential Learning Project</td>
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<td>GEB 6366</td>
<td>Fundamentals of International Business</td>
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<tr>
<td>GEB 6924</td>
<td>Entrepreneurship Professional Speaker Series</td>
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<td>REE 6045</td>
<td>Introduction to Real Estate</td>
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<tr>
<td>REE 6058</td>
<td>Construction Considerations in Real Estate</td>
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<td>REE 6105</td>
<td>Real Estate Appraisal</td>
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<td>REE 6206</td>
<td>Primary/Mortgage Markets and Institutions</td>
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<td>REE 6208</td>
<td>Secondary/Mortgage Markets and Securitization</td>
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<tr>
<td>REE 6315</td>
<td>Real Estate Market and Transaction Analysis</td>
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<tr>
<td>REE 6395</td>
<td>Investment Property Analysis</td>
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<td>REE 6397</td>
<td>Real Estate Securities and Portfolios</td>
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<td>REE 6705</td>
<td>Geographic Information Systems and Location Analysis</td>
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<td>REE 6737</td>
<td>Real Estate Development</td>
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<td>Individual Work in Real Estate</td>
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<td>REE 6940</td>
<td>Supervised Teaching</td>
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<td>REE 6948</td>
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<td>REE 6957</td>
<td>International Studies in Real Estate</td>
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<td>REE 7979</td>
<td>Advanced Research</td>
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<tr>
<td>REE 7980</td>
<td>Research for Doctoral Dissertation</td>
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- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Planning
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6852: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
• MAN 5246: Organizational Behavior
• MAN 5265: Managing Groups and Teams
• MAN 6107: Motivation in Organizational Setting
• MAN 6128: Management Skills and Personal Development
• MAN 6149: Developing Leadership Skills
• MAN 6257: Power and Politics in Organizations
• MAN 6266: Managing Groups and Teams in Organizations
• MAN 6286: Managing Strategic Processes and Change in Organizations
• MAN 6296: Individual Work in Management
• MAN 6310: Supervised Research
• MAN 6330: Special Topics
• MAN 6340: Supervised Teaching
• MAN 6357: Managing Technology in Organizations
• MAN 6367: Business Policy
• MAN 6368: Strategic Management
• MAN 6457: Building and Managing Brand Equity
• MAN 6467: Business-to-Business Marketing
• MAN 6498: Customer Analysis
• MAN 6508: Marketing Research for Managerial Decision Making
• MAN 6518: International Marketing
• MAN 6528: The Art and Science of Pricing
• MAN 6538: Strategy and Tactics of Pricing
• MAR 5905: International Marketing
• MAR 6108: Marketing Literature
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6267: Market Development and Management
• MAR 6277: Marketing of Science and Technology
• MAR 6287: Consumer-Centered Product Design
• MAR 6297: Customer Relationship Management
• MAR 6307: Product Development and Management
• MAR 6318: Advanced Marketing Management (MBA)
• MAR 6328: Customer Information Processing and Decision Making
• MAR 6338: Marketing of Science and Technology
• MAR 6348: Marketing of Science and Technology
• MAR 6358: Business-to-Business Marketing
• MAR 6368: Customer Relationship Management
• MAR 6458: Marketing Research for Managerial Decision Making
• MAR 6468: Marketing Research for Managerial Decision Making
• MAR 6478: Web-Based Marketing
• MAR 6488: Advanced Marketing Management
• MAR 6498: Customer Analysis
• MAR 6508: Marketing Research for Managerial Decision Making
• MAR 6518: International Marketing
• MAR 6528: The Art and Science of Pricing
• MAR 6538: Strategy and Tactics of Pricing
• MAR 6548: Business-to-Business Marketing
• MAR 6558: Customer Analysis
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6723: Introduction to Electronic Commerce
• MAR 6816: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6828: Advanced Marketing Management
• MAR 6838: Marketing of Science and Technology
• MAR 6848: Marketing of Science and Technology
• MAR 6858: Marketing of Science and Technology
• MAR 6868: Marketing Decision Models
• MAR 6878: Marketing Literature

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6267: Market Development and Management
• MAR 6337: Marketing of Science and Technology
• MAR 6357: Managing Technology in Organizations
• MAR 6367: Business Policy
• MAR 6368: Strategic Management
• MAR 6458: Marketing Research for Managerial Decision Making
• MAR 6468: Marketing Research for Managerial Decision Making
• MAR 6478: Web-Based Marketing
• MAR 6488: Advanced Marketing Management
• MAR 6498: Customer Analysis
• MAR 6508: Marketing Research for Managerial Decision Making
• MAR 6518: International Marketing
• MAR 6528: The Art and Science of Pricing
• MAR 6538: Strategy and Tactics of Pricing
• MAR 6548: Business-to-Business Marketing
• MAR 6558: Customer Analysis
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6723: Introduction to Electronic Commerce
• MAR 6816: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6828: Advanced Marketing Management
• MAR 6838: Marketing of Science and Technology
• MAR 6848: Marketing of Science and Technology
• MAR 6858: Marketing of Science and Technology
• MAR 6868: Marketing Decision Models
• MAR 6878: Marketing Literature

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MAR 7925: Workshop in Marketing Research
MAR 7979: Advanced Research
MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Business Administration (Ph.D.)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax I
- TAX 5027: Federal Income Tax II
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Microeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Macroeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization/Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6436: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7806: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary/Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
MAN 6286: Managing Strategic Processes and Change in Organizations
MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management
MAN 6331: Compensation in Organizations
MAN 6351: Training and Development in Organizations
MAN 6365: Organizational Staffing
MAN 6366: Organizational Staffing
MAN 6385: Strategic Human Resource Management
MAN 6446: Negotiations
MAN 6447: Art and Science of Negotiation
MAN 6537: Managing Technology in Organizations
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

MAR 5805: Problems and Methods in Marketing Management
MAR 5806: Problems and Methods in Marketing Management
MAR 6157: International Marketing
MAR 6158: International Marketing
MAR 6237: The Art and Science of Pricing
MAR 6256: Strategy and Tactics of Pricing
MAR 6335: Building and Managing Brand Equity
MAR 6456: Business-to-Business Marketing
MAR 6508: Customer Analysis
MAR 6646: Marketing Research for Managerial Decision Making
MAR 6648: Marketing Research for Managerial Decision Making
MAR 6722: Web-Based Marketing
MAR 6725: Introduction to Electronic Commerce
MAR 6818: Advanced Marketing Management (MBA)
MAR 6819: Advanced Marketing Management
MAR 6833: Product Development and Management
MAR 6834: Marketing of Science and Technology
MAR 6835: Marketing of Science and Technology
MAR 6837: Consumer-Centered Product Design
MAR 6861: Customer Relationship Management
MAR 6862: Customer Relationship Management
MAR 6905: Individual Work
MAR 6910: Supervised Research
MAR 6930: Special Topics in Marketing
MAR 6940: Supervised Teaching
MAR 6957: International Studies in Marketing
MAR 6971: Research for Master's Thesis
MAR 6973: Project in Lieu of Thesis
MAR 7507: Perspectives on Consumer Behavior
MAR 7586: Consumer Information Processing and Decision Making
MAR 7589: Judgment and Decision Making
MAR 7626: Multivariate Statistical Methods in Marketing
MAR 7636: Research Methods in Marketing
MAR 7666: Marketing Decision Models
MAR 7728: Marketing Literature
MAR 7925: Workshop in Marketing Research
MAR 7979: Advanced Research
MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses
Fisher School of Accounting

Warrington College of Business Administration

Director: Gary A. McGill
Graduate Coordinators: Dominique DeSantiago, Stephen Asare

As a professional school in a major public research university, the Fisher School of Accounting (FSOA) is committed to scholarly research, teaching, and service to advance knowledge and prepare future leaders for business, professional, and academic careers.

The Fisher School of Accounting offers graduate work leading to the Master of Accounting (M.Acc.) degree with a major in accounting, and the Ph.D. degree with a major in business administration and an accounting concentration. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below, or visit our website: http://warrington.ufl.edu/accounting.

Other

Accounting

College

Warrington College of Business Administration

Department/School

Fisher School of Accounting

Accounting Program Information

Master of Accounting: Three variations of the Master of Accounting degree program are available. These allow students to select one of three tracks: Audit, Tax, and Generalist. Minimum admission requirements include an acceptable score on the Graduate Management Admission Test (GMAT), with a minimum score of 550 and completion of essays with a minimum score of 4. International students must submit a satisfactory score on the following: TOEFL (Test of English as a Foreign Language: paper-based=570, internet-based=86). Additional information, including minimum GPA standards for admission, may be viewed at http://warrington.ufl.edu/accounting/academics/macc.

Combined degree program: The recommended curriculum to prepare for a professional career in accounting is the 3/2 five-year program with a joint awarding of the Bachelor of Science in Accounting and Master of Accounting degrees upon completion of the 150-hour program. The entry point into the 3/2 program is the beginning of the senior year.

Traditional Master of Accounting program: Students who have already completed an undergraduate degree in accounting may enter the 1-year M.Acc. degree program which requires satisfactory completion of 34 hours of course work. A minimum of 28 credits must be in graduate-level courses; a minimum of 20 credits must be in graduate-level accounting courses. The remaining credits are selected from recommended elective courses that vary by area of specialization. Students are cautioned to seek early advisement, since many graduate courses are offered only once a year.

J.D./M.Acc. program: A joint program leading to the Juris Doctor and Master of Accounting degrees is offered by the Fisher School of Accounting and Levin College of Law. Specific details for the M.Acc., J.D./M.Acc., and Ph.D. programs are available at http://warrington.ufl.edu/accounting/academics/jd-macc.

Degrees Offered with a Major in Accounting

Master of Accounting
Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6156: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Business Administration (Accounting)

College

Warrington College of Business Administration

Department/School

Fisher School of Accounting

Business Administration (Accounting) Program Information

The Ph.D. program offers a broad-based interdisciplinary training that prepares students to conduct both empirical and analytical research. The curriculum consists of course work of four types: the major field, a breadth requirement, a research foundation requirement, and a minor or supporting field. In addition, students must demonstrate competence in conducting research and teaching, and must complete a dissertation on an accounting topic.

The major field in accounting consists of at least 18 credit hours of course work including research analysis, archival research, analytical research, experimental research, readings, and a research project. The breadth requirement consists of at least 13 credit hours of course work including microeconomic theory, corporate finance theory, game theory, asset pricing, and information economics. The research foundation requirement consists of at least 12 hours of graduate course work in mathematical economics, statistics, or econometrics. The minor or supporting field requirement is met by completing a minimum of 12 hours of graduate course work in the selected field.

Students demonstrate competency in conducting research by completing a research project in the summers of the first and second year. The teaching competence is demonstrated by completing at least 1 hour (but no more than 5 hours) of supervised teaching, and by teaching for at least 2 semesters. Admission requirements include a history of academic excellence, adequate score on the GMAT (the average score of recently admitted applicants is 690 for GMAT), competence in written and spoken English (TOEFL Internet-Based test (iBT) required for applicants whose native language is not English), appreciation of accounting issues, and institutional and math competency. The school requires a total score of 91, including a minimum of 26 on the speaking section.

Degrees Offered with a Major in Business Administration
Doctor of Philosophy

concentration in Accounting

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6936: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6416: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6588: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6636: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7806: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Professional Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
- REE 6910: Supervised Research
- REE 6930: Special Topics in Real Estate
- REE 6935: Real Estate Case Studies
- REE 6940: Supervised Teaching
- REE 6948: Capstone Seminar and Applied Project
- REE 6957: International Studies in Real Estate
- REE 7979: Advanced Research
- REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6506: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6596: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6819: International Logistics
- CMB 5303: Managerial Statistics
- CMB 5304: Introduction to Managerial Statistics
QMB 5305: Advanced Managerial Statistics
QMB 6358: Statistical Analysis for Managerial Decisions I
QMB 6359: Statistical Analysis for Managerial Decisions II
QMB 6607: Decision Processes Under Uncertainty I
QMB 6616: Business Process Analysis
QMB 6693: Quality Management and Control Systems
QMB 6697: Optimization in Simulation Modeling I
QMB 6755: Managerial Quantitative Analysis I
QMB 6756: Managerial Quantitative Analysis II
QMB 6905: Individual Work in Information Systems and Operations Management
QMB 6910: Supervised Research
QMB 6930: Special Topics in Information Systems and Operations Management
QMB 6940: Supervised Teaching
QMB 6941: Internship
QMB 6957: International Studies in Quantitative Methods
QMB 6971: Research for Master's Thesis
QMB 7931: Special Topics in Information Systems and Operations Management
QMB 7933: Seminar in Information Systems and Operations Management
QMB 7979: Research for Doctoral Dissertation

Management Departmental Courses

BUL 5445: Ethical Role of the Manager
BUL 5810: Legal Environment of Business
BUL 5811: Managers and Legal Environment of Business
BUL 5831: Commercial Law
BUL 5832: Commercial Law for Accountants
BUL 6440: Business Ethics and Corporation Social Responsibility
BUL 6441: Business Ethics and Corporate Social Responsibility
BUL 6516: Law of Real Estate Transactions
BUL 6652: Law and Ethics of Corporate Governance
BUL 6656: Law for Entrepreneurs
BUL 6821: Cyberlaw and Ethics
BUL 6841: Employment Law
BUL 6851: International Business Law
BUL 6852: International Business Law
BUL 6891: Legal Aspects of Technology Management
BUL 6905: Individual Work
BUL 6930: Special Topics
ENT 6706: Global Entrepreneurship
MAN 5141: Leadership Skills
MAN 5245: Organizational Behavior
MAN 5246: Organizational Behavior
MAN 5265: Managing Groups and Teams
MAN 6107: Motivation in Organizational Setting
MAN 6128: Management Skills and Personal Development
MAN 6149: Developing Leadership Skills
MAN 6257: Power and Politics in Organizations
MAN 6266: Managing Groups and Teams in Organizations
MAN 6286: Managing Strategic Processes and Change in Organizations
MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management
MAN 6331: Compensation in Organizations
MAN 6351: Training and Development in Organizations
MAN 6365: Organizational Staffing
MAN 6366: Organizational Staffing
MAN 6385: Strategic Human Resource Management
MAN 6446: Negotiations
MAN 6447: Art and Science of Negotiation
MAN 6537: Managing Technology in Organizations
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6818: Advanced Marketing Management (MBA)
- MAR 6819: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6883: Consumer-Centered Product Design
- MAR 6884: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Economics Department

Chair: R. D. Blair
Graduate Coordinator: S. M. Slutsky.

Complete faculty listing: Follow this link.

The department offers the Master of Arts (thesis and nonthesis option) and Doctor of Philosophy degrees in economics with specializations in econometrics, economic theory, industrial organization, international economics, monetary economics, and public finance.

M.A. requirements: A minimum of 36 credits of course work is required for the M.A. with and without thesis. A maximum of six credits of the research course ECO 6971 may be included for a master's degree with thesis. The following core courses are required: ECO 7408 and ECO 7404 or equivalent, ECO 7415 or equivalent, ECO 7115, and ECO 7206.

Ph.D. requirements: Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) an acceptable score on the GRE, and (c) for nonnative speakers of English,
an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

All core courses must be completed in the first year. In addition, students must complete courses in three fields of specializations and pass qualifying examinations in two of those fields.

Complete descriptions of the minimum requirements for the M.A. and Ph.D. degrees are provided elsewhere in this catalog.

Other

Economics

College

Warrington College of Business Administration

Department/School

Economics Department

Degrees Offered with a Major in Economics

Doctor of Philosophy

Master of Arts

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Microeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7770: International Economic Relations
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5226: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Finance, Insurance, and Real Estate Department

Chair: Michael D. Ryngaert
Graduate Coordinator: Mahen Nimalendran

Complete faculty listing: Follow this link.

The Department of Finance, Insurance, and Real Estate offers graduate work leading to the Master of Science degree with major programs in finance and real estate; the Master of Science in Entrepreneurship (M.S.E.); and the Doctor of Philosophy degree in business administration with a concentration in finance, insurance, quantitative analysis, or real estate. Complete descriptions of the minimum requirements for the M.S., M.S.E., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

Finance, Real Estate, and Entrepreneurship are also available as concentrations within the M.B.A program. For information about the M.B.A. program, please consult that listing in the Graduate Degrees section.

For more information see the program pages below, and visit our website: http://warrington.ufl.edu/departments/fire.

Other

Business Administration (Finance, Insurance, and Real Estate)

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Business Administration (Finance, Insurance, and Real Estate) Program Information

The Ph.D. in Business Administration - Finance and Real Estate program prepares students to engage in productive scholarly research and teaching in the broad area of financial and real estate economics. Graduates of this program typically are placed with major universities in the United States, although some students choose to work in research positions at non-academic institutions.

The Ph.D. program has a strong emphasis on scholarly research training. Admission requirements include (a) minimum grade point average of 3.5 in the last two years of an undergraduate program and in any previous graduate-level work, (b) minimum GRE score of 1300 or GMAT score of 600 (both verbal and quantitative scores must exceed the sixtieth percentile), and (c) (for nonnative speakers of English) a minimum score of 550 on the TOEFL. Generally students will not be admitted to the Ph.D. program unless they have been offered financial assistance by
Finance
The student pursuing a concentration in finance typically specializes in corporate finance, financial markets and institutions, or investments. The Ph.D. curriculum consists of course work of four types: research foundations, the major field, a minor or supporting field, and a breadth requirement.

The research foundation requirements are comprised of courses in microeconomic theory, macroeconomic theory, mathematical methods and applications to economics, mathematical statistics, and econometrics. The actual courses will depend on the student's background and proposed thesis research.

The major field in finance consists of at least 16 credit hours in graduate course work in finance including financial theory, corporate finance, and seminars in empirical methods, market microstructure, and special topics. Students may elect to have one "strong" minor (16 credit hours), two "weak" minors (8 credit hours each), or a supporting field which is not declared as a minor. If a supporting field is chosen, at least 16 hours of course work acceptable to the student's supervisory committee must be taken. The supporting field option is selected when a student wishes to take courses across a number of departments. The department offers a combined B.S./M.S. program. Contact the graduate coordinator for information.

The breadth requirement applies only to students with no prior course work in business and consists of financial and managerial accounting or their equivalents, plus two courses out of the following areas: managerial economics, production operations management, or problems and methods in marketing management.

Real Estate
The research foundations are identical to those listed above for finance. The major field, minor, and supporting field requirements have the same credit stipulation as those outlined above for finance, except that the major work is in real estate.

The breadth requirement, as in all concentrations for the business administration program, applies only to students entering without prior course work in business. It consists of at least three courses from the following list (two or more fields must be represented): managers and legal environment of business, finance, money and capital markets, problems and methods of marketing management, consumer behavior, and financial and managerial accounting.

Other degree requirements are listed in the Graduate Degrees section of this catalog.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/phd-fre.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

- concentration in Finance
- concentration in Insurance
- concentration in Quantitative Finance
- concentration in Real Estate and Urban Analysis

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6906: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5406: Business Financial Management
• FIN 5437: Finance I: Asset Valuation, Risk, and Return
• FIN 5439: Finance II: Capital Structure and Risk Management Issues
• FIN 6108: Personal Financial Management
• FIN 6246: Money and Capital Markets
• FIN 6296: Capitalism
• FIN 6306: Investment Banking
• FIN 6418: International Cash Flow Management
• FIN 6425: Corporate Finance
• FIN 6427: Measuring and Managing Value
• FIN 6429: Financial Decision Making
• FIN 6432: Asset Valuation and Corporate Finance
• FIN 6434: Private Equity
• FIN 6438: Study in Valuation
• FIN 6465: Financial Statement Analysis
• FIN 6477: Entrepreneurial Finance
• FIN 6489: Financial Risk Management
• FIN 6496: Mergers & Acquisitions
• FIN 6518: Investment Concepts
• FIN 6525: Asset Management Project
• FIN 6526: Portfolio Theory
• FIN 6528: Asset Allocation and Investment Strategy
• FIN 6537: Derivative Securities
• FIN 6545: Fixed Income Security Valuation
• FIN 6547: Interest Rate Risk Management
• FIN 6549: Special Topics in Fixed Income Securities
• FIN 6575: Emerging Markets Finance I
• FIN 6576: Emerging Markets Finance II
• FIN 6585: Securities Trading
• FIN 6595: Investment Analytics
• FIN 6596: Introduction to Computational Methods & Derivative Pricing
• FIN 6608: Financial Management of the Multinational Corporation
• FIN 6626: International Finance
• FIN 6638: International Finance
• FIN 6643: Project Analysis in a Global Environment
• FIN 6727: Economic Organizations and Markets
• FIN 6728: Capitalism and Regulation
• FIN 6729: Economics Organizations and Markets
• FIN 6785: Investment Banking and Corporate Financial Modeling I
• FIN 6786: Investment Banking and Corporate Financial Modeling II
• FIN 6905: Individual Work in Finance
• FIN 6930: Special Topics in Finance
• FIN 6935: Finance Professional Speaker Series
• FIN 6936: Special Topics in Investment Finance
• FIN 6940: Supervised Teaching
• FIN 6957: International Studies in Finance
• FIN 6958: International Finance Study Tour
• FIN 6971: Research for Master's Thesis
• FIN 7446: Financial Theory I
• FIN 7447: Financial Theory II
• FIN 7808: Corporate Finance
• FIN 7809: Investments
• FIN 7848: Marketing Microstructure
• FIN 7938: Finance Research Workshop
• FIN 7979: Advanced Research
• FIN 7980: Research for Doctoral Dissertation
• GEB 5114: Entrepreneurship and Venture Finance
• GEB 5118: New Venture Creation
• GEB 6157: Entrepreneurship Experiential Learning Project
• GEB 6366: Fundamentals of International Business
• GEB 6924: Entrepreneurship Professional Speaker Series
• REE 6045: Introduction to Real Estate
• REE 6058: Construction Considerations in Real Estate
• REE 6105: Real Estate Appraisal
• REE 6206: Primary/Mortgage Markets and Institutions
• REE 6208: Secondary/Mortgage Markets and Securitization
• REE 6315: Real Estate Market and Transaction Analysis
• REE 6395: Investment Property Analysis
• REE 6397: Real Estate Securities and Portfolios
• REE 6705: Geographic Information Systems and Location Analysis
• REE 6737: Real Estate Development
• REE 6905: Individual Work in Real Estate
• REE 6910: Supervised Research
• REE 6930: Special Topics in Real Estate
• REE 6935: Real Estate Case Studies
• REE 6940: Supervised Teaching
• REE 6948: Capstone Seminar and Applied Project
• REE 6957: International Studies in Real Estate
• REE 7979: Advanced Research
• REE 7980: Research for Doctoral Dissertation

Accounting Departmental Courses
• ACG 5005: Financial Accounting
• ACG 5065: Financial and Managerial Accounting
• ACG 5075: Managerial Accounting
• ACG 5226: Advanced Accounting
• ACG 5505: Governmental Accounting
• ACG 5637: Auditing I
• ACG 5647: Auditing II
• ACG 5815: Accounting Regulation
• ACG 6136: Accounting Theory
• ACG 6175: Financial Reporting and Analysis
• ACG 6207: Accounting for Risk
• ACG 6265: International Accounting and Taxation
• ACG 6635: Issues in Audit Practice
• ACG 6685: Forensic Accounting
• ACG 6691: International Auditing
• ACG 6697: Information Systems Assurance
• ACG 6905: Individual Work in Accounting
• ACG 6935: Special Topics in Accounting
• ACG 6940: Supervised Teaching
• ACG 7885: Accounting Research I
• ACG 7886: Accounting Research II
• ACG 7887: Research Analysis in Accounting
• ACG 7939: Theoretical Constructs in Accounting
• ACG 7979: Advanced Research
• ACG 7980: Research for Doctoral Dissertation
• TAX 5005: Introduction to Federal Income Taxation
• TAX 5025: Federal Income Tax I
• TAX 5027: Federal Income Tax II
• TAX 5065: Tax Professional Research
• TAX 6105: Corporate Taxation
• TAX 6115: Advanced Corporate Taxation
• TAX 6205: Partnership Taxation
• TAX 6526: International Taxation
• TAX 6726: Executive Tax Planning
• TAX 6877: State and Local Taxation

Economics Departmental Courses

• ECO 5715: Open Economy/Macroeconomics
• ECO 6075: Economics/Consumer Education
• ECO 6407: Game Theory and Competitive Strategies: Theory and Cases
• ECO 6409: Game Theory Applied to Business Decisions
• ECO 6716: International Macroeconomics
• ECO 6906: Individual Work in Economics
• ECO 6910: Supervised Research
• ECO 6936: Special Topics
• ECO 6940: Supervised Teaching
• ECO 6957: International Studies in Economics
• ECO 6971: Research for Master's Thesis
• ECO 7113: Information Economics
• ECO 7115: Macroeconomic Theory
• ECO 7118: Markets and Institutions
• ECO 7119: Information, Incentives, and Agency Theory
• ECO 7120: General Equilibrium and Welfare Economics
• ECO 7206: Macroeconomic Theory I
• ECO 7272: Economic Growth I
• ECO 7404: Game Theory for Economists
• ECO 7405: Mathematical Economics: Game Theory
• ECO 7406: Dynamic Economics: Theory and Applications
• ECO 7408: Mathematical Methods and Applications to Economics
• ECO 7415: Statistical Methods in Economics
• ECO 7424: Econometric Models and Methods
• ECO 7426: Econometric Methods I
• ECO 7427: Econometric Methods II
• ECO 7452: Best Empirical Practices in Economics
• ECO 7516: Tax Theory and Public Policy
• ECO 7525: Welfare Economics and The Second Best
• ECO 7534: Empirical Public Economics I
• ECO 7535: Empirical Public Economics II
• ECO 7536: Theoretical Public Economics
• ECO 7706: Theory of International Trade
• ECO 7707: International Economic Relations
• ECO 7925: Research Skills Workshop
• ECO 7938: Advanced Economics Seminar
• ECO 7995: Advanced Research
• ECO 7992: Research for Doctoral Dissertation
• ECP 5415: Antitrust Policy and Managerial Decisions
• ECP 5702: Managerial Economics
• ECP 5705: Economics of Business Decisions
• ECP 6417: Public Policy and Social Control
• ECP 6701: Competitive Strategies in Expanding Markets
• ECP 6708: Cases in Competitive Strategy
Information Systems and Operations Management Departmental Courses

- ISM5021: Information Systems in Organizations
- ISM6022: Management Information Systems
- ISM6123: Systems Analysis and Design
- ISM6129: Advanced Business Systems Design and Development I
- ISM6129: Advanced Business Systems Design and Development II
- ISM6215: Business Database Systems I
- ISM6216: Business Database Systems II
- ISM6217: Database Management Systems
- ISM6222: Business Telecom Strategy and Applications I
- ISM6223: Business Telecom Strategy and Applications II
- ISM6224: Business Telecom Strategy and Applications III
- ISM6226: Business Telecom Strategy and Applications
- ISM6236: Business Objects I
- ISM6239: Business Objects II
- ISM6257: Intermediate Business Programming
- ISM6258: Advanced Business Programming
- ISM6259: Business Programming
- ISM6405: Business Intelligence
- ISM6423: Data Analysis for Decision Support
- ISM6485: Electronic Commerce and Logistics
- ISM6486: eCommerce Technologies
- ISM6487: Risks and Controls in eCommerce
- ISM6942: Electronic Commerce Practicum
- ISM7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
• BUL 6652: Law and Ethics of Corporate Governance
• BUL 6656: Law for Entrepreneurs
• BUL 6821: Cyberlaw and Ethics
• BUL 6841: Employment Law
• BUL 6851: International Business Law
• BUL 6891: Legal Aspects of Technology Management
• BUL 6905: Individual Work
• BUL 6930: Special Topics
• ENT 6706: Global Entrepreneurship
• MAN 5141: Leadership Skills
• MAN 5245: Organizational Behavior
• MAN 5246: Organizational Behavior
• MAN 5265: Managing Groups and Teams
• MAN 6107: Motivation in Organizational Setting
• MAN 6128: Management Skills and Personal Development
• MAN 6149: Developing Leadership Skills
• MAN 6257: Power and Politics in Organizations
• MAN 6266: Managing Groups and Teams in Organizations
• MAN 6286: Managing Strategic Processes and Change in Organizations
• MAN 6296: Designing Effective Organizations
• MAN 6321: Human Resource Management
• MAN 6331: Compensation in Organizations
• MAN 6351: Training and Development in Organizations
• MAN 6365: Organizational Staffing
• MAN 6366: Organizational Staffing
• MAN 6385: Strategic Human Resource Management
• MAN 6446: Negotiations
• MAN 6447: Art and Science of Negotiation
• MAN 6537: Managing Technology in Organizations
• MAN 6627: Cross Cultural Negotiation
• MAN 6635: International Aspects of Human Resource Management
• MAN 6636: Global Strategic Management
• MAN 6637: Global Strategic Management
• MAN 6721: Business Policy
• MAN 6724: Strategic Management
• MAN 6905: Individual Work in Management
• MAN 6910: Supervised Research
• MAN 6930: Special Topics
• MAN 6940: Supervised Teaching
• MAN 6957: International Studies in Management
• MAN 6958: International Study Program
• MAN 6973: Project in Lieu of Thesis
• MAN 7108: Seminar in Research Concepts and Methods in Management
• MAN 7109: Seminar in Motivation and Attitudes
• MAN 7146: Seminar in Leadership
• MAN 7207: Seminar on Foundations of Organizational Theory
• MAN 7208: Seminar in Contemporary Approaches to Organizations
• MAN 7267: Seminar on Groups and Teams Research
• MAN 7275: Organizational Behavior
• MAN 7328: Seminar on Staffing and Selection
• MAN 7778: Seminar in Strategic Adaptation to Environment
• MAN 7779: Strategic Processes and Structure in Organizations
• MAN 7933: Seminar in Management
• MAN 7979: Advanced Research
• MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Customer Analysis
• MAR 6646: Marketing Research for Managerial Decision Making
• MAR 6848: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6725: Introduction to Electronic Commerce
• MAR 6816: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6833: Product Development and Management
• MAR 6834: Marketing of Science and Technology
• MAR 6835: Marketing of Science and Technology
• MAR 6837: Consumer-Centered Product Design
• MAR 6881: Customer Relationship Management
• MAR 6882: Customer Relationship Management
• MAR 6905: Individual Work
• MAR 6910: Supervised Research
Entrepreneurship Program Information

The Masters of Science in Entrepreneurship (M.S.E.) program is a one-year, 36-credit, campus-based program designed for young and aspiring entrepreneurs and change-makers. Offered to both business and non-business majors alike, the program is a combination of classroom delivery and experiential learning activities with a focus on opportunity assessment, feasibility analysis, lean entrepreneurial concept testing, business plan development, entrepreneurial leadership, and the sourcing of capital. Students are exposed to cutting edge entrepreneurial theory, which they apply immediately by consulting for small business, commercializing UF technology, and creating their own businesses.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/mse](http://warrington.ufl.edu/graduate/academics/mse).

Degrees Offered with a Major in Entrepreneurship

**Master of Science in Entrepreneurship**

**Finance, Insurance, and Real Estate Departmental Courses**

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6460: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7890: Investments
- FIN 7848: Financial Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- GEB 6914: Entrepreneurship and Venture Finance
- GEB 6935: Investment Banking and Corporate Financial Modeling I
- GEB 7105: Real Estate Appraisal
- GEB 7106: Primary/Mortgage Markets and Institutions
- GEB 7108: Secondary/Mortgage Markets and Securitization
- GEB 7115: Real Estate Market and Transaction Analysis
- GEB 6395: Investment Property Analysis
- GEB 6397: Real Estate Securities and Portfolios
- GEB 6705: Geographic Information Systems and Location Analysis
- GEB 6737: Real Estate Development
- GEB 6905: Individual Work in Real Estate
- GEB 6924: Entrepreneurship Professional Speaker Series
- GEB 6935: Investment Banking and Corporate Financial Modeling I
- GEB 6940: Supervised Teaching
- GEB 6948: Capstone Seminar and Applied Project
- GEB 6957: International Studies in Real Estate
Finance

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Finance Program Information

The student pursuing a major in finance typically specializes in corporate finance, financial markets and institutions, or investments.

**Master of Science degree in Finance, nonthesis option:** This M.S. program option consists of at least 32 credits in letter-graded courses. It is designed to ensure that each student acquires a basic knowledge of the major financial economics subject areas: corporate finance, derivatives, fixed income securities, investments, international finance, and real estate. The program is designed to prepare students with an undergraduate background in finance for positions in commercial banking, money management, investment banking, and securities markets.

The Department also offers a combined bachelor's/master's program. Contact the admissions director for information.

**Master of Science degree in Finance/juris doctorate joint degree program:** This joint degree program culminates in the M.S. and J.D. degrees. Applicants must meet the entrance requirements for both the Warrington College of Business Administration and the Levin College of Law. Admission to the second degree program is required no later than the end of the second consecutive semester after beginning one degree in the joint program.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/msf.

Degrees Offered with a Major in Finance

**Master of Science**

Finance, Insurance, and Real Estate Department Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporate Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6636: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
- REE 6910: Supervised Research
- REE 6930: Special Topics in Real Estate
- REE 6935: Real Estate Case Studies
- REE 6940: Supervised Teaching
- REE 6948: Capstone Seminar and Applied Project
- REE 6957: International Studies in Real Estate
- REE 7979: Advanced Research
- REE 7980: Research for Doctoral Dissertation
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Real Estate

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Real Estate Program Information

The ten-month, full-time in residence, Nathan S. Collier Master of Science in Real Estate (MSRE) Program, housed in the Warrington College of Business Administration (WCBA), thrives on innovation, a dynamic student body, significant interaction with high-level working professionals, and nationally recognized professors. The program is a unique combination of theory and practice that will both enhance your real estate education and develop your professional skills.

**Master of Science degree in real estate, nonthesis option:** This M.S. option consists of at least 34 credits of letter-graded courses. It is designed to ensure that each student acquires a basic knowledge of the various functional areas in real estate, real estate finance and investment, real estate development, real estate law and institutions, real estate asset management, international real estate, and advanced training in specialized areas. The capstone course (REE 6948) involves actual projects in which students work in teams to undertake a real estate problem for real clients. This two-tiered program of study provides both a firm theoretical foundation for later professional effectiveness and an applied bridge to professional practice.

**Master of Science degree in real estate/juris doctorate joint program:** This joint degree program culminates in the M.S. and J.D. degrees. Applicants must meet the entrance requirements for both the Warrington College of Business Administration and the Levin College of Law. Admission to the second degree program is required no later than the end of the second consecutive semester after beginning one degree of the joint program.

The Department also offers a combined bachelor's / master's program for all undergraduate disciplines.

For more information, please contact the admissions director and see our website: [http://warrington.ufl.edu/graduate/academics/msre](http://warrington.ufl.edu/graduate/academics/msre).

Degrees Offered with a Major in Real Estate

Master of Science

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
ENT 6933: Entrepreneurship Lecture Series
ENT 6946: Entrepreneurial Consulting Project
ENT 6950: Integrated Technology Ventures
ENT 6957: International Studies in Entrepreneurship
FIN 5405: Business Financial Management
FIN 5437: Finance I: Asset Valuation, Risk, and Return
FIN 5439: Finance II: Capital Structure and Risk Management Issues
FIN 6108: Personal Financial Management
FIN 6246: Money and Capital Markets
FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6636: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics in Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Information Systems and Operations Management Department

Warrington College of Business Administration

Chair: Haldun Aytug
Graduate Coordinator: Praveen Pathak

Complete faculty listing: Follow this link

The primary mission of the Department of Information Systems & Operations Management is a commitment to scholarly research, teaching and service to advance the state of knowledge in information systems and supply chain management and to train future leaders for professional and academic careers.

The Department offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Combined Bachelor/Master of Science: The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.

For more information, please see the program pages below and our website: http://warrington.ufl.edu/departments/isom.

Other

Business Administration (Information Systems and Operations Management)

College

Warrington College of Business Administration

Department/School

Information Systems and Operations Management Department

Business Administration (Information Systems and Operations Management)

The Department of Information Systems & Operations Management offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Doctor of Philosophy: The mission of the Ph.D. Program is to educate scholars who will make substantial contributions in their field of research. Our primary goal is to train graduate students to make such contributions. To achieve this goal, we attempt to place students in productive academic research environments. The major areas of study within the department are Information Systems/Information Technology (ISIT) and Operations Management (OM).

Students come from a variety of backgrounds, with the most common being engineering computer sciences, mathematics, business, and statistics. Students admitted for the Ph.D. choose to specialize either in information systems/information technology or in operations management. The course schedule taken by each student is always personalized to fit the background of the student and is developed in consultation with the Ph.D. program coordinator and/or chair of the dissertation committee. Additionally, doctoral students will be required to attend all ISOM Workshops and the Department Seminar Series (regardless of area of specialization) held at the University of Florida.

Admission requirements for the Ph.D. include

- A minimum grade point average of 3.2
- A minimum GMAT score of 650, or GRE scores acceptable to the program
- For nonnative speakers of English, submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/phd-isom.
Degrees Offered with a Major in Business Administration

Doctor of Philosophy

concentration in Information Systems and Operations Management

Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6588: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation
Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6897: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6728: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Industrial Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7116: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and the Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
 Finance, Insurance, and Real Estate Departmental Courses

  ENT 5275: Family Business Management
  ENT 6006: Entrepreneurship
  ENT 6008: Entrepreneurial Opportunity
  ENT 6016: Venture Analysis
  ENT 6116: Business Plan Formation
  ENT 6416: Venture Finance
  ENT 6506: Social Entrepreneurship
  ENT 6616: Creativity in Entrepreneurship
  ENT 6905: Individual Work in Entrepreneurship
  ENT 6930: Special Topics
  ENT 6933: Entrepreneurship Lecture Series
  ENT 6946: Entrepreneurial Consulting Project
  ENT 6950: Integrated Technology Ventures
  ENT 6957: International Studies in Entrepreneurship
  FIN 5405: Business Financial Management
  FIN 5436: Investment Banking
  FIN 618: International Cash Flow Management
  FIN 6225: Corporate Finance
  FIN 6227: Measuring and Managing Value
  FIN 6229: Financial Decision Making
  FIN 632: Asset Valuation and Corporate Finance
  FIN 634: Private Equity
  FIN 643: Study in Valuation
  FIN 646: Financial Statement Analysis
  FIN 647: Entrepreneurial Finance
  FIN 648: Financial Risk Management
  FIN 649: Mergers & Acquisitions
  FIN 6518: Investment Concepts
  FIN 6525: Asset Management Project
  FIN 6526: Portfolio Theory
  FIN 6528: Asset Allocation and Investment Strategy
  FIN 6537: Derivative Securities
  FIN 6545: Fixed Income Security Valuation
  FIN 6547: Interest Rate Risk Management
  FIN 6549: Special Topics in Fixed Income Securities
  FIN 6575: Emerging Markets Finance I
  FIN 6576: Emerging Markets Finance II
  FIN 6585: Securities Trading
  FIN 6595: Investment Analytics
  FIN 6596: Introduction to Computational Methods & Derivative Pricing
  FIN 6606: Financial Management of the Multinational Corporation
  FIN 6626: International Finance
  FIN 6638: International Finance
  FIN 6643: Project Analysis in a Global Environment
  FIN 6727: Economic Organizations and Markets
  FIN 6728: Capitalism and Regulation
  FIN 6729: Economics Organizations and Markets
  FIN 6785: Investment Banking and Corporate Financial Modeling I
  FIN 6786: Investment Banking and Corporate Financial Modeling II
  FIN 6905: Individual Work in Finance
  FIN 6930: Special Topics in Finance
  FIN 6935: Finance Professional Speaker Series
  FIN 6936: Special Topics In Investment Finance
  FIN 6940: Supervised Teaching
  FIN 6957: International Studies in Finance
  FIN 6958: International Finance Study Tour
  FIN 6971: Research for Master's Thesis
  FIN 7446: Financial Theory I
  FIN 7447: Financial Theory II
  FIN 7808: Corporate Finance
  FIN 7809: Investments
  FIN 7848: Marketing Microstructure
  FIN 7938: Finance Research Workshop
  FIN 7979: Advanced Research
• FIN 7980: Research for Doctoral Dissertation
• GEB 5114: Entrepreneurship and Venture Finance
• GEB 5118: New Venture Creation
• GEB 6157: Entrepreneurship Experiential Learning Project
• GEB 6366: Fundamentals of International Business
• GEB 6924: Entrepreneurship Professional Speaker Series
• REE 6045: Introduction to Real Estate
• REE 6058: Construction Considerations in Real Estate
• REE 6105: Real Estate Appraisal
• REE 6206: Primary Mortgage Markets and Institutions
• REE 6208: Secondary Mortgage Markets and Securitization
• REE 6315: Real Estate Market and Transaction Analysis
• REE 6395: Investment Property Analysis
• REE 6397: Real Estate Securities and Portfolios
• REE 6705: Geographic Information Systems and Location Analysis
• REE 6737: Real Estate Development
• REE 6905: Individual Work in Real Estate
• REE 6910: Supervised Research
• REE 6930: Special Topics in Real Estate
• REE 6935: Real Estate Case Studies
• REE 6940: Supervised Teaching
• REE 6948: Capstone Seminar and Applied Project
• REE 6957: International Studies in Real Estate
• REE 7979: Advanced Research
• REE 7980: Research for Doctoral Dissertation

Management Departmental Courses

• BUL 5445: Ethical Role of the Manager
• BUL 5810: Legal Environment of Business
• BUL 5811: Managers and Legal Environment of Business
• BUL 5831: Commercial Law
• BUL 5832: Commercial Law for Accountants
• BUL 6440: Business Ethics and Corporation Social Responsibility
• BUL 6441: Business Ethics and Corporate Social Responsibility
• BUL 6516: Law of Real Estate Transactions
• BUL 6652: Law and Ethics of Corporate Governance
• BUL 6656: Law for Entrepreneurs
• BUL 6821: Cyberlaw and Ethics
• BUL 6841: Employment Law
• BUL 6851: International Business Law
• BUL 6852: International Business Law
• BUL 6891: Legal Aspects of Technology Management
• BUL 6905: Individual Work
• BUL 6930: Special Topics
• ENT 6706: Global Entrepreneurship
• MAN 5141: Leadership Skills
• MAN 5245: Organizational Behavior
• MAN 5246: Organizational Behavior
• MAN 5265: Managing Groups and Teams
• MAN 6107: Motivation in Organizational Setting
• MAN 6128: Management Skills and Personal Development
• MAN 6149: Developing Leadership Skills
• MAN 6257: Power and Politics in Organizations
• MAN 6286: Managing Groups and Teams in Organizations
• MAN 6286: Managing Strategic Processes and Change in Organizations
• MAN 6296: Designing Effective Organizations
• MAN 6321: Human Resource Management
• MAN 6331: Compensation in Organizations
• MAN 6351: Training and Development in Organizations
• MAN 6365: Organizational Staffing
• MAN 6366: Organizational Staffing
• MAN 6385: Strategic Human Resource Management
• MAN 6446: Negotiations
• MAN 6447: Art and Science of Negotiation
• MAN 6537: Managing Technology in Organizations
• MAN 6627: Cross Cultural Negotiation
• MAN 6635: International Aspects of Human Resource Management
• MAN 6636: Global Strategic Management
• MAN 6637: Global Strategic Management
• MAN 6721: Business Policy
• MAN 6724: Strategic Management
• MAN 6905: Individual Work in Management
• MAN 6910: Supervised Research
• MAN 6930: Special Topics
• MAN 6940: Supervised Teaching
• MAN 6957: International Studies in Management
• MAN 6958: International Study Program
• MAN 6973: Project in Lieu of Thesis
• MAN 7108: Seminar in Research Concepts and Methods in Management
• MAN 7109: Seminar in Motivation and Attitudes
• MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7700: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Information Systems and Operations Management

College

Warrington College of Business Administration
Information Systems and Operations Management Program Information

The Department of Information Systems & Operations Management offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM), the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Master of Science: The M.S.ISOM program provides computing, analytical, and application skills to be used in a business setting. The primary areas of emphasis in the M.S.ISOM program are business intelligence and analytics, information systems/information technology, and supply chain management. Requirements span traditional academic disciplines to produce a multiple-discipline focus. Typical positions for graduates include decision support specialist, information systems specialist, systems analyst, and logistic support specialist.

For a student with a bachelor's degree in business or economics, the M.S.ISOM non-thesis on-campus program consists of a minimum of 36 credit hours, normally requiring a minimum of three semesters of study, not including summer. For students without a bachelor's degree in business or economics, the M.S.ISOM non-thesis on-campus program consists of a minimum of 40 credit hours, normally requiring a minimum of four semesters of study, not including summer.

All M.S.ISOM candidates must complete 26 credits of core coursework:

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming (capstone course)
- MAN 6581: Project Management
- OMB 6558: Statistical Analysis for Managerial Decisions I
- OMB 6755: Managerial Quantitative Analysis I
- OMB 6756: Managerial Quantitative Analysis II

All M.S.ISOM candidates must also complete 6 credits of track coursework for the information technology, supply chain management, or business intelligence and analytics track:

Information Technology Track
- ISM 6216: Business Database Systems II
- ISM 6236: Business Objects I
- ISM 6259: Business Programming

Supply Chain Management Track
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management

Business Intelligence and Analytics Track
- ISM 6216: Business Database Systems II
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support

These required courses total 32 credit hours. In addition, each M.S.ISOM student with an undergraduate major or minor in business must take a minimum of 4 additional hours of approved graduate business electives for a total of 36 credit hours required for the M.S.ISOM degree. For students without an undergraduate business degree or minor, instead of graduate business electives, they must complete four of the following core business courses: ACG 5006, ACG 5075, ECP 5702, FIN 5437, FIN 5439, MAN 5246, MAR 5806.

Bachelor/Master of Science: The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/ms-isom](http://warrington.ufl.edu/graduate/academics/ms-isom).

Degrees Offered With a Major in Information Systems and Operations Management

Master of Science in Information Systems and Operations Management

without a concentration

concentration in Supply Chain Management

Information Systems and Operations Management Departmental Courses
- ISM 5021: Information Systems in Organizations
- ISM 5022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6260: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 6956: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6596: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality/Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7939: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6926: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Management Department
Doctor of Philosophy

The Management Department offers graduate work leading to a Ph.D. degree with a major in Business Administration and a concentration in Management; a Master of Business Administration degree with a concentration in Management; a Master of Science degree with a major in Management; and a Master of International Business (M.I.B.). Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees Section of this catalog.

The Department participates in combined bachelor's/master's degree programs for the Master of International Business (M.I.B.) and Master of Science (M.S.) with a major in management. The Master of International Business is open to students pursuing a bachelor's degree in a business discipline or minor in business administration. The M.S. with a major in management program is only open to non-business majors. Contact the graduate coordinator for information.

For more information, please see our website: [http://warrington.ufl.edu/departments/mgt](http://warrington.ufl.edu/departments/mgt).

Other

Business Administration (Management)

College

Warrington College of Business Administration

Department/School

Management Department

Business Administration (Management) Program Information

Doctor of Philosophy

The Ph.D. program in business administration in the Department of Management prepares students for careers as faculty members of universities that emphasize teaching and research. The program is designed so that the student will (1) develop strong competence in the base discipline crucial to the study of organizations and organization processes and (2) follow a field of specialization in organizational behavior, organizational theory, human resource management, and strategic studies. Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) a minimum GRE score of 1000, and (c) for nonnative speakers of English, a minimum score of 550 on the TOEFL.

The research interests of the faculty are quite broad. For example, work is being done on defining the domain of performance in organizations, employee selection, performance appraisal, goal setting and incentives, aging, dispositions and job satisfaction, corporate governance, health care, innovation processes, organizational control and executive compensation practices, agency theory, and organizational processes. Faculty often work on interdisciplinary projects with other departments.

In addition, the student has exposure to scholars and faculty members from other universities, and from other departments in the University, who are invited to give workshops in the Department. These courses should complement the major area of study selected by the student.

Breadth Requirement: All students pursuing the Ph.D. are expected to be well versed in the structure and functioning of business organizations and the environment within which they operate. This requirement may be met through undergraduate or master's level work in business administration. The student who does not meet the breadth requirement before entering the Ph.D. program must take at least three graduate courses in different functional areas in the Warrington College of Business Administration but outside of the Department of Management. These courses must include at least three of the following: (1) Organizational Behavior, (2) Organizational Theory, (3) Strategic Management, and (4) Human Resource Management.

Research Skills Requirement: The general nature of the research requirement has been specified by the Graduate Committee of the Warrington College of Business. Students must take six approved courses to satisfy it. For the typical student in the Department of Management, the research foundation courses include at least 18 credits in courses such as philosophy of social science (e.g., PHI 5425 or PHI 5405), basic statistical methods (e.g., STA 6126), research methods (e.g., MAR 7786, EDF 7486, or PPE 6308), psychometrics (e.g., EDF 6436), experimental design (e.g., EDF 7439), field research methods (e.g., MAR 7786), and qualitative research (e.g., EDF 6436, SYA 6315). The specific program is determined by the student's supervisory committee and will be tailored to fit the student's prior preparation and the specialization that the student chooses.

Major Course Requirements: The program of study for each student will include required seminars in Organizational Behavior, Organizational Theory, Strategic Management, and Human Resource Management. Research, and the Management Workshop.

Specialization Requirements: Each student selects a specialization area. Courses must provide the depth of knowledge required to teach and conduct research successfully in the area of specialization. This part of the program will be developed by the supervisory committee in conjunction with the student. The specialization courses are primarily offered within the Department of Management, although it is quite common for students to take courses in related disciplines, such as Marketing, Finance, Economics, Psychology, Statistics, and Decision and Information Systems. Procedures for the qualifying examinations, dissertation, and final examination are given in the Requirements for the Ph.D. section of this catalog.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/phd-mgt](http://warrington.ufl.edu/graduate/academics/phd-mgt).

Degrees Offered with a Major in Business Administration

Doctor of Philosophy
concentration in Management

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6906: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7287: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ACG 5637</td>
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<td>Auditing II</td>
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<td>Accounting Regulation</td>
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<td>Accounting Theory</td>
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<td>Financial Reporting and Analysis</td>
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<td>Issues in Audit Practice</td>
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<td>Supervised Teaching</td>
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<td>ACG 7885</td>
<td>Accounting Research I</td>
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<td>ACG 7886</td>
<td>Accounting Research II</td>
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<td>ACG 7887</td>
<td>Research Analysis in Accounting</td>
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<td>ACG 7939</td>
<td>Theoretical Constructs in Accounting</td>
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<td>TAX 5065</td>
<td>Tax Professional Research</td>
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<td>Corporate Taxation</td>
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**Economics Departmental Courses**

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<tr>
<td>ECO 5715</td>
<td>Open Economy/Macroeconomics</td>
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<tr>
<td>ECO 6075</td>
<td>Economics/Consumer Education</td>
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<tr>
<td>ECO 6407</td>
<td>Game Theory and Competitive Strategy: Theory and Cases</td>
</tr>
<tr>
<td>ECO 6409</td>
<td>Game Theory Applied to Business Decisions</td>
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<td>ECO 6716</td>
<td>International Macroeconomics</td>
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<td>ECO 6906</td>
<td>Individual Work in Economics</td>
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<td>ECO 6910</td>
<td>Supervised Research</td>
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<td>ECO 6936</td>
<td>Special Topics</td>
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<td>ECO 6940</td>
<td>Supervised Teaching</td>
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<td>ECO 6957</td>
<td>International Studies in Economics</td>
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<td>ECO 6971</td>
<td>Research for Master's Thesis</td>
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<td>ECO 7113</td>
<td>Information Economics</td>
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<td>ECO 7115</td>
<td>Macroeconomic Theory</td>
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<td>ECO 7118</td>
<td>Markets and Institutions</td>
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<td>ECO 7119</td>
<td>Information, Incentives, and Agency Theory</td>
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<td>ECO 7120</td>
<td>General Equilibrium and Welfare Economics</td>
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<td>ECO 7206</td>
<td>Macroeconomic Theory I</td>
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<td>ECO 722</td>
<td>Economic Growth I</td>
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<td>ECO 7404</td>
<td>Game Theory for Economists</td>
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<td>ECO 7405</td>
<td>Mathematical Economics: Game Theory</td>
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<td>ECO 7406</td>
<td>Dynamic Economics: Theory and Applications</td>
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<td>ECO 7408</td>
<td>Mathematical Methods and Applications to Economics</td>
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<td>ECO 7415</td>
<td>Statistical Methods in Economics</td>
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<td>Econometric Models and Methods</td>
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<td>ECO 7426</td>
<td>Econometric Methods I</td>
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<td>ECO 7427</td>
<td>Econometric Methods II</td>
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<td>ECO 7452</td>
<td>Best Empirical Practices in Economics</td>
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<td>ECO 7516</td>
<td>Tax Theory and Public Policy</td>
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<td>ECO 7525</td>
<td>Welfare Economics and The Second Best</td>
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<td>ECO 7534</td>
<td>Empirical Public Economics I</td>
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<td>ECO 7535</td>
<td>Empirical Public Economics II</td>
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<td>ECO 7536</td>
<td>Theoretical Public Economics</td>
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<td>ECO 7706</td>
<td>Theory of International Trade</td>
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<td>ECO 7707</td>
<td>International Economic Relations</td>
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<td>ECO 7925</td>
<td>Research Skills Workshop</td>
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<td>ECO 7938</td>
<td>Advanced Economics Seminar</td>
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<td>Advanced Research</td>
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<td>ECO 7980</td>
<td>Research for Doctoral Dissertation</td>
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<td>ECP 5415</td>
<td>Antitrust Policy and Managerial Decisions</td>
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<tr>
<td>ECP 5702</td>
<td>Managerial Economics</td>
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<td>ECP 5705</td>
<td>Economics of Business Decisions</td>
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<td>ECP 6417</td>
<td>Public Policy and Social Control</td>
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<tr>
<td>ECP 6701</td>
<td>Competitive Strategies in Expanding Markets</td>
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<td>ECP 6708</td>
<td>Cases in Competitive Strategy</td>
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<tr>
<td>ECP 6847</td>
<td>Economics for Managing Information for Electronic Commerce</td>
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<tr>
<td>ECP 7407</td>
<td>Theory of Industrial Organization: Product Differentiation and Strategy</td>
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<td>ECP 7408</td>
<td>Empirical Industrial Organization</td>
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<td>ECP 7418</td>
<td>Economics of Regulation</td>
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<tr>
<td>ECP 7419</td>
<td>Current Research in Regulation</td>
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</table>
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporate Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6606: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finances Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7893: Investments
- FIN 7845: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6126: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6526: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Marketing Departmental Courses
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5226: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

International Business

College

Warrington College of Business Administration

Department/School

Management Department

International Business Program

The Master of International Business (M.I.B.) is a non-thesis interdisciplinary graduate business program designed to enhance a student’s knowledge and understanding of global business trends and problems.

All M.I.B. candidates must complete the 30-credit curriculum, which consists of 14 core credits and 16 elective credits, with a grade point average (major and overall) of 3.0 or higher. The
curriculum includes a mandatory global immersion experience and a non-thesis capstone project.

Combined Degree: The Master of International Business offers a combined bachelor's/master's degree option for students pursuing a bachelor's degree in a business discipline or minor in business administration.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/mib

Degrees Offered with a Major in International Business

Master of International Business

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6811: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5255: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation
Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Microeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology-Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6436: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6606: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7800: Corporate Finance
- FIN 7807: Investments
- FIN 7848: Marketing Microstructure
Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6222: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6225: Business Telecom Strategy and Applications
- ISM 6230: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6486: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6942: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6775: Managerial Quantitative Analysis I
- QMB 6776: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
• QMB 6941: Internship
• QMB 6957: International Studies in Quantitative Methods
• QMB 6971: Research for Master's Thesis
• QMB 7931: Special Topics in Information Systems and Operations Management
• QMB 7933: Seminar in Information Systems and Operations Management
• QMB 7979: Advanced Research
• QMB 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Customer Analysis
• MAR 6646: Marketing Research for Managerial Decision Making
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6725: Introduction to Electronic Commerce
• MAR 6818: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6833: Product Development and Management
• MAR 6834: Marketing of Science and Technology
• MAR 6835: Marketing of Science and Technology
• MAR 6837: Consumer-Centered Product Design
• MAR 6861: Customer Relationship Management
• MAR 6862: Customer Relationship Management
• MAR 6905: Individual Work
• MAR 6910: Supervised Research
• MAR 6930: Special Topics in Marketing
• MAR 6940: Supervised Teaching
• MAR 6957: International Studies in Marketing
• MAR 6971: Research for Master's Thesis
• MAR 6973: Project in Lieu of Thesis
• MAR 7507: Perspectives on Consumer Behavior
• MAR 7588: Consumer Information Processing and Decision Making
• MAR 7589: Judgment and Decision Making
• MAR 7626: Multivariate Statistical Methods in Marketing
• MAR 7636: Research Methods in Marketing
• MAR 7666: Marketing Decision Models
• MAR 7786: Marketing Literature
• MAR 7925: Workshop in Marketing Research
• MAR 7979: Advanced Research
• MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

• GEB 5212: Professional Writing in Business
• GEB 5215: Professional Communication in Business
• GEB 5217: Executive Communication
• GEB 5225: Advanced Business Writing
• GEB 5929: Foundations Review
• GEB 6229: Professional Communication for Accountants
• GEB 6365: International Business
• GEB 6368: Globalization and the Business Environment
• GEB 6905: Individual Work
• GEB 6928: Professional Development Module IV
• GEB 6930: Special Topics
• GEB 6941: Internship
• GEB 6957: International Studies in Business

Management

College

Warrington College of Business Administration

Department/School
Management Department

Management Program Information

**Master of Science degree with a major in Management, non-thesis option:** This M.S. program is designed to afford general business competency to students who possess little or no educational business background. The M.S. with a major in management program is only open to non-business majors. Students must complete the 32-credit curriculum, which consists of 22 core credits and 10 elective credits, with a grade point average (major and overall) of 3.0 or higher.

**Combined Degree Program:** The M.S. with a major in management offers a combined bachelor's/master's degree option.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/msm](http://warrington.ufl.edu/graduate/academics/msm).

Degrees Offered with a Major in Management

**Master of Science**

without a concentration

concentration in Health Care Risk Management

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6805: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6897: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax I
- TAX 5027: Federal Income Tax II
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6806: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Macroeconomic Theory
- ECO 7118: Markets and Institutions
ECO 7119: Information, Incentives, and Agency Theory
ECO 7120: General Equilibrium and Welfare Economics
ECO 7206: Macroeconomic Theory I
ECO 7272: Economic Growth I
ECO 7404: Game Theory for Economists
ECO 7405: Mathematical Economics: Game Theory
ECO 7406: Dynamic Economics: Theory and Applications
ECO 7408: Mathematical Methods and Applications to Economics
ECO 7415: Statistical Methods in Economics
ECO 7424: Econometric Models and Methods
ECO 7426: Econometric Methods I
ECO 7427: Econometric Methods II
ECO 7452: Best Empirical Practices in Economics
ECO 7516: Tax Theory and Public Policy
ECO 7525: Welfare Economics and The Second Best
ECO 7534: Empirical Public Economics I
ECO 7535: Empirical Public Economics II
ECO 7536: Theoretical Public Economics
ECO 7706: Theory of International Trade
ECO 7707: International Economic Relations
ECO 7925: Research Skills Workshop
ECO 7938: Advanced Economics Seminar
ECO 7979: Advanced Research
ECO 7980: Research for Doctoral Dissertation
ECP 5415: Antitrust Policy and Managerial Decisions
ECP 5702: Managerial Economics
ECP 5705: Economics of Business Decisions
ECP 6417: Public Policy and Social Control
ECP 6701: Competitive Strategies in Expanding Markets
ECP 6708: Cases in Competitive Strategy
ECP 6407: Economics for Managing Information for Electronic Commerce
ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
ECP 7408: Empirical Industrial Organization
ECP 7418: Economics of Regulation
ECP 7419: Current Research in Regulation
HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

ENT 5275: Family Business Management
ENT 6006: Entrepreneurship
ENT 6008: Entrepreneurial Opportunity
ENT 6016: Venture Analysis
ENT 6116: Business Plan Formation
ENT 6416: Venture Finance
ENT 6506: Social Entrepreneurship
ENT 6616: Creativity in Entrepreneurship
ENT 6905: Individual Work in Entrepreneurship
ENT 6930: Special Topics
ENT 6933: Entrepreneurship Lecture Series
ENT 6946: Entrepreneurial Consulting Project
ENT 6950: Integrated Technology Ventures
ENT 6957: International Studies in Entrepreneurship
FIN 5405: Business Financial Management
FIN 5437: Finance I: Asset Valuation, Risk, and Return
FIN 5439: Finance II: Capital Structure and Risk Management Issues
FIN 6108: Personal Financial Management
FIN 6246: Money and Capital Markets
FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
Information Systems and Operations Management Departmental Courses

- ISM5021: Information Systems in Organizations
- ISM6022: Management Information Systems
- ISM6123: Systems Analysis and Design
- ISM6128: Advanced Business Systems Design and Development I
- ISM6129: Advanced Business Systems Design and Development II
- ISM6215: Business Database Systems I
- ISM6216: Business Database Systems II
- ISM6217: Database Management Systems
- ISM6222: Business Telecom Strategy and Applications I
- ISM6223: Business Telecom Strategy and Applications II
- ISM6224: Business Telecom Strategy and Applications III
- ISM6226: Business Telecom Strategy and Applications
- ISM6236: Business Objects I
- ISM6239: Business Objects II
- ISM6257: Intermediate Business Programming
- ISM6258: Advanced Business Programming
- ISM6259: Business Programming
- ISM6405: Business Intelligence
- ISM6423: Data Analysis for Decision Support
- ISM6485: Electronic Commerce and Logistics
- ISM6486: eCommerce Technologies
- ISM6487: Risks and Controls in eCommerce
- ISM6942: Electronic Commerce Practicum
- ISM7166: Advanced Business Systems Design and Development III
- MAN5501: Management
- MAN5502: Production and Operations Management
- MAN6508: Management of Service Operations
- MAN6511: Production Management Problems
Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6853: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6857: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
Marketing Department

Chair: Joseph W. Alba
Graduate Coordinator: Lyle A. Brenner

The Marketing Department at the University of Florida is a recognized leader in the discipline of marketing. For over a decade, our faculty has ranked as one of the most productive and influential in the field. Our faculty is known for conducting provocative, cutting-edge research that contributes both to the scientific understanding and practice of marketing. Our Ph.D. program has produced many leading researchers in the discipline. And the David F. Miller Center for Retailing Education and Research is known as one of the foremost centers for developing the science of retailing.

The Marketing Department offers graduate work leading to the Ph.D. degree in business administration, the M.S. degree in business administration, and a concentration in the Master of Business Administration (M.B.A.) program. Requirements for the M.B.A., M.S., and Ph.D. degrees are described in the Graduate Degrees section of this catalog.

For more information, please see our website: http://warrington.ufl.edu/departments/mkt.

Other

Business Administration (Marketing - Master's)

The Masters of Business Administration (M.B.A) with a concentration in marketing focuses on consumer behavior, marketing management, and marketplace phenomenon. Students study the critical linkages between an organization and its environment, particularly customers and competitors.

The M.S. degree in Business Administration with a concentration in marketing is intended for students whose ultimate objective is to earn a Ph.D. in marketing at another institution. Applicants must have (a) an undergraduate degree from a nationally accredited program, (b) a minimum 3.5 undergraduate GPA, (c) a minimum 600 GMAT (1250 GRE), and (d) evidence of a strong interest in academic research in marketing. The concentration requires 30 credits of graduate-level courses, at least half of which must be in marketing.

Degrees Offered with a Major in Business Administration

Master of Arts

concentration in Marketing

Master of Science
concentration in Marketing

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7798: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Business Administration (Marketing - Ph.D.)

College

Warrington College of Business Administration

Department/School

Marketing Department
Business Administration (Marketing - Ph.D.)

The doctoral program is research-focused and offers the opportunity for concentrated study in consumer behavior, marketing management, and quantitative or analytical modeling of marketplace phenomena.

The Ph.D. curriculum consists of course work in three areas: research foundations, the major field, and electives. In addition, students are required to complete a first-year summer research project, a third-year review paper, and a dissertation. Other requirements are outlined in the Graduate Degrees section of this catalog.

The research foundations requirement comprises a set of research methods and data analysis courses chosen from statistics, psychology, and/or economics. The major field course work is made up of a set of four required marketing seminars that are completed during the student’s first 2 years in the program. Electives are selected from both advanced marketing seminars and other related disciplines to complement the student’s research program.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

concentration in Marketing

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7586: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5077: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 6985: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax I
- TAX 5027: Federal Income Tax II
- TAX 5065: Tax Professional Research
- TAX 5105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6965: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Macroeconomic Theory
- ECO 7116: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research forDoctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6874: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6436: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics In Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7806: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5119: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary/Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
- REE 6910: Supervised Research
- REE 6930: Special Topics in Real Estate
- REE 6935: Real Estate Case Studies
- REE 6940: Supervised Teaching
- REE 6948: Capstone Seminar and Applied Project
- REE 6957: International Studies in Real Estate
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 5022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6489: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporate Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6552: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6268: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6226: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
GEB 6957: International Studies in Business

College of Dentistry

Interim Dean: Boyd Robinson
Associate Dean & Director: Roberta Pileggi

Complete faculty listing: Follow this link.

Advanced education has progressed over the years to be an integral component of the College of Dentistry, growing from six certificate residency programs, with an enrollment of only 36 students in 1979, to fourteen certificate programs and various fellowship programs. Enrollment is now over 140. In 1993, the college started master degree programs in endodontics, orthodontics, periodontics and prosthodontics, and continues today to grow.

Follow this link for more information about UF's College of Dentistry graduate programs: http://admissions.dental.ufl.edu/advanced-graduate-programs/programs-application-process/

Departments and Programs within the College of Dentistry

College of Dentistry Courses

Dental Sciences Department

Endodontics Chair and Graduate Coordinator: Roberta Pileggi
Orthodontics Chair and Graduate Coordinator: Calogero Dolce
Periodontology Chair: Ikramuddin Aukhil; Graduate Coordinator: Rodrigo Neiva
Restorative Dental Sciences Interim Chair: William Willis; Graduate Coordinator: Edgar O'Neill

Complete faculty listing: Follow this link.

The College of Dentistry offers the Master of Science degree in dental sciences with concentrations in endodontics, orthodontics, periodontics, and prosthodontics. These concentrations include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include:

- Satisfactory completion of all course work
- Meeting the requirements for clinical certification in the respective dental specialty
- Thesis or project based on research.

Prerequisites for admission, in addition to those of the Graduate School, include:

- D.D.S. or D.M.D. degree
- Completion of Parts I and II of the American Dental Association's National Board of Dental Examinations.

The application deadline for Endodontics, Periodontics, and Prosthodontics is August 1
The application deadline of Orthodontics is September 2

Send applications to:
Master of Science Program,
College of Dentistry,
P.O. Box 100402,
Health Science Center,
University of Florida,
Gainesville, FL 32610-0402

Requirements for the M.S. degree are provided in the Graduate Degrees section of this catalog.

For further information, see the Dental Science program link below.

Other

Dental Sciences

College

College of Dentistry

Department/School

Dental Sciences Department

Dental Sciences Program Information

The College of Dentistry offers the Master of Science degree in dental sciences with concentrations in endodontics, orthodontics, periodontics, and prosthodontics. These concentrations
include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include:

- Satisfactory completion of all course work
- Meeting the requirements for clinical certification in the respective dental specialty
- Thesis or project based on research.

Prerequisites for admission, in addition to those of the Graduate School, include:

- D.D.S. or D.M.D. degree
- Completion of Parts I and II of the American Dental Association's National Board of Dental Examinations.

The application deadline for Endodontics, Periodontics, and Prosthodontics is August 1.
The application deadline of Orthodontics is September 2.

Send applications to:

Master of Science Program,  
College of Dentistry,  
P.O. Box 100402,  
Health Science Center,  
University of Florida,  
Gainesville, FL 32610-0402.

Those not in Dentistry are given in-department graduate credit. Registration in the courses listed below is restricted to students currently admitted to a program in the College of Dentistry.

**Degrees Offered with a Major in Dental Sciences**

**Master of Science**

- **without a concentration**

- **concentration in Endodontics**

- **concentration in Orthodontics**

- **concentration in Periodontics**

- **concentration in Prosthodontics**

**General Courses**

- **DEN 6937**
- **DEN 6674: Advanced Oral Pathology**
- **DEN 6675: Craniofacial Pain**
- **DEN 6678: Advanced Oral Medicine and Drug Interactions in Dentistry**
- **DEN 6679: Advanced Radiology and Interpretation**
- **DEN 6905: Individual Study**
- **DEN 6910: Supervised Research**
- **DEN 6934: Special Topics in Dentistry**
- **DEN 6935: Special Topics in Dentistry**
- **DEN 6936: Practice Management**
- **DEN 6940: Supervised Teaching**
- **DEN 6941: Clinical Teaching in Dentistry**
DEN 6942: Grand Rounds
DEN 6971: Research for Master's Thesis
DEN 6973: Project in Lieu of Thesis

Endodontics Courses

DEN 6642: Introduction to Advanced Endodontics
DEN 6643: Treatment Planning/Cases Presentation
DEN 6644: Nonsurgical Endodontic Care I
DEN 6645: Nonsurgical Endodontic Care II
DEN 6646: Surgical Endodontics I
DEN 6647: Surgical Endodontics II

Orthodontics Courses

DEN 6602: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 1: Class I Treatment
DEN 6603: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 2: Class II Treatment
DEN 6604: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 3: Class II Treatment and Oerbble Treatments
DEN 6605: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 4: Class II Treatment and Oerbble Treatments
DEN 6606: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 5: Class III and Crossbite Treatments and Soft Tissue Considerations
DEN 6607: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 6: Impactions, Transplantations and Stability
DEN 6608: Analysis, Diagnosis, and Treatment Planning: Part I
DEN 6609: Analysis, Diagnosis, and Treatment Planning: Part II
DEN 6610: Biology of Tooth Movement: Part I
DEN 6612: Orthodontic Biomechanics: Part I
DEN 6613: Orthodontic Biomechanics: Part II
DEN 6614: Ortho-Perio Relationships: Part I
DEN 6615: Ortho-Perio Relationships: Part II
DEN 6616: Orthognathic Surgery: Part I
DEN 6617: Orthognathic Surgery: Part II
DEN 6618: Postnatal Growth and Development
DEN 6670: Craniofacial Anomalies
DEN 6671: Prenatal Growth and Development
DEN 6672: Materials in Orthodontics

Periodontics Courses

DEN 6652: Review of Periodontics Literature I
DEN 6653: Review of Periodontics Literature II
DEN 6654: Review of Periodontics Literature III
DEN 6655: Review of Periodontics Literature IV
DEN 6656: Introduction to Advanced Periodontology
DEN 6657: Periodontal Histology and Histopathology
DEN 6658: Treatment Planning in Periodontal Therapy

Prosthodontics Courses

DEN 6622: Principles of Occlusion
DEN 6623: Maxillofacial Prosthetics
DEN 6624: Dental Implant Restoration
DEN 6625: Fixed Prosthodontic Ceramics
DEN 6626: Advanced Removable Partial Dentures
DEN 6627: Treatment Planning Seminar

College of Design, Construction, and Planning

Dear: C. Silver

Complete faculty listings: Follow this link.

DCP is home to five independent professional disciplines: architecture, construction management, interior design, landscape architecture and urban and regional planning. The college also is home to an interdisciplinary program in historic preservation, which allows graduate students to gain expertise in research and application of historic preservation in the United States and abroad.

Accreditation and Degrees
The academic programs in the college have an accreditation process from the professional organizations of each discipline.

- Architecture – National Architectural Accrediting Board
- Construction Management – American Council for Construction Education
- Interior Design – Foundation for Interior Design Education Research
- Landscape Architecture – American Society of Landscape Architects
- Urban and Regional Planning – Planning Accreditation Board

DCP offers both undergraduate and graduate degrees and programs. Through its academic units, the college offers doctoral, master's, and bachelor's degrees, as well as distance education programs, combined degrees, joint degrees, certificate programs, and academic minors.

**College Institutes, Centers and Programs**

Research and service projects conducted through the research centers and institutes often entail multidisciplinary, cross-campus student input and effort. Each division of the college is involved in on-going projects that advance both scholarly study and professional practice. The college contributes to community, state, regional and national efforts to conserve and improve the quality of the natural and built environments through its research centers. The college's teaching and research programs have national and international prominence.

For more information, please see our website: [http://www.dcp.ufl.edu](http://www.dcp.ufl.edu)

**Departments and Programs within the College of Design, Construction, and Planning**

College of Design, Construction, and Planning Courses

**Other**

**Design, Construction, and Planning (Ph.D.)**

College

College of Design, Construction, and Planning

Degrees Offered with a Major in Design, Construction, and Planning

Doctor of Philosophy

without a concentration

concentration in Construction Management

  *optional second concentration in Geographic Information Systems*

concentration in Geographic Information Systems

concentration in Historic Preservation

  *optional second concentration in Geographic Information Systems*

concentration in Interior Design

  *optional second concentration in Geographic Information Systems*

concentration in Landscape Architecture

  *optional second concentration in Geographic Information Systems*

concentration in Urban and Regional Planning
optional second concentration in Geographic Information Systems

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6357: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Connections
- ARC 6399: Advanced Topics in Urban Design
- ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
- ARC 6576: Architectural Structures
- ARC 6611: Advanced Topics in Architectural Technology
- ARC 6621: Graduate Environmental Technology 2
- ARC 6642: Architectural Acoustic Design Laboratory
- ARC 6643: Architectural Acoustics
- ARC 6670: Lighting Design Seminar
- ARC 6685: Life Safety, Sanitation, and Plumbing Systems
- ARC 6705: Graduate Architectural History 3
- ARC 6711: Architecture of the Ancient World
- ARC 6750: Architectural History: America
- ARC 6773: Strains of Modernism
- ARC 6793: Advanced Topics in Regional Architecture
- ARC 6805: Architectural Conservation
- ARC 6821: Preservation Problems and Processes
- ARC 6822: Preservation Programming and Design
- ARC 6851: Technology of Preservation: Materials and Methods I
- ARC 6852: Technology of Preservation: Materials and Methods II
- ARC 6883: Vernacular Architecture & Sustainability
- ARC 6911: Architectural Research
- ARC 6912: Architectural Research II
- ARC 6913: Architectural Research III
- ARC 6932: Advanced Topics in Architectural Methods
- ARC 6933: Sustainable Site Design
- ARC 6934: European Approach to Sustainable Design
- ARC 6935: Seminar in Sustainable Design
- ARC 6940: Supervised Teaching
- ARC 6971: Research for Master's Thesis
- ARC 6979: Master's Research Project

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5723: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6766: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
- ICM 5905: Special Studies
- ICM 6420: Commercial Management and Cost Control
- ICM 6440: Construction Value Management
- ICM 6680: Principles of International Sustainable Construction
- ICM 6682: Construction Ecology and Metabolism
- ICM 6684: High-Performance Green Building Delivery Systems
- ICM 6710: Construction Human Resource Management
- ICM 6750: Managing Construction Information Technology
- ICM 6751: International Construction Management
- ICM 6752: Construction Finance and Investment
- ICM 6761: Advanced Planning, Scheduling, and Logistics
- ICM 6762: Construction Risk Management
- ICM 6770: Advanced Project Safety Management
- ICM 6772: International Strategic Management
- ICM 6905: Directed Independent Study in International Construction
- ICM 6910: Supervised Research
- ICM 6930: Construction Communication and Research
- ICM 6934: International Construction Research

Interior Design Departmental Courses

- IND 5023: Introduction to Architectural Interiors
- IND 5106: History of Interior Design I
- IND 5136: History of Interior Design II
- IND 5212C: Architectural Interiors I
- IND 5213C: Introduction to Architectural Interiors Lab
- IND 5227C: Advanced Architectural Interiors I
- IND 5231C: Architectural Interiors II
- IND 5232C: Advanced Architectural Interiors II
- IND 5317C: Interior Design Communication Systems
- IND 5427C: Interior Design Construction Documents
- IND 5428: Materials for Interior Design
- IND 5434C: Interior Lighting
- IND 5445C: Furniture Design
- IND 5454C: Advanced Interior Design Detailing and Construction Documents
- IND 5464C: Computer Applications in Three-Dimensional Design
- IND 5466: Interior Environmental Technology
- IND 5508: Business and Professional Practices for Interior Designers
- IND 5638: Design Environments and Human Interaction
- IND 5937: Current Topics in Interior Design
- IND 6239: Advanced Topics in Interior Design Studio
- IND 6639: Methods of Interior Design Research
- IND 6906: Independent Studies and Readings
- IND 6940: Supervised Teaching
- IND 6941: Interior Design Internship
- IND 6971: Research for Master's Thesis

Landscape Architecture Departmental Courses

- LAA 5331: Site Design Methodologies
- LAA 5336: Principles of Landscape Architecture
- LAA 6231: Landscape Architecture Theory
- LAA 6322: Project Management for Landscape Architects
- LAA 6342: Landscape Architecture Criticism
- LAA 6349C: Design Communications for Landscape Architects
- LAA 6382: Ecological and Environmental Policy
- LAA 6525L: Advanced Landscape Construction Design
- LAA 6536: Landscape Management
● LAA 6656C: Advanced Landscape Architectural Design
● LAA 6713: Cultural Landscapes
● LAA 6716: History of Landscape Architecture
● LAA 6905: Directed Study
● LAA 6931: Water Conservation through Site Design and Green Roofs
● LAA 6931C: Special Topics
● LAA 6933: Topics in European Design: Paris, France
● LAA 6935: Gardens of the World
● LAA 6941: Supervised Internship
● LAA 6952C: European Landscape Architecture Studio
● LAA 6971: Research for Master's Thesis
● LAA 6979: Terminal Project

Urban and Regional Planning Departmental Courses

● URP 6042: Urban Economy
● URP 6061: Planning Administration and Ethics
● URP 6100: Planning Theory and History
● URP 6122: Alternative Conflict Management
● URP 6131: Growth Management Powers I
● URP 6132: Growth Management Seminar
● URP 6203: Planning Research Design
● URP 6231: Quantitative Data Analysis for Planners
● URP 6270: Survey of Planning Information Systems
● URP 6271: Planning Information Systems
● URP 6272: Advanced Planning Information Systems
● URP 6274: GPS for Planners: Introduction to Global Positioning System
● URP 6275: Spatial Database Design and Development
● URP 6312: Land Development Planning and Evaluation
● URP 6341: Urban Planning Project
● URP 6421: Environmental Impact Statements
● URP 6424: Sustainable Urbanism in the Americas
● URP 6428: Advanced Environmental Planning
● URP 6429: Natural Resources Planning and Management
● URP 6445: Planning for Climate Change
● URP 6526: Health and the Built Environment
● URP 6541: Economic Development Planning
● URP 6542: Urban Land Economics
● URP 6543: Seminar in Capital Improvement Finance
● URP 6547: Local Public Finance for Urban Planners
● URP 6601: State Planning
● URP 6603: Development Review
● URP 6610: International Development Planning
● URP 6716: Transportation Policy and Planning
● URP 6718: Bikeways Planning and Design
● URP 6745: Housing, Public Policy, and Planning
● URP 6746: Topical Debates in Housing
● URP 6821: Transportation and Land-Use Modeling
● URP 6871: Planning and Design I
● URP 6872: Planning and Design II
● URP 6880: Defensible Space and CPTED in Urban Design
● URP 6884: Community Conservation and Revitalization
● URP 6905: Exploration and Directed Study
● URP 6910: Supervised Research
● URP 6920: Colloquium
● URP 6931: Topical Seminar
● URP 6933: Planning Information Seminar
● URP 6940: Supervised Teaching
● URP 6941: Urban Planning Internship
● URP 6971: Research for Master's Thesis
● URP 6979: Terminal Project

College of Design, Construction, and Planning Courses

● DCP 6205: Ecological Issues in Sustainability and the Built Environment
● DCP 6211: Preservation Topics, Issues, and Practice
● DCP 6710: History and Theory of Historic Preservation
● DCP 6711: History of the Built Environment for Preservation Practice
● DCP 6712: Preservation Technology: Conserving Modern Buildings
● DCP 6713: Historic Preservation: Principles, Practice, and Engineering
● DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
● DCP 6715: Preservation Building Technology
● DCP 6716: Cultural Resource Management
● DCP 6730: Preservation Policy
● DCP 6905: Independent Study
● DCP 6931: Special Topics in Design, Construction, and Planning
● DCP 6943: Practicum in Historic Preservation
● DCP 6971: Research for Master's Thesis
Historic Preservation

College

College of Design, Construction, and Planning

Degrees Offered with a Major in Historic Preservation

Master of Historic Preservation

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6357: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Connections
- ARC 6399: Advanced Topics in Urban Design
- ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
- ARC 6576: Architectural Structures
- ARC 6611: Advanced Topics in Architectural Technology
- ARC 6621: Graduate Environmental Technology 2
- ARC 6642: Architectural Acoustic Design Laboratory
- ARC 6643: Architectural Acoustics
- ARC 6670: Lighting Design Seminar
- ARC 6685: Life Safety, Sanitation, and Plumbing Systems
- ARC 6705: Graduate Architectural History 3
- ARC 6711: Architecture of the Ancient World
- ARC 6750: Architectural History: America
- ARC 6773: Strains of Modernism
- ARC 6793: Advanced Topics in Regional Architecture
- ARC 6805: Architectural Conservation
- ARC 6821: Preservation Problems and Processes
- ARC 6822: Preservation Programming and Design
- ARC 6851: Technology of Preservation: Materials and Methods I
- ARC 6852: Technology of Preservation: Materials and Methods II
- ARC 6883: Vernacular Architecture & Sustainability
- ARC 6911: Architectural Research
- ARC 6912: Architectural Research II
- ARC 6913: Architectural Research III
- ARC 6932: Advanced Topics in Architectural Methods
- ARC 6933: Sustainable Site Design
- ARC 6934: European Approach to Sustainable Design
- ARC 6935: Seminar in Sustainable Design
- ARC 6940: Supervised Teaching
- ARC 6971: Research for Master's Thesis
- ARC 6979: Master's Research Project
Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5819: Methods and Management for Heavy Construction
- BCN 5835: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6932: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6766: Research Methods in FES
- FES 6800: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
- ICM 5905: Special Studies
- ICM 6420: Commercial Management and Cost Control
- ICM 6440: Construction Value Management
- ICM 6680: Principles of International Sustainable Construction
- ICM 6682: Construction Ecology and Metabolism
- ICM 6684: High-Performance Green Building Delivery Systems
- ICM 6710: Construction Human Resource Management
- ICM 6750: Managing Construction Information Technology
- ICM 6751: International Construction Management
- ICM 6752: Construction Finance and Investment
- ICM 6761: Advanced Planning, Scheduling, and Logistics
- ICM 6762: Construction Risk Management
- ICM 6770: Advanced Project Safety Management
- ICM 6772: International Strategic Management
- ICM 6905: Directed Independent Study in International Construction
- ICM 6910: Supervised Research
- ICM 6930: Construction Communication and Research
- ICM 6934: International Construction Research

Interior Design Departmental Courses

- IND 5023: Introduction to Architectural Interiors
- IND 5106: History of Interior Design I
- IND 5136: History of Interior Design II
- IND 5212C: Architectural Interiors I
- IND 5213C: Introduction to Architectural Interiors Lab
- IND 5227C: Advanced Architectural Interiors I
- IND 5231C: Architectural Interiors II
- IND 5232C: Advanced Architectural Interiors II
- IND 5317C: Interior Design Communication Systems
- IND 5427C: Interior Design Construction Documents
- IND 5428: Materials for Interior Design
- IND 5434C: Interior Lighting
- IND 5445C: Furniture Design
- IND 5454C: Advanced Interior Design Detailing and Construction Documents
- IND 5464C: Computer Applications in Three-Dimensional Design
- IND 5466: Interior Environmental Technology
- IND 5508: Business and Professional Practices for Interior Designers
- IND 5638: Design Environments and Human Interaction
- IND 5937: Current Topics in Interior Design
- IND 6239: Advanced Topics in Interior Design Studio
- IND 6639: Methods of Interior Design Research
- IND 6906: Independent Studies and Readings
- IND 6940: Supervised Teaching
- IND 6941: Interior Design Internship
- IND 6971: Research for Master's Thesis

Landscape Architecture Departmental Courses

- LAA 5331: Site Design Methodologies
- LAA 5366: Principles of Landscape Architecture
- LAA 6231: Landscape Architecture Theory
- LAA 6322: Project Management for Landscape Architects
- LAA 6342: Landscape Architecture Criticism
- LAA 6349C: Design Communications for Landscape Architects
- LAA 6362: Ecological and Environmental Policy
- LAA 6525L: Advanced Landscape Construction Design
- LAA 6536: Landscape Management
- LAA 6656C: Advanced Landscape Architectural Design
- LAA 6713: Cultural Landscapes
- LAA 6716: History of Landscape Architecture
- LAA 6905: Directed Study
- LAA 6931: Water Conservation through Site Design and Green Roofs
- LAA 6931C: Special Topics
- LAA 6903: Topics in European Design: Paris, France
- LAA 6905: Gardens of the World
- LAA 6941: Supervised Internship
- LAA 6952C: European Landscape Architecture Studio
- LAA 6971: Research for Master's Thesis
- LAA 6979: Terminal Project

Urban and Regional Planning Departmental Courses

- URP 6042: Urban Economy
- URP 6061: Planning Administration and Ethics
- URP 6100: Planning Theory and History
- URP 6122: Alternative Conflict Management
- URP 6131: Growth Management Powers I
- URP 6132: Growth Management Seminar
- URP 6203: Planning Research Design
- URP 6231: Quantitative Data Analysis for Planners
- URP 6270: Survey of Planning Information Systems
- URP 6271: Planning Information Systems
- URP 6272: Advanced Planning Information Systems
- URP 6274: GPS for Planners: Introduction to Global Positioning System
- URP 6275: Spatial Database Design and Development
- URP 6312: Land Development Planning and Evaluation
- URP 6341: Urban Planning Project
- URP 6421: Environmental Impact Statements
- URP 6424: Sustainable Urbanism in the Americas
- URP 6428: Advanced Environmental Planning
- URP 6429: Natural Resources Planning and Management
- URP 6445: Planning for Climate Change
- URP 6526: Health and the Built Environment
- URP 6541: Economic Development Planning
- URP 6542: Urban Land Economics
- URP 6543: Seminar in Capital Improvement Finance
- URP 6547: Local Public Finance for Urban Planners
- URP 6601: State Planning
- URP 6603: Development Review
- URP 6610: International Development Planning
- URP 6716: Transportation Policy and Planning
- URP 6718: Bikeways Planning and Design
- URP 6745: Housing, Public Policy, and Planning
- URP 6746: Topical Debates in Housing
- URP 6821: Transportation and Land-Use Modeling
- URP 6871: Planning and Design I
- URP 6872: Planning and Design II
- URP 6880: Defensible Space and CPTED in Urban Design
- URP 6884: Community Conservation and Revitalization
- URP 6905: Exploration and Directed Study
- URP 6910: Supervised Research
The University of Florida School of Architecture offers the following NAAB-accredited degree programs:

Doctor of Architecture and Master of Architecture degree programs may constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture (pre-professional degree + 52 graduate credits) Master of Architecture (professional degree + 30 graduate credits) Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits)

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Florida School of Architecture offers the following NAAB-accredited degree programs:

Master of Architecture (pre-professional degree + 52 graduate credits) Master of Architecture (professional degree + 30 graduate credits) Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits)
Accredited 5-year professional base: For students with a baccalaureate degree in architecture from an accredited 5-year professional degree program, a 1-year degree program is available. In these cases, a specialized curriculum is developed that complements the needs of the applicant. Minimum registration is 30 credits; however, the minimum may increase if transcript reviews show that further course work is needed to meet registration and curriculum requirements. ARC 6356 is a prerequisite for the thesis or master's project.

Most states require individuals intending to become architects to hold an accredited degree. The National Architectural Accrediting Board acknowledges two types of degrees: the Bachelor of Architecture (minimum 5 years of study); and the Master of Architecture (minimum 3 years of study after an unrelated bachelor's degree, or 2 years after a related pre-professional bachelor's degree). These professional degrees educate those who aspire to registration and licensure to practice as architects.

Student work: The College may retain student work for the purpose of record, exhibition, or instruction.

Master of Science in Architectural Studies: The M.S.A.S. is a nonprofessional degree for advanced investigations in specialized areas of architectural history, architectural pedagogy, theory, technology, design, preservation, or practice. Students with a bachelor's degree in any discipline from an accredited university are eligible to apply to this program; the proposed area of focus should be precisely defined in the application. This is a 3- to 4-semester program (32 hours minimum) that includes a thesis. (No more than 6 hours of ARC 6971 may be counted in the minimum credit hours for the degree.) Interdisciplinary study is encouraged. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design.

The School sponsors special curricula in architecture to enhance the academic program. Preservation Institute: Caribbean, Preservation Institute: Nantucket, and Vicenza Institute of Architecture (Italy) accepts students from the University of Florida, and also from academic circles throughout the United States and the world for year-round study. Any student in a graduate architecture program at the University of Florida may apply for one or more of these programs.

Requirements for the M.Arch., M.S.A.S., and Ph.D. degrees are described in the General Information section of this catalog.

The School also participates in a program granting an Interdisciplinary Concentration and Certificate in Sustainable Architecture. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

Applications: All applications for fall term graduate admission (including official transcripts, GRE scores, and TOEFL scores, if necessary) must be received by the Office of the Registrar by January 15. In addition to satisfying University requirements for admission, applicants are required to submit to the Graduate Program Assistant, School of Architecture, 231 ARCH, Box 115702, the following: a portfolio of their creative work; a scholarly statement of intent and objectives; and three letters of recommendation. This material must be received by January 15 to be considered for admission in the next fall term. Students may apply after the January 15 deadline but will only be considered if spaces become available. (Updates of portfolios are accepted after January 15; however, applications will not be considered until they are complete.)

The School reserves the right to retain student work for purposes of record, exhibition, or instruction. Field trips are required of all students; students should plan to have adequate funds available. It may be necessary to assess studio fees to defray costs of base maps and other generally used materials.
Master of Architecture

without a concentration

centration in Historic Preservation

centration in Sustainable Architecture

centration in Sustainable Design

Courses

- ARC 6512: Structural Modeling
- ARC 6116: Drawing toward Architecture
- ARC 6311C: Building Information Modeling
- ARC 6383: St. Augustine Interdisciplinary Design Studio
- DCP 6710: History and Theory of Historic Preservation
- DCP 6715: Preservation Building Technology
- DCP 6971: Research for Master's Thesis
- URP 6272: Advanced Planning Information Systems

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6357: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Connections
- ARC 6399: Advanced Topics in Urban Design
- ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
- ARC 6576: Architectural Structures
- ARC 6611: Advanced Topics in Architectural Technology
- ARC 6621: Graduate Environmental Technology 2
- ARC 6642: Architectural Acoustic Design Laboratory
- ARC 6643: Architectural Acoustics
- ARC 6670: Lighting Design Seminar
- ARC 6685: Life Safety, Sanitation, and Plumbing Systems
- ARC 6705: Graduate Architectural History 3
- ARC 6711: Architecture of the Ancient World
- ARC 6750: Architectural History: America
- ARC 6773: Strains of Modernism
- ARC 6793: Advanced Topics in Regional Architecture
- ARC 6805: Architectural Conservation
addition to these 6 research-oriented graduate credit hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses

No more than 3 credits of courses to provide a foundation for advanced courses. There is no foreign language requirement.

methods, structures, and management. Students with deficiencies in these related fields may need longer residence for the master's degree, as they will be required to take specified basic systems, construction safety, and construction law. Requirements for the M.B.C., M.S.B.C., M.I.C.M., and Ph.D. degrees are given in the General Information section of this catalog.

The M.E. Rinker Sr. School offers courses leading to the degrees of Master of Science in Construction Management (thesis), Master of Construction Management (nonthesis), and Master of Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115705.

The M.E. Rinker Sr. School offers courses leading to the degrees of Master of Science in Construction Management (thesis), Master of Construction Management (nonthesis), and Master of International Construction Management (nonthesis distance education program for experienced professionals). An individual plan of study is prepared for each student to insure that the student's goals are achieved within the broad policy guidelines of the Rinker School. Specialization may be in such areas as construction management, sustainable construction, information systems, construction safety, affordable housing, productivity, and human resource management. These specializations prepare students to assume college-level faculty positions and industry research positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115705.

No more than 3 credits of ICM 6934 may be used to satisfy the credit requirements for the M.I.C.M. without written permission of the Director. All candidates are required to take ICM 6930. In addition to these 6 research-oriented graduate credit hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses.

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

M.E. Rinker, Sr., School of Construction Management

Director: Robert Ras
Director of Master’s Programs: Robert E. Minchin

Complete faculty listing: Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary doctoral program in design, construction, and planning. Areas of specialization in the program include architecture, construction management, interior design, landscape architecture, and urban and regional planning. Within the area of construction management, specialization options include sustainable construction, information systems, construction safety, affordable housing, productivity, and human resource management. These specializations prepare students to assume college-level faculty positions and industry research positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115705.

No more than 3 credits of ICM 6934 may be used to satisfy the credit requirements for the M.I.C.M. without written permission of the Director. All candidates are required to take ICM 6930. In addition to these 6 research-oriented graduate credit hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses.

Master of Construction Management (M.C.M.) or Master of Science in Construction Management (M.S.C.M.): To be eligible for admission to the M.C.M. or M.S.C.M. programs, a student must hold a 4-year undergraduate degree in building construction or its equivalent in related fields. "Equivalent in related fields" should include studies in construction materials and methods, structures, and management. Students with deficiencies in these related fields may need longer residence for the master's degree, as they will be required to take specified basic courses to provide a foundation for advanced courses. There is no foreign language requirement.

M.E. Rinker, Sr., School of Construction Management

Director: Robert Ras
Director of Master’s Programs: Robert E. Minchin

Complete faculty listing: Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary doctoral program in design, construction, and planning. Areas of specialization in the program include architecture, construction management, interior design, landscape architecture, and urban and regional planning. Within the area of construction management, specialization options include sustainable construction, information systems, construction safety, affordable housing, productivity, and human resource management. These specializations prepare students to assume college-level faculty positions and industry research positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115705.

The M.E. Rinker Sr. School offers courses leading to the degrees of Master of Science in Construction Management (thesis), Master of Construction Management (nonthesis), and Master of International Construction Management (nonthesis distance education program for experienced professionals). An individual plan of study is prepared for each student to ensure that the student's goals are achieved within the broad policy guidelines of the Rinker School. Specialization may be in such areas as construction management, sustainable construction, information systems, construction safety, and construction law. Requirements for the M.B.C., M.S.B.C., M.I.C.M., and Ph.D. degrees are given in the General Information section of this catalog.

Master of Construction Management (M.C.M.) or Master of Science in Construction Management (M.S.C.M.): To be eligible for admission to the M.C.M. or M.S.C.M. programs, a student must hold a 4-year undergraduate degree in building construction or its equivalent in related fields. "Equivalent in related fields" should include studies in construction materials and methods, structures, and management. Students with deficiencies in these related fields may need longer residence for the master's degree, as they will be required to take specified basic courses to provide a foundation for advanced courses. There is no foreign language requirement.

No more than 3 credits of ICM 6934 may be used to satisfy the credit requirements for the M.I.C.M. without written permission of the Director. All candidates are required to take ICM 6930. In addition to these 6 research-oriented graduate credit hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses.
and special electives. All candidates are required to pass a comprehensive oral and/or written examination at the completion of the course work and their master's research report/project.

The M.E. Rinker Sr. School reserves the right to retain student work for purposes of record, exhibition, or instruction.

**Research facilities:** The Shimberg Center for Housing Studies, operating within the School, researches the problems and possible solutions associated with developing and producing affordable housing. The Powell Center for Construction and the Environment conducts research on implementing sustainability in creating, operating, and constructing a built environment. The Fluor Program for Construction Safety researches and disseminates information on matters related to construction safety and health. The Center for Advanced Construction Information Modeling educates members of the AECO industry about new and emerging technologies in virtual design and construction.

**Combined program:** The School offers a combined bachelor's/master's degree program. Contact the Director of Master's Programs for information.

For more information, please see our website: [http://www.bcn.ufl.edu](http://www.bcn.ufl.edu).

**Other**

**Construction Management**

**College**

[College of Design, Construction, and Planning](http://www.bcn.ufl.edu)

**Department/School**

[M.E. Rinker, Sr., School of Construction Management](http://www.bcn.ufl.edu)

**Degrees Offered with a Major in Construction Management**

**Master of Construction Management**

without a concentration

concentration in Historic Preservation

concentration in Sustainable Construction

concentration in Sustainable Design

**Master of Science in Construction Management**

without a concentration

concentration in Historic Preservation

concentration in Sustainable Construction

concentration in Sustainable Design

**Construction Management Departmental Courses**

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
BCN 5905: Special Studies in Construction
BCN 5949: Graduate Construction Management Internship
BCN 5957: Advanced International Studies in Construction
BCN 6036: Research Methods in Construction
BCN 6580: High-Performance Green Building Delivery Systems
BCN 6585: Sustainable Construction
BCN 6586: Construction Ecology and Metabolism
BCN 6621: Bidding Strategy
BCN 6641: Construction Value Engineering
BCN 6748: Construction Law
BCN 6755: Construction Financial Management
BCN 6756: Housing Economics and Policy
BCN 6777: Construction Management Processes
BCN 6785: Construction Information Systems
BCN 6905: Directed Independent Study in Construction
BCN 6910: Supervised Research
BCN 6933: Advanced Construction Management
BCN 6934: Construction Research
BCN 6940: Supervised Teaching
BCN 6971: Research for Master's Thesis
FES 6705: Communications in Emergency Management
FES 6724: Fire and Emergency Services Response Planning
FES 6726: Hazard Mitigation and Preparedness
FES 6735: International Emergency/Disaster Management
FES 6736: Homeland Security and Emergency Management
FES 6786: Research Methods in FES
FES 6806: Disaster Response and Recovery
FES 6826: Emergency Services - Disaster Planning
FES 6827: Business Continuity and Disaster Planning
FES 6836: Impacts of Natural and Man-made Disasters on Buildings
FES 6916: Research for Master's Report
FES 6940: Practicum in FES
ICM 6420: Commercial Management and Cost Control
ICM 6440: Construction Value Management
ICM 6680: Principles of International Sustainable Construction
ICM 6682: Construction Ecology and Metabolism
ICM 6684: High-Performance Green Building Delivery Systems
ICM 6710: Construction Human Resource Management
ICM 6750: Managing Construction Information Technology
ICM 6751: International Construction Management
ICM 6752: Construction Finance and Investment
ICM 6761: Advanced Planning, Scheduling, and Logistics
ICM 6762: Construction Risk Management
ICM 6770: Advanced Project Safety Management
ICM 6772: International Strategic Management
ICM 6905: Directed Independent Study in International Construction
ICM 6910: Supervised Research
ICM 6930: Construction Communication and Research
ICM 6934: International Construction Research

College of Design, Construction, and Planning Courses

DCP 6206: Ecological Issues in Sustainability and the Built Environment
DCP 6211: Preservation Topics, Issues, and Practice
DCP 6710: History and Theory of Historic Preservation
DCP 6711: History of the Built Environment for Preservation Practice
DCP 6712: Preservation Technology: Conserving Modern Buildings
DCP 6713: Historic Preservation: Principles, Practice, and Engineering
DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
DCP 6715: Preservation Building Technology
DCP 6716: Cultural Resource Management
DCP 6730: Preservation Policy
DCP 6905: Independent Study
DCP 6931: Special Topics in Design, Construction, and Planning
DCP 6943: Practicum in Historic Preservation
DCP 6971: Research for Master's Thesis
DCP 7790: Doctoral Core I
DCP 7792: Doctoral Core II
DCP 7794: Doctoral Seminar
DCP 7911: Advanced Design, Construction, and Planning Research I
DCP 7940: Supervised Teaching
DCP 7949: Professional Internship
DCP 7979: Advanced Research
DCP 7980: Research for Doctoral Dissertation

Fire and Emergency Services
Fire and Emergency Services Program Information

The Master of Fire and Emergency Services degree program focuses on Emergency Services/Disaster Management (ES/DM) and is designed for individuals who are seeking knowledge in emergency planning, hazard mitigation and preparedness, disaster response and recovery, and homeland security. The goal is to create broad experience that includes the many elements of current cases in ES/DM and emphasizes both the critical thinking and leadership skills necessary to advance in the field.

The M.F.E.S. degree provides post-professional advancement for the critical technical issues beyond the initial fire science practices and administrative studies. Major research topics include interdisciplinary studies in material sciences, suppression systems, advanced planning and geographic systems, pre- and post-disaster mitigation planning, computer applications, and technological innovations.

The M.F.E.S. is an online distance education program. All courses are conveniently delivered utilizing a web-based e-Learning system.

For more information, please see our website: [http://www.bcnc.ufl.edu/academics/masters/msfesesdm](http://www.bcnc.ufl.edu/academics/masters/msfesesdm).

Degrees Offered with a Major in Fire and Emergency Services

Master of Fire and Emergency Services

without a concentration

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

International Construction Management

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr. School of Construction Management

Degrees Offered with a Major in International Construction Management

Master of International Construction Management

without a concentration
concentration in Historic Preservation

**Construction Management Departmental Courses**

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery/Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5798C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
- ICM 5905: Special Studies
- ICM 6420: Commercial Management and Cost Control
- ICM 6440: Construction Value Management
- ICM 6680: Principles of International Sustainable Construction
- ICM 6682: Construction Ecology and Metabolism
- ICM 6684: High-Performance Green Building Delivery Systems
- ICM 6710: Construction Human Resource Management
- ICM 6755: Managing Construction Information Technology
- ICM 6751: International Construction Management
- ICM 6752: Construction Finance and Investment
- ICM 6761: Advanced Planning, Scheduling, and Logistics
- ICM 6762: Construction Risk Management
- ICM 6770: Advanced Project Safety/Management
- ICM 6772: International Strategic Management
- ICM 6905: Directed Independent Study in International Construction
- ICM 6910: Supervised Research
- ICM 6930: Construction Communication and Research
- ICM 6934: International Construction Research

**College of Design, Construction, and Planning Courses**

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
Sustainable Construction

College

College of Design, Construction, and Planning

M.E. Rinker, Sr., School of Construction Management

Degrees Offered with a Major in Sustainable Construction

Master of Science in Construction Management

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5728: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
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- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
- ICM 5905: Special Studies
- ICM 6420: Commercial Management and Cost Control
- ICM 6440: Construction Value Management
- ICM 6680: Principles of International Sustainable Construction
- ICM 6682: Construction Ecology and Metabolism
- ICM 6684: High-Performance Green Building Delivery Systems
- ICM 6710: Construction Human Resource Management
- ICM 6750: Managing Construction Information Technology
- ICM 6751: International Construction Management
- ICM 6752: Construction Finance and Investment
- ICM 6761: Advanced Planning, Scheduling, and Logistics
- ICM 6762: Construction Risk Management
- ICM 6770: Advanced Project Safety Management
- ICM 6772: International Strategic Management
- ICM 6805: Directed Independent Study in International Construction
- ICM 6810: Supervised Research
- ICM 6930: Construction Communication and Research
- ICM 6934: International Construction Research

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Interior Design Department

Chair: M. Portillo.
Graduate Coordinator: N. Park

Complete faculty listing by department: Follow this link.

Doctor of Philosophy:
The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

Master of Interior Design:
The Master of Interior Design (M.I.D.) provides opportunities for students to direct their attention toward a variety of topics, including
- Design pedagogy and processes
- Sustainable, safe, and secure environments
- Creative performance and innovation
- Built heritage conservation.

Regardless of the study emphasis selected by the student, the M.I.D. program has a central focus with three categories of course work:
- Design studio
- Seminars in current interior design topics
- Theories and methods of research.

All M.I.D. students must complete an approved research topic with a written thesis. Requirements for the M.I.D. and Ph.D. degrees are given in the General Information section of this catalog.

Applications:
All applications must include acceptable GRE scores, transcripts for all previous academic work, and if the applicant's native language is not English, a satisfactory score on one of the
following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute. This information must be received in the Office of the Registrar by February 2. In addition to satisfying University requirements for admission, the applicants are required to submit to the Graduate Program Assistant, Department of Interior Design, 336 Architecture, P.O. Box 115705, University of Florida, Gainesville, FL 32611-5705, the following:

- A portfolio of your design work (if applicable). The portfolio must be accompanied by a self-addressed, stamped envelope.
- A written essay on your goals and aspirations related to graduate studies
- Three letters of recommendation.
- A personal interview is not required, but many applicants choose to visit the campus and Department as a part of the application process.

Students enrolled in the Bachelor of Interior Design program at the University of Florida may apply to the M.I.D. program during their junior year (see below).

The Department reserves the right to retain student course work for the purposes of record, exhibition, or instruction. Field trips are required for all students; students should plan to have adequate funds available. Students are required to purchase a computer for course work. It may be necessary to assess studio fees to defray costs of base maps, plans, and other generally used materials.

Admission: Applications are processed through February 2 for fall term and all applicants are encouraged to apply as soon as possible. Admission decisions are made between February and the end of April. All new students begin their studies in the fall to coincide with curriculum sequencing.

Graduate course requirements according to background: After assessment of previous design work, leveling courses may be required to prepare the student for the M.I.D. 36 hours of graduate course work. Therefore, each student entering the Master of Interior Design program works with the graduate coordinator to evaluate the student's unique background to determine the specific courses needed to facilitate interest and experience. Estimated credit hours and length of study time vary according to each student's individual baccalaureate degree and experience.

There are four options:

- For students enrolled in the Bachelor of Design program at the University of Florida, 12 hours of graduate-level course work in the senior year can be counted for both the undergraduate and M.I.D. degrees. An additional 24 graduate credit hours are required. Expect at least 1 additional year to complete the M.I.D.
- For students who graduated from a Council of Interior Design Accreditation (CIDA) accredited first professional degree program within an architectural framework, the course of study is estimated to be 36 graduate credit hours. Expect 2 years to complete the M.I.D.
- For students who graduated from a design-related (architecture or interior design) baccalaureate degree program, the course of study is estimated to be a maximum of 59 graduate credit hours. Expect 3 to 4 years to complete leveling courses and the M.I.D.
- For students with a bachelor's degree in a field other than design, the course of study is estimated to be 86 undergraduate and graduate credit hours. Expect 3 to 4 years to complete leveling courses and the M.I.D.

Estimates of the number of credit hours and length of study time may be adjusted based on the individual student's previous preparation including experience as a practicing designer, architect, or other professional.

Program requirements: After leveling courses are completed and with approval by the graduate coordinator and supervisory committee chair, a student completes 24 hours of departmentally approved graduate work in the Department of Interior Design. In addition, with the graduate coordinator's approval, the student is required to take 3 hours of course work in graduate statistics and 9 hours of multidisciplinary graduate electives that reinforce and extend the research.

Courses from such academic units as Psychology, Anthropology, Sociology, Engineering, Education, and Business Administration provide possible electives. The College of Design, Construction and Planning offers the Certificate in Historic Preservation. If the focus of a student is the renovation and preservation of built environments, then historic preservation courses leading to a certificate would strengthen the research and design effort. Likewise, existing appropriate courses in Architecture, Landscape Architecture, Urban and Regional Planning, and Building Construction offer both collaborative study and research opportunities for M.I.D students.

Each student must select a two-member supervisory committee to guide course selection and to guide thesis selection, study, and production.

Other

Interior Design

College

College of Design, Construction, and Planning

Department/School

Interior Design Department

Degrees Offered with a Major in Interior Design

Master of Interior Design

without a concentration
Concentration in Historic Preservation

Concentration in Sustainable Design

Courses

- IND 5326: Color Theory Planning and Practice

Interior Design Departmental Courses

- IND 5023: Introduction to Architectural Interiors
- IND 5106: History of Interior Design I
- IND 5138: History of Interior Design II
- IND 5212C: Architectural Interiors I
- IND 5213C: Introduction to Architectural Interiors Lab
- IND 5227C: Advanced Architectural Interiors I
- IND 5231C: Architectural Interiors II
- IND 5232C: Advanced Architectural Interiors II
- IND 5317C: Interior Design Communication Systems
- IND 5427C: Interior Design Construction Documents
- IND 5428: Materials for Interior Design
- IND 5434C: Interior Lighting
- IND 5445C: Furniture Design
- IND 5454C: Advanced Interior Design Detailing and Construction Documents
- IND 5464C: Computer Applications in Three-Dimensional Design
- IND 5466: Interior Environmental Technology
- IND 5508: Business and Professional Practices for Interior Designers
- IND 5638: Design Environments and Human Interaction
- IND 5937: Current Topics in Interior Design
- IND 6239: Advanced Topics in Interior Design Studio
- IND 6906: Independent Studies and Readings
- IND 6940: Supervised Teaching
- IND 6941: Interior Design Internship
- IND 6971: Research for Master's Thesis

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Landscape Architecture Department
Complete faculty listing by department: Follow this link

The mission of the Department of Landscape Architecture is to advance the ethical, creative, and skillful application of the art and the science of planning and designing urban, rural and natural environments. The Master of Landscape Architecture seeks excellence through professional practice and service, and through research and scholarly pursuit.

Interstate field trips are required as part of the normal program curriculum. Students should plan to have adequate funds for field trips and for studio materials. Students are also required to own a laptop computer meeting minimum department requirements. These specifications are available through the department of Landscape Architecture's website at URL: http://www.diag.ufl.edu/landscape.

The Graduate program in Landscape Architecture offers flexibility in meeting the needs of applicants with varied backgrounds. Students entering the graduate program in landscape architecture follow one of the four following tracks:

Pre MLA Program
Graduate students who do not possess an LAAB accredited professional degree in landscape architecture are invited to enroll in the Pre MLA program.

The Pre MLA Program aids the development of basic analytical, design and graphic skills. Upon successful completion of the Pre MLA Summer term, students advance into a two-semester sequence of articulation courses that provide a foundation of applied landscape design and planning theory as well as competencies in landscape construction.

MLA Advanced Graduate Studies Program
Graduate students having completed the Pre MLA program or entering the MLA program with an LAAB accredited professional baccalaureate degree in Landscape Architecture commence a two year program of advanced graduate coursework towards the completion of the MLA degree.

MLA Program + Construction
Graduate students with a non-accredited or non-LAAB accredited degree in Landscape Architecture may apply directly to the MLA program but may be required to take additional coursework to develop core competencies required for advanced graduate study.

MLA Research Degree
Graduate students with an LAAB accredited professional degree in Landscape Architecture and a significant history of achievement in professional practice may tailor a program of advanced study to meet their specific needs. Proposals for the MLA Research Degree option are reviewed by the Graduate Coordinator and an approved course of study is determined through consultation with the Graduate Committee.

The normal tenure of advanced graduate study is five semesters which includes a summer semester internship. Students complete a minimum of 52 credit hours composed of lecture courses, seminars, design and construction studios, internship and individual study (special studies, supervised research and thesis or terminal project).

This time period would be extended should a student elect to expand the course work or seek a concurrent degree in a related field.

Design studios: Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio’s selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defensible design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

Thesis or terminal project: The Department recognizes that students have different professional goals and personal strengths and interests. A thesis is appropriate for students interested in further research or teaching or in pursuing advanced degrees. A project (with a significant research component) is appropriate for students interested in design or project-oriented aspects of landscape architecture, or if their specific areas of interest suggest a nontraditional approach.

Programs, centers, and institutes: The College of Design, Construction, and Planning has several research centers and institutes. The course work and summer sessions afforded by these programs offer both required and elective course work for graduate students in landscape architecture:

The Center for Landscape Conservation Planning: The Center for Landscape Conservation Planning conducts applied research on the relationship between conservation and land use while providing learning opportunities for students.

The Center for International Design and Planning: The Center for International Design and Planning conducts interdisciplinary research with a focus on emerging design and planning trends in an era of globalization with a focus on resilient development systems and adaptive design and planning strategies.

The Preservation Institute: Nantucket gives students an opportunity to receive specialized educational experience in a broad range of preservation topics using Nantucket as a resource for case-study projects.

The Preservation Institute: Caribbean gives students an opportunity to conduct and apply research regarding the conservation of the rich cultural traditions of the Greater Caribbean basin.

The GEOPLAN Center is dedicated to the development of geographic and spatial information systems. Graduate students receive instruction in geographic information systems and are involved in a multidisciplinary studio that applies the tools and systems understanding afforded by GIS.

Graduate advisement: Students are initially advised by the Graduate Coordinator. He or she has guided the student’s application through the acceptance process and is familiar with the student’s background and needs. A plan of study is developed that includes required and optional courses. By the end of the second semester of study, each student is required to form a supervisory committee composed of two faculty members. The primary purpose of the graduate committee is to advise the student on educational objectives and the thesis or terminal project course work.

Application Procedure
Details of application procedure are found on the Department of Landscape Architecture’s website. Applicants are encouraged to familiarize themselves with the details of the application procedures and the application requirements. Applications will ONLY be considered for the track for which they have been submitted. Make certain you are applying to the correct track based on your background and credentials and the criteria detailed above.

Application Dates
Applications are to be completed and submitted prior to the deadline noted on the Department’s website. Unless otherwise noted, international applications must be received by November 1st. Applications from within the US are to be received no later than February 1st. Early applications are encouraged.

Application materials to be submitted online and/or to the Office of the Registrar
Application materials include the online application form accompanied by official transcripts, Letters of Recommendation, GRE scores, and TOEFL scores (applicants with English as a second language) to Office of the Registrar: Admissions Section, Criser Hall, University of Florida, Gainesville, Florida 32611.

Application Materials to be submitted directly to the Department
In addition to the materials submitted to the registrar’s office, applicants must also submit a letter of intention to the Department of Landscape Architecture (Graduate Program Assistant).

Application Portfolio
All applicants are encouraged to submit a portfolio of creative works.

Post professional degree applicants applying for either the Pre MLA Fall Start or MLA Advanced Graduate Study program are required to submit a portfolio that both exhibits creative work...
experience and shows evidence of acquired technical proficiencies in the practice of landscape architecture.

All portfolio must be digital. PDF is preferred.

Application Status
Applications will be processed once all material has been received and must be complete prior to the application deadline. Applicants will be contacted by the Program Assistant if their application is incomplete. Please respond quickly if you have been contacted to increase the chances of your application being considered in the current review period. Only completed applications will be processed for review.

Once the application has been processed for review, applicants will receive written notification of their application status, generally sometime in the middle of March. Please do not contact the department with inquiries of your application status prior to the end of March.

Preparatory courses (see Undergraduate Catalog): LAA 2330, LAA 2350, LAA 2360, LAA 2370, LAA 3420, LAA 3350, LAA 3352, LAA 3421, LAA 3550, LAA 6716, and ORH 3513.

Other

Landscape Architecture

College

College of Design, Construction, and Planning

Department/School

Landscape Architecture Department

Landscape Architecture Program

The Department of Landscape Architecture offers graduate programs leading to the Master of Landscape Architecture (M.L.A.) degree in Landscape Architecture. A Ph.D. degree with a concentration in Landscape Architecture is also offered through the College of Design, Construction and Planning. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Master of Landscape Architecture: The MLA is a Landscape Architecture Accreditation Board (LAAB) accredited professional Master's degree in Landscape Architecture. Graduation from an accredited program is an essential first step toward licensing in Florida and other states that regulate the practice of landscape architecture.

For more information, please see our website: http://www.dcp.ufl.edu/landscape.

Degrees Offered with a Major in Landscape Architecture

Master of Landscape Architecture

without a concentration

concentration in Geographic Information Systems

concentration in Historic Preservation

concentration in Sustainable Design
concentration in Wetland Sciences

Landscape Architecture Departmental Courses

- LA 5331: Site Design Methodologies
- LA 5366: Principles of Landscape Architecture
- LA 6231: Landscape Architecture Theory
- LA 6322: Project Management for Landscape Architects
- LA 6342: Landscape Architecture Criticism
- LA 6349C: Design Communications for Landscape Architects
- LA 6382: Ecological and Environmental Policy
- LA 6525L: Advanced Landscape Construction Design
- LA 6538: Landscape Management
- LA 6556C: Advanced Landscape Architectural Design
- LA 6713: Cultural Landscapes
- LA 6716: History of Landscape Architecture
- LA 6905: Directed Study
- LA 6931: Water Conservation through Site Design and Green Roofs
- LA 6931C: Special Topics
- LA 6933: Topics in European Design: Paris, France
- LA 6935: Gardens of the World
- LA 6941: Supervised Internship
- LA 6952C: European Landscape Architecture Studio
- LA 6971: Research for Master's Thesis
- LA 6979: Terminal Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Urban and Regional Planning Department

Director of School of Landscape Architecture and Planning: Kristin Larsen
Chair: Joseli Macedo
Graduate Coordinator: Stanley Latimer
Graduate Coordinator of Online Degree program: Ferdinand Lewis
Complete faculty listing by department: Follow this link.

Doctor of Philosophy: The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in Design, Construction, and Planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

Master of Arts in Urban and Regional Planning: The Department of Urban and Regional Planning offers graduate work leading to the degree of Master of Arts in Urban and Regional Planning (M.A.U.R.P.). Students are encouraged to enter the program in the fall semester. The program is usually completed in two academic years. The student entering with an undergraduate degree and no graduate study must complete 52 hours of credit for the M.A.U.R.P. degree. Students who have a master's degree in a related field may transfer up to 18 graduate semester hours toward the 52 hour requirement. Such a transfer of credit requires the approval of the Department. The Department encourages students with any undergraduate degree who are interested in the field of planning to apply for admission.
Complete descriptions of the requirements for the M.A.U.R.P. and Ph.D. degrees are provided in the General Information section of this catalog.

The urban and regional planning curriculum is designed to provide a set of core studies and contextual projects which prepare the graduate for the practice of planning in public or private agencies at both national and international levels. The core studies include history and theory of planning; growth management at local, regional, and state levels; and related studies in community and regional social, natural, and economic systems. Contextual projects include, among many subject areas, urban design, transportation, regional planning, community redevelopment and preservation, housing, real estate, and economic development. The program emphasizes planning, policies, and design for the physical environment. Current specializations include growth management and transportation, urban design, housing, community and economic development, information technologies for planning and environmental planning. Students are also encouraged to take advantage of the extensive faculty, course offerings, and other resources available in the College of Design, Construction, and Planning and throughout the University. The Department has two research centers: The Geo-facilities Planning and Information Center (GeoPlan), the Center for Building Better Communities (CBBC), and the Center for Health and the Built Environment (CHBE).

The curriculum is supported by an extensive GIS laboratory, and a visual aid library. Variation from the core studies may be approved by the Department if the student can demonstrate education and experience to the faculty that would support such an alternative. The M.A.U.R.P. degree is accredited by the Planning Accreditation Board, a joint undertaking of the American Institute of Certified Planners and the Association of Collegiate Schools of Planning, for having achieved the highest applicable standards for graduate education in the field of planning. Graduates of the Department are prepared to practice urban and regional planning.

The Department of Urban and Regional Planning and the College of Law offer a joint degree program (see Requirements for Master’s Degrees in the General Information section of this catalog). Areas of concentration with other programs in the Graduate School may be developed to meet the individual needs of students. In addition to course work the student is required to complete an internship with a public or private planning office and the student must complete a thesis.

The Department reserves the right to retain student work for purposes of record, exhibition, or instruction.

Other

Urban and Regional Planning

College

College of Design, Construction, and Planning

Department/School

Urban and Regional Planning Department

Degrees Offered with a Major in Urban and Regional Planning

Master of Arts in Urban and Regional Planning

without a concentration

concentration in Geographic Information Systems

concentration in Historic Preservation

concentration in Sustainable Design

concentration in Tropical Conservation and Development
concentration in Wetland Sciences

Courses

- URP 6276: Internet Geographic Information Systems
- URP 6277: Land Use Visioning and Analysis
- URP 6610: International Development Planning
- URP 6711: Transportation and Land Use Coordination
- URP 6743: Affordable Housing Law
- URP 6855: Urban Form in Cities throughout the Americas
- URP 6887: Advanced Defensible Space in Urban Design

Urban and Regional Planning Departmental Courses

- URP 6042: Urban Economy
- URP 6061: Planning Administration and Ethics
- URP 6100: Planning Theory and History
- URP 6122: Alternative Conflict Management
- URP 6131: Growth Management Powers I
- URP 6132: Growth Management Seminar
- URP 6203: Planning Research Design
- URP 6231: Quantitative Data Analysis for Planners
- URP 6270: Survey of Planning Information Systems
- URP 6271: Planning Information Systems
- URP 6272: Advanced Planning Information Systems
- URP 6274: GPS for Planners: Introduction to Global Positioning System
- URP 6275: Spatial Database Design and Development
- URP 6312: Land Development Planning and Evaluation
- URP 6341: Urban Planning Project
- URP 6421: Environmental Impact Statements
- URP 6424: Sustainable Urbanism in the Americas
- URP 6428: Advanced Environmental Planning
- URP 6429: Natural Resources Planning and Management
- URP 6445: Planning for Climate Change
- URP 6526: Health and the Built Environment
- URP 6541: Economic Development Planning
- URP 6542: Urban Land Economics
- URP 6543: Seminar in Capital Improvement Finance
- URP 6547: Local Public Finance for Urban Planners
- URP 6601: State Planning
- URP 6603: Development Review
- URP 6610: International Development Planning
- URP 6716: Transportation Policy and Planning
- URP 6718: Bikeways Planning and Design
- URP 6745: Housing, Public Policy, and Planning
- URP 6746: Topical Debates in Housing
- URP 6821: Transportation and Land-Use Modeling
- URP 6871: Planning and Design I
- URP 6872: Planning and Design II
- URP 6880: Defensible Space and CPTED in Urban Design
- URP 6884: Community Conservation and Revitalization
- URP 6905: Exploration and Directed Study
- URP 6910: Supervised Research
- URP 6920: Colloquium
- URP 6931: Topical Seminar
- URP 6933: Planning Information Seminar
- URP 6940: Supervised Teaching
- URP 6941: Urban Planning Internship
- URP 6971: Research for Master's Thesis
- URP 6979: Terminal Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
College of Education

Dear: G. Good.

Complete faculty listings: [Follow this link](http://education.ufl.edu/graduate-studies).

Graduate study in education, allows individuals with bachelor's degrees in agriculture, business, education, engineering, mathematics, sciences, humanities, foreign languages, preprofessional studies and other fields to prepare for rewarding professional careers in education and related fields.

The College of Education offers 19 master's or specialist programs, 12 doctoral programs, and a J.D./Ph.D. program with the College of Law through its three schools: [Human Development and Organizational Studies in Education](http://education.ufl.edu/hdose); [Special Education, School Psychology and Early Childhood Studies](http://education.ufl.edu/hdose); and [School of Teaching and Learning](http://education.ufl.edu/hdose).

Follow these links for more information about UF's College of Education graduate programs:
- [http://education.ufl.edu/graduate-studies](http://education.ufl.edu/graduate-studies)
- [http://education.ufl.edu/programs](http://education.ufl.edu/programs)

Departments and Programs within the College of Education

College of Education Courses

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Human Development and Organizational Studies in Education Department

Director: Linda B. Eldridge

Graduate Coordinator: Patricia Ashton

Complete faculty listing by department: [Follow this link](http://education.ufl.edu/hdose).

Programs leading to the Master of Arts in Education (M.A.E.), Master of Education (M.Ed.), Education Specialist (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees are offered through this school with programs in Counseling and Counselor Education, Educational Leadership, Higher Education Administration, Marriage and Family Counseling, Mental Health Counseling, Research and Evaluation Methodology, School Counseling and Guidance, and Student Personnel in Higher Education.

Requirements for these degrees are given in the [Graduate Degrees](http://education.ufl.edu/hdose) section of this catalog.

More information can be found at our website: [http://education.ufl.edu/hdose](http://education.ufl.edu/hdose)

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Other Counseling and Counselor Education

College

[College of Education](http://education.ufl.edu/hdose)

Department/School

[Human Development and Organizational Studies in Education Department](http://education.ufl.edu/hdose)

Counseling and Counselor Education Program

The doctoral program in Counseling and Counselor Education prepares students for careers in academia and advanced clinical and administrative positions. Our program aligns with the University of Florida mission to prepare the next generation of scholars and professional leaders. Thus, our doctoral program is a good fit for individuals who want to fulfill the roles of counselor educators - research, writing, teaching, service, securing external funding to support scholarship, assuming professional leadership positions, etc. The doctoral program is ideally suited for individuals with previously earned masters and at least two years of clinical experience. Doctoral students complete coursework, a doctoral clinical internship, participate in teaching...
and supervision, and conduct research leading to the completion of a dissertation. Students average 3 to 5 years to complete the doctorate, many of whom balance work and school commitments.

Degrees Offered with a Major in Counseling and Counselor Education

Doctor of Education

without a concentration

concentration in Marriage and Family Counseling

concentration in Mental Health Counseling

concentration in School Counseling and Guidance

Doctor of Philosophy

without a concentration

concentration in Marriage and Family Counseling

concentration in Mental Health Counseling

concentration in School Counseling and Guidance

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6061: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA6192: Educational Leadership: The Individual
- EDA6193: Educational Leadership: Instruction
- EDA6196: Educational Policy/Development
- EDA6215: Communications in Educational Leadership
- EDA6222: Administration of School Personnel
- EDA6225: Labor Relations in Public Education
- EDA6232: Public School Law
- EDA6242: Public School Finance
EDA 6271: Technology Leadership for Educational Administrators
EDA 6423: Data-Driven Decision Making in Educational Organizations
EDA 6503: The Principalship
EDA 6905: Individual Work
EDA 6931: Special Topics
EDA 6948: Supervised Practice in School Administration
EDA 6971: Research for Master's Thesis
EDA 7206: Organizational Leadership in Education
EDA 7945: Practicum in Supervision and Administration
EDA 7979: Advanced Research
EDA 7980: Research for Doctoral Dissertation
EDA 7985: Research Design in Educational Administration
EDF 7413: Advanced Topics in Structural Equation Modeling
EDF 7482: Quasi-experimental Design and Analysis in Educational Research
EDG 6250: The School Curriculum
EDG 6285: Evaluation in the School Program
EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7222: Curriculum: Theory and Research
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7665: Bases of Curriculum and Instruction Theory
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EDH 6040: Theory of College Student Development
EDH 6046: Diversity Issues in Higher Education
EDH 6049: Domestic and International College Student Services
EDH 6051: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community Junior College in America
EDH 6066: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6503: Resource Development in Higher Education
EDH 6632: Current Issues in Community College Leadership
EDH 6637: Crisis Management in Higher Education
EDH 6931: Special Topics in Higher Education
EDH 6935: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7505: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDS 6140: Supervision of Instruction
MHS 5005: Introduction to Counseling
MHS 6000: Assessment and Treatment of Family Violence
MHS 6020: Counseling in Community Settings
MHS 6061: Spiritual Issues in Multicultural Counseling
MHS 6071: Diagnosis and Treatment of Mental Disorders
MHS 6200: Assessment in Counseling
MHS 6340: Career Development
MHS 6401: Counseling Theories and Applications
MHS 6421: Play Counseling and Play Process with Children
MHS 6428: Multicultural Counseling
MHS 6430: Introduction to Family Counseling
MHS 6440: Marriage Counseling
MHS 6450: Substance Abuse Counseling
MHS 6464: Introduction to Disaster Mental Health Counseling
MHS 6466: Trauma and Crisis Intervention: Theory and Practice
MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
MHS 6468: Multicultural issues in disaster mental health counseling
MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
MHS 6471: Sexuality and Mental Health
MHS 6480: Developmental Counseling Over the Life Span
MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
MHS 6500: Group Counseling: Theories and Procedures
MHS 6602: Educational Mediation
MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
MHS 6720: Professional Identity and Ethics in Counseling
MHS 8851: Supervision for a Split Internship
MHS 6905: Individual Work
Educational Leadership

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Educational Leadership Program Information

Programs in Educational Leadership provide opportunities for professional educators and those who would like to be professional educators to receive quality coursework, mentorship, and degrees in educational administration, policy, and leadership. The programs provided are ideal for vice principals, principals, district directors and supervisors, assistant superintendents, school business managers, teachers aspiring to acquire administrative roles within the K-12 system and educational leaders of other organizations.

Degrees Offered with a Major in Educational Leadership

Doctor of Education

without a concentration

concentration in Educational Policy
Doctor of Philosophy

without a concentration

concentration in Educational Policy

Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6226: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7222: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7685: Bases of Curriculum and Instruction Theory
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
Higher Education Administration

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Higher Education Administration Program Information

The Higher Education Administration program has been established for students aspiring to become community college and university administrators, deans, presidents, and professors. America's community colleges and universities will soon face a critical leadership gap. As the baby boom generation approaches retirement age, many provosts, deans and college presidents are getting ready to add "emeritus" to their titles. As a result, openings in top leadership positions are expected to exceed the number of appropriately-trained individuals for many years to come.

The University of Florida's College of Education is helping fill the gap. Our nationally recognized Higher Education Administration Program prepares future leaders for their roles in administrative positions in higher education. Our faculty and alumni shaped the community and state college systems as we know it, and our graduates have gone on to crucial administrative positions at two- and four-year institutions. Join us in shaping the future of higher education.

Degrees Offered with a Major in Higher Education Administration

Doctor of Education

without a concentration

concentration in Educational Policy

Doctor of Philosophy

without a concentration

concentration in Educational Policy

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6061: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA6192: Educational Leadership: The Individual
- EDA6193: Educational Leadership: Instruction
Marriage and Family Counseling

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Marriage and Family Counseling Program Information

The Marriage & Family Counseling Therapy program specialization emphasizes an eco-systemic approach to understanding human problems and generating solution opportunities: Students learn to moderate solution-oriented conversations among interested parties (i.e., stakeholders) who are invited to seek "double descriptions" of mutual concerns and problems, to listen carefully to each other, to entertain and invert multiple solution possibilities, and to construct new narratives of cooperation and commitment.

Degrees Offered with a Major in Marriage and Family Counseling

Doctor of Education

Doctor of Philosophy
Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6605: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7222: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7665: Bases of Curriculum and Instruction Theory
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6350: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
Mental Health Counseling

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department
Mental Health Counseling Program Information

The M.Ed./Ed.S. and M.AE./Ed.S. program in Mental Health Counseling is designed to equip students with the pre-professional competencies required for Registered Intern status and, after a minimum number of years of post-degree supervised clinical experience, (a) licensure in the State of Florida as Mental Health Counselors and (b) clinical membership in NBCC's Academy of Certified Clinical Mental Health Counselors. Additionally, some students may choose to continue their studies in a doctoral program. These students often elect the thesis option (M.A.E.) to complete their studies.

Degrees Offered with a Major in Mental Health Counseling

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDF 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7222: Curriculum: Theory and Research
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7665: Bases of Curriculum and Instruction Theory
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EDH 6040: Theory of College Student Development
EDH 6046: Diversity Issues in Higher Education
EDH 6049: Domestic and International College Student Services
EDH 6051: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community Junior College in America
EDH 6066: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6503: Resource Development in Higher Education
EDH 6632: Current Issues in Community College Leadership
EDH 6637: Crisis Management in Higher Education
EDH 6931: Special Topics in Higher Education
EDH 6935: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7505: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDS 6140: Supervision of Instruction
MHS 5005: Introduction to Counseling
MHS 6000: Assessment and Treatment of Family Violence
MHS 6020: Counseling in Community Settings
MHS 6061: Spiritual Issues in Multicultural Counseling
MHS 6071: Diagnosis and Treatment of Mental Disorders
MHS 6200: Assessment in Counseling
MHS 6340: Career Development
MHS 6401: Counseling Theories and Applications
MHS 6421: Play Counseling and Play Process with Children
MHS 6428: Multicultural Counseling
MHS 6430: Introduction to Family Counseling
MHS 6440: Marriage Counseling
MHS 6450: Substance Abuse Counseling
MHS 6464: Introduction to Disaster Mental Health Counseling
MHS 6466: Trauma and Crisis Intervention: Theory and Practice
MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
MHS 6468: Multicultural issues in disaster mental health counseling
MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
MHS 6471: Sexuality and Mental Health
MHS 6480: Developmental Counseling Over the Life Span
MHS 6495: Counseling Lesbian, Gay Bisexual, and Transgender Clients
MHS 6500: Group Counseling: Theories and Procedures
MHS 6602: Educational Mediation
MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
MHS 6720: Professional Identity and Ethics in Counseling
MHS 6831: Supervision for a Split Internship
MHS 6905: Individual Work
MHS 6910: Supervised Research
MHS 6940: Supervised Teaching
MHS 6971: Research for Master's Thesis
MHS 7402: Brief Therapy
MHS 7407: Advanced Counseling Theories
MHS 7431: Advanced Family Counseling
MHS 7600: Consultation Procedures
MHS 7610: Practicum in Counseling Supervision
MHS 7730: Seminar in Counseling Research
MHS 7740: Research in Counseling
MHS 7800: Practicum in Counseling
MHS 7804: Group Supervision in Agency Counseling
MHS 7805: Practicum in Agency Counseling
MHS 7806: Practicum in Marriage and Family Counseling
MHS 7807: Group Supervision in Marriage and Family Counseling
MHS 7830: Internship in Counseling and Development-600 Hours
MHS 7840: Internship in Counselor Education
MHS 7946: Internship in Agency Program Management
MHS 7979: Advanced Research
MHS 7980: Research for Doctoral Dissertation
Research and Evaluation Methodology

College

Department/School

Research and Evaluation Methodology Program Information

The mission of the Research and Evaluation Methodology program is to generate, evaluate, apply and disseminate knowledge about educational research methodology, to prepare exemplary educational research methodologists, and to collaborate with others to provide methodology for the advancement of educational research. This mission aligns with College of Education's and University of Florida's missions because it results in research strategies for knowledge discovery to solve critical educational and human problems in a diverse global community.

- Learn to evaluate educational programs, analyze educational data, develop assessment instruments, and conduct research about the efficacy of research methodologies.
- Work as an educational researcher, an educational data analyst, or a psychometrician (an expert in testing and assessment).
- Find jobs in testing companies; research and evaluation companies; research centers; and assessment centers at universities, school districts, and state and federal agencies.
- Complete a master's degree (M.A.E. or M.Ed.) in two years or a Ph.D. in four years with classes focusing on research methodology, statistics applied to education, program evaluation, and psychometrics.
- We admit students with some undergraduate research experience. Our students come from a variety of backgrounds, including psychology, sociology, statistics, mathematics, mathematics education, political science, marketing, economics, and engineering.

Degrees Offered with a Major in Research and Evaluation Methodology

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Research and Evaluation Methodology
- EDF 5441: Assessment in General and Exceptional Student Education
- EDF 6113: Educational Psychology; Human Development
- EDF 6211: Educational Psychology; General
- EDF 6215: Educational Psychology; Learning Theory
- EDF 6232: Principles of Learning and Instructional Practice
- EDF 6400: Quantitative Foundations of Education Research Overview
- EDF 6401: Educational Statistics
- EDF 6402: Quantitative Foundations in Educational Research; Inferential Statistics
- EDF 6403: Quantitative Foundations of Educational Research
- EDF 6434: Educational Measurement
- EDF 6436: Theory of Measurement
- EDF 6471: Survey Design and Analysis in Educational Research
- EDF 6475: Qualitative Foundations of Educational Research
- EDF 6481: Quantitative Research Methods in Education
- EDF 6905: Individual Study
- EDF 6910: Supervised Research
- EDF 6938: Special Topics
- EDF 6940: Supervised Teaching
- EDF 6941: Practicum in Educational Research
- EDF 6971: Research for Master's Thesis
- EDF 7117: Affective Development and Education
- EDF 7405: Advanced Quantitative Foundations of Educational Research
- EDF 7412: Structural Equation Models
- EDF 7436: Rating Scale Design and Analysis in Educational Research
- EDF 7439: Item Response Theory
- EDF 7474: Multilevel Models
- EDF 7479: Qualitative Data Analysis: Approaches and Techniques
- EDF 7483: Qualitative Data Collection: Approaches and Techniques
- EDF 7486: Methods of Educational Research
- EDF 7491: Evaluation of Educational Products and Systems
- EDF 7639: Research in Educational Sociology
- EDF 7931: Seminar in Educational Research
- EDF 7932: Multivariate Analysis in Educational Research
- EDF 7979: Advanced Research
- EDF 7980: Research for Doctoral Dissertation
- EDF 6052: Cognitive Psychology Applied to Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDA 7413: Advanced Topics in Structural Equation Modeling
- EDA 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6255: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7222: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EGD 7665: Bases of Curriculum and Instruction Theory
- EGD 7941: Field Experience in Curriculum and Instruction
- EGD 7979: Advanced Research
- EGD 7980: Research for Doctoral Dissertation
EDH 6040: Theory of College Student Development
EDH 6046: Diversity Issues in Higher Education
EDH 6049: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community-Junior College in America
EDH 6065: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6503: Resource Development in Higher Education
EDH 6632: Current Issues in Community College Leadership
EDH 6637: Crisis Management in Higher Education
EDH 6638: Special Topics in Higher Education
EDH 6639: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7505: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDS 6140: Supervision of Instruction
MHS 5005: Introduction to Counseling
MHS 6000: Assessment and Treatment of Family Violence
MHS 6020: Counseling in Community Settings
MHS 6061: Spiritual Issues in Multicultural Counseling
MHS 6071: Diagnosis and Treatment of Mental Disorders
MHS 6200: Assessment in Counseling
MHS 6340: Career Development
MHS 6401: Counseling Theories and Applications
MHS 6421: Play Counseling and Play Process with Children
MHS 6428: Multicultural Counseling
MHS 6430: Introduction to Family Counseling
MHS 6440: Marriage Counseling
MHS 6450: Substance Abuse Counseling
MHS 6464: Introduction to Disaster Mental Health Counseling
MHS 6465: Trauma and Crisis Intervention: Theory and Practice
MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
MHS 6468: Multicultural issues in disaster mental health counseling
MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
MHS 6471: Sexuality and Mental Health
MHS 6480: Developmental Counseling Over the Life Span
MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
MHS 6500: Group Counseling: Theories and Procedures
MHS 6602: Educational Mediation
MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
MHS 6720: Professional Identity and Ethics in Counseling
MHS 6831: Supervision for a Split Internship
MHS 6905: Individual Work
MHS 6910: Supervised Research
MHS 6940: Supervised Teaching
MHS 6971: Research for Master's Thesis
MHS 7402: Brief Therapy
MHS 7407: Advanced Counseling Theories
MHS 7431: Advanced Family Counseling
MHS 7600: Consultation Procedures
MHS 7610: Practicum in Counseling Supervision
MHS 7730: Seminar in Counseling Research
MHS 7740: Research in Counseling
MHS 7800: Practicum in Counseling
MHS 7804: Group Supervision in Agency Counseling
MHS 7805: Practicum in Agency Counseling
MHS 7806: Practicum in Marriage and Family Counseling
MHS 7807: Group Supervision in Marriage and Family Counseling
MHS 7830: Internship in Counseling and Development-600 Hours
MHS 7840: Internship in Counselor Education
MHS 7948: Internship in Agency Program Management
MHS 7979: Advanced Research
MHS 7980: Research for Doctoral Dissertation
SDS 6401: Counseling Skills for Non-Counselors
SDS 6411: Counseling with Children
SDS 6413: Counseling Adolescents
SDS 6436: Family-School Intervention
SDS 6520: Family, Student Development and Role of Teacher as Adviser
SDS 6620: Organization and Administration of School Counseling Programs
SDS 6831: Supervision for a Split Internship
SDS 6905: Individual Work
SDS 6936: Seminar in Counselor Education
SDS 6998: Special Topics
School Counseling and Guidance

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

School Counseling and Guidance Program Information

The M.Ed./Ed.S. and M.AE./Ed.S. program in School Counseling is designed to equip students with the pre-professional competencies required for Florida Department of Education Certification in School Counseling. The 72-credit hour program provides students with the specialized knowledge and skills required for placements as school counselors in public or private elementary, middle, or secondary schools. Students enrolled in the School Counseling program, a state-approved and NCATE (National Council for the Accreditation of Teacher Education) and CACREP (Council for the Accreditation of Counseling and Related Educational Programs) accredited school counselor preparation program, must provide passing scores for all pertinent sections of the Florida Teacher Certification Examination (FTCE) including the General Knowledge test (math, English language skills, reading comprehension, and essay), the Professional Education examination, and the Subject Area Examination in Guidance and Counseling K-12 prior to graduation from the program. Questions about this requirement or any other certification related questions may be addressed to the College of Education Office of Student Services.

Degrees Offered with a Major in School Counseling and Guidance

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6061: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA6192: Educational Leadership: The Individual
- EDA6193: Educational Leadership: Instruction
- EDA6195: Educational Policy Development
MHS 6602: Educational Mediation
MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
MHS 6720: Professional Identity and Ethics in Counseling
MHS 6831: Supervision for a Split Internship
MHS 6905: Individual Work
MHS 6910: Supervised Research
MHS 6940: Supervised Teaching
MHS 6971: Research for Master's Thesis
MHS 7402: Brief Therapy
MHS 7407: Advanced Counseling Theories
MHS 7431: Advanced Family Counseling
MHS 7600: Consultation Procedures
MHS 7610: Practicum in Counseling Supervision
MHS 7730: Seminar in Counseling Research
MHS 7740: Research in Counseling
MHS 7800: Practicum in Counseling
MHS 7804: Group Supervision in Agency Counseling
MHS 7805: Practicum in Agency Counseling
MHS 7806: Practicum in Marriage and Family Counseling
MHS 7807: Group Supervision in Marriage and Family Counseling
MHS 7830: Internship in Counseling and Development-600 Hours
MHS 7840: Internship in Counselor Education
MHS 7946: Internship in Agency Program Management
MHS 7979: Advanced Research
MHS 7980: Research for Doctoral Dissertation
SDS 6401: Counseling Skills for Non-Counselors
SDS 6411: Counseling with Children
SDS 6413: Counseling Adolescents
SDS 6436: Family-School Intervention
SDS 6520: Family, Student Development and Role of Teacher as Adviser
SDS 6620: Organization and Administration of School Counseling Programs
SDS 6831: Supervision for a Split Internship
SDS 6905: Individual Work
SDS 6936: Seminar in Counselor Education
SDS 6938: Special Topics
SDS 7800: Practicum in School Counseling
SDS 7820: Group Supervision in School Counseling
SDS 7830: Internship in Counseling and Development-600 Hours

Student Personnel in Higher Education

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Student Personnel in Higher Education Program Information

The University of Florida Student Personnel in Higher Education program is a master's program designed to prepare students to enter Student Affairs leadership positions in two- and four-year institutions of higher education. The program integrates academic coursework with practitioner-based experience. The SPHE master's degree consists of 36 credit hours of core classes and 10 credit hours of supervised practicum and internship experiences (total = 46 credit hours). Students enter the graduate program in the fall semester as members of a cohort group. The group provides support and builds a sense of community for the students. All students are assigned a faculty advisor at the time of admission.

The student affairs profession is increasingly diverse and is engaged in a variety of activities and programs. The emphasis in UF's master's degree program in SPHE is upon the promotion, design, and assessment of student learning in a variety of campus and community settings.

Degrees Offered with a Major in Student Personnel in Higher Education

Master of Arts in Education

Master of Education
Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7222: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7965: Bases of Curriculum and Instruction Theory
- EDG 7981: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6306: College and University Teaching
- EDH 6306: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
- EDH 7505: The Financing of Higher Education
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7942: Group Supervision in Student Personnel
- EDH 7948: Internship in Student Personnel
- EDS 6140: Supervision of Instruction
- MHS 5006: Introduction to Counseling
- MHS 6000: Assessment and Treatment of Family Violence
- MHS 6020: Counseling in Community Settings
- MHS 6061: Spiritual Issues in Multicultural Counseling
- MHS 6071: Diagnosis and Treatment of Mental Disorders
- MHS 6200: Assessment in Counseling
- MHS 6340: Career Development
- MHS 6401: Counseling Theories and Applications
Special Education, School Psychology and Early Childhood Studies Department

Director: Jean Crockett

Complete faculty listing by department: Follow this link.

The School of Special Education, School Psychology, and Early Childhood Studies offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 3 areas of specialization: Special Education; School Psychology; and Early Childhood Studies. Programs are accredited by the Florida Department of Education and approved by the National Council for Accreditation of Teacher Education (NCATE). The School Psychology program is approved by the NCATE and the National Association of School Psychologists (NASP). The Ph.D. program in School Psychology is accredited by the American Psychological Association (APA).

Other

Early Childhood Education

College

College of Education
Department/School

Special Education, School Psychology and Early Childhood Studies Department

Degrees Offered with a Major in Early Childhood Education

Master of Arts in Education

Master of Education

Early Childhood Education Courses

- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7666: Theory and Research in Early Childhood Studies
- EEC 7979: Advanced Research

Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7666: Theory and Research in Early Childhood Studies
- EEX 6053: Foundations of Special Education
- EEX 6098: Students with Disabilities in Higher Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
- EEX 6299: Understanding Assessment for Postsecondary Students with Disabilities
- EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
- EEX 6785: Introduction to Education-Healthcare Transition
- EEX 6786: Transdisciplinary and Transition Services in Special Education
- EEX 6788: Methods for Integrating Education-Healthcare Transition
- EEX 6789: Legal Aspects and Policy in Education-Healthcare Transition
- EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
- EEX 6841: Practicum in Special Education: Mild Disabilities
- EEX 6863: Supervised Practice in Special Education
- EEX 7709: Social-Emotional Learning & Play in Early Childhood
- SPS 7980: Research for Doctoral Dissertation

School Psychology

College
Degrees Offered with a Major in School Psychology

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

School Psychology Courses

- SPS 6052: Issues and Problems in School Psychology
- SPS 6191: Psychoeducational Assessment I
- SPS 6192: Psychoeducational Assessment II
- SPS 6193: Academic Assessment & Intervention
- SPS 6195: Developmental Psychopathology
- SPS 6197: Psychoeducational Assessment III
- SPS 6410: Direct Interventions I: Applied Behavior Analysis for School Psychologists
- SPS 6707: Interventions in School Psychology II: Cognitive Behavioral Interventions
- SPS 6708: Interventions in School Psychology III: System Level Interventions for Children and Youths
- SPS 6815: Law and Ethics in Psychology
- SPS 6937: Special Topics in School Psychology
- SPS 6941: Practicum in School Psychology
- SPS 6942: School Psychology Practicum II
- SPS 6945: Advanced Practicum in School Psychology
- SPS 7205: School Psychology Consultation
- SPS 7931: Seminar in School Psychology
- SPS 7949: Internship in School Psychology
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation

Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
Special Education

College

Special Education, School Psychology and Early Childhood Studies Department

Degrees Offered with a Major in Special Education

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Special Education Courses

- EEX 5940: Supervised Student Teaching in Special Education
- EEX 6053: Foundations of Special Education
Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7666: Theory and Research in Early Childhood Studies
- EEX 6053: Foundations of Special Education
- EEX 6098: Students with Disabilities in Higher Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
- EEX 6539: Understanding Assessment for Postsecondary Students with Disabilities
- EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
- EEX 6785: Introduction to Education-Healthcare Transition
- EEX 6786: Transdisciplinary and Transition Services in Special Education
- EEX 6788: Methods for Integrating Education-Healthcare Transition
- EEX 6789: Legal Aspects and Policy in Education-Healthcare Transition
- EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
- EEX 6841: Practicum in Special Education: Mild Disabilities
- EEX 6863: Supervised Practice in Special Education
- EEX 6879: Social-Emotional Learning & Play in Early Childhood
- EEC 7617: Early Childhood Assessment & Evaluation
- SPS 7980: Research for Doctoral Dissertation

School of Teaching and Learning

Director: E. Bondy.
Graduate Coordinator: S. G. Terzian.

Complete faculty listing by department: Follow this link.

The School of Teaching and Learning offers online and face-to-face programs leading to the Master of Education (M.Ed., non-thesis), Master of Arts in Education (M.A.E., thesis or project in lieu of thesis), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) degrees in curriculum and instruction. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

The School offers graduate study and research experience in 10 areas of specialization: curriculum, teaching, and teacher education; educational technology; elementary education; mathematics education; language and literacy education (including children's literature, English education, ESOL/bilingual education, language arts, and reading education); science and environmental education; social foundations of education; social studies education; and teacher leadership for school improvement.

The nationally recognized Proteach graduate program leads to the M.Ed. degree and state certification as a classroom teacher. Unified Elementary Proteach admits undergraduates who complete the five-year program with a master's degree. Secondary Proteach (English, Science, Social Studies) prepares teachers who have completed a bachelor's degree in the discipline they will teach. Prospective elementary teachers who already hold a bachelor's degree in a non-education field may want to consider the School's SITE program (Site-based Implementation of Teacher Education), which leads to the M.Ed. degree in curriculum and instruction. Students may apply to the state for alternative certification.
Beyond the Graduate School and College of Education admission requirements, students should have academic preparation and teaching experience appropriate to the program being pursued. Students having deficiencies in their preparation will be required to follow a program to remove such deficiencies. A limited amount of support is available for graduate studies through fellowships, scholarships, research assistantships, and teaching assistantships.

Other

Curriculum and Instruction (CCD)

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Curriculum and Instruction

Doctor of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MIE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology into the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6802: Human-Computer Interactivity and the Learner
- EME 6806: Advanced Instructional Design
- EME 6809: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6385: Foreign Languages Teaching Methods
- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

**Mathematics Education**

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

**Reading Education**

- RED 5946: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

**Science Education**

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

**Secondary Education**

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

**Social Foundations of Education**

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Curriculum and Instruction (ISC)

College

- College of Education

Department/School

- School of Teaching and Learning

Degrees Offered with a Major in Curriculum and Instruction

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7982: Practitioner Research: Theory & Practice

ESOL/Bilingual Education

- RLE 6165: Bilingual-Bicultural Education
Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5335: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6547: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher InquiryAction Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Elementary Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Elementary Education

Master of Arts in Education
Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDE 6356: Teaching, Learning and Assessment
- EDE 7224: Critical Pedagogy
- EDE 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDE 7303: Teacher Learning and Socialization in High Poverty Schools
- EDE 7982: Practitioner Research: Theory & Practice

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher InquiryAction Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDE 6356: Teaching, Learning and Assessment
- EDE 7224: Critical Pedagogy
- EDE 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDE 7303: Teacher Learning and Socialization in High Poverty Schools
- EDE 7326: Differentiated Supervision and Teacher Professional Development
- EDE 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
EME 5432: Integrating Technology into Social Science Classroom  
EME 5433: Integrating Technology into Science Classroom  
EME 6066: Issues and Trends in Educational Technology Research  
EME 6205: Digital Photography and Visual Literacy  
EME 6208: Designing Integrated Media Environments I  
EME 6209: Designing Integrated Media Environments II  
EME 6405: Educational Technology and Teaching  
EME 6458: Distance Teaching and Learning  
EME 6505: Educational Television Design and Production  
EME 6602: Human-Computer Interactivity and the Learner  
EME 6606: Advanced Instructional Design  
EME 6608: Instructional Design  
EME 6716: Organization and Administration of Educational Media Centers  
EME 6935: Seminar: Distance Education Issues and Applications  
EME 6945: Practicum in Educational Media and Instructional Design  
EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

FLE 6165: Bilingual-Bicultural Education  
FLE 6167: Cross-Cultural Communication for Teachers  
FLE 6336: Teaching Foreign Languages in Elementary Schools  
FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School  
FLE 6385: Foreign Languages Teaching Methods  
FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level  
TSL 5142: ESOL Curriculum, Methods, and Assessment  
TSL 5325: Secondary ESOL Teaching Strategies  
TSL 6145: Curriculum and Materials Development for ESOL K-12  
TSL 6171: TESL I: Materials and Techniques  
TSL 6172: TESL II: Materials for Special Purposes  
TSL 6245: Language Principles for ESOL Teachers  
TSL 6373: Methods of Teaching ESOL K-12  
TSL 6440: Testing and Evaluation of ESOL  
TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

LAE 6298: Literacy & Language Instruction  
LAE 6319: Language Arts in the Elementary School  
LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts  
LAE 6348: Teaching Multiliteracies  
LAE 6365: Language Arts: Language and Composition  
LAE 6366: Language Arts: Literature  
LAE 6407: Early Childhood Children's Literature  
LAE 6446: Multicultural Literature for Children and Adolescents  
LAE 6447: Immigrant Experiences in Children's and Adolescent Literature  
LAE 6455: International Children's Literature  
LAE 6616: Seminar in Children's Literature  
LAE 6635: Teaching Adolescent Literature in the Secondary School  
LAE 6714: Children's Literature in the Childhood Curriculum  
LAE 6861: Technology and Media Literacy  
LAE 6865: Teaching Media Literacy with the Internet  
LAE 6969: Teaching Digital Storytelling  
LAE 6939: Literacy, Family, and Culture  
LAE 6945: Practicum and Assessment for Teachers of Secondary School English  
LAE 6948: Children's Literature in Educational Settings  
LAE 7066: Language Acquisition and Education  
LAE 7519: Language and Inquiry  
LAE 7715: Research in Children's Literature  
LAE 7934: Seminar in Composition Theory and Practice  
LAE 7936: Seminar in English Language Arts

Mathematics Education

MAE 5327: Middle School Mathematics Methods  
MAE 5332: Secondary School Mathematics Methods and Assessment  
MAE 5336: Multicultural Mathematics Methods  
MAE 5338: Using Formative Assessment to Improve Mathematical Learning  
MAE 5347: Teaching K-8 Mathematics for Understanding  
MAE 5945: Secondary School Mathematics Practicum  
MAE 6313: Problem Solving in School Mathematics  
MAE 6615: Individualizing Instruction in Mathematics  
MAE 6641: Readings and Research in Mathematics Education  
MAE 7899: Mathematics Education Seminar

Reading Education
• RED 5046: Foundations of Reading in Grades PreK-12
• RED 5316: Reading in the Primary Grades
• RED 5337: Reading in the Secondary School
• RED 5355: Reading Instruction in the Intermediate Grades
• RED 5399: Practices in Beginning Reading Instruction
• RED 6346: Seminar in Reading
• RED 6520: Classroom Literacy Assessment and Instruction
• RED 6546C: Diagnosis of Reading Difficulties
• RED 6548C: Remediation of Reading Difficulties
• RED 6647: Trends in Reading
• RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
• RED 7019: Foundations of Literacy
• RED 7817: Understanding Reading Difficulties

Science Education

• SCE 5316: Inquiry-Based Science Teaching
• SCE 5355: Foundations of Science Teaching
• SCE 5695: Diversity and Equity in Science Teaching
• SCE 5765: Data-Driven Science Instruction
• SCE 6045: Environmental Education Methods and Materials
• SCE 6117: Science Education in the Elementary School
• SCE 6246: Science Instruction in Informal Settings
• SCE 6338: Secondary Science Methods and Assessment
• SCE 6647: Global Studies Methods in Science Education
• SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

• EDM 6005: The Emergent Middle School
• EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
• ESE 6215: The Secondary School Curriculum
• ESE 6344: Classroom Practices and Assessment in Secondary Education
• ESE 6345: Effective Teaching and Classroom Management
• ESE 6906: Individual Work
• ESE 6939: Special Topics
• ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

• EDF 5552: Role of School in Democratic Society
• EDF 6520: History of Education
• EDF 6544: Philosophical Foundations of Education
• EDF 6606: Socioeconomic Foundations of Education
• EDF 6616: Education and American Culture
• EDF 6630: Educational Sociology
• EDF 6812: Comparative Education
• EDF 6820: Education in Latin America
• EDF 7555: Values and Ethics in Education
• EDF 7934: Seminar in Educational Foundations

Social Studies Education

• SSE 5320: Middle School Social Studies Methods
• SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
• SSE 6046: Perspectives in Social Studies Education
• SSE 6117: Social Studies Education—Elementary School
• SSE 6133: Secondary School Social Studies Methods and Assessment
• SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

• EDE 6325: Teacher Inquiry Action Research
• EDG 6047: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6415: Culturally Responsive Classroom Management
• EDG 6953: TLSI Online Portfolio Preparation
Degrees Offered with a Major in English Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6326: Teacher InquiryAction Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

**Educational Technology**

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

**ESOL/Bilingual Education**

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6385: Foreign Languages Teaching Methods
- FLE 6948: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- TSL 6700: Issues in ESOL for School Counselors and Psychologists

**Language and Literacy Education**

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary/English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
LAE 7715: Research in Children's Literature  
LAE 7934: Seminar in Composition Theory and Practice  
LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods  
- MAE 5332: Secondary School Mathematics Methods and Assessment  
- MAE 5395: Multicultural Mathematics Methods  
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning  
- MAE 5347: Teaching K-8 Mathematics for Understanding  
- MAE 5945: Secondary School Mathematics Practicum  
- MAE 6313: Problem Solving in School Mathematics  
- MAE 6615: Individualizing Instruction in Mathematics  
- MAE 6641: Readings and Research in Mathematics Education  
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12  
- RED 5316: Reading in the Primary Grades  
- RED 5337: Reading in the Secondary School  
- RED 5355: Reading Instruction in the Intermediate Grades  
- RED 5399: Practices in Beginning Reading Instruction  
- RED 6346: Seminar in Reading  
- RED 6520: Classroom Literacy Assessment and Instruction  
- RED 6546C: Diagnosis of Reading Difficulties  
- RED 6548C: Remediation of Reading Difficulties  
- RED 6647: Trends in Reading  
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties  
- RED 6919: Foundations of Literacy

Science Education

- SCE 5316: Inquiry-Based Science Teaching  
- SCE 5355: Foundations of Science Teaching  
- SCE 5569: Diversity and Equity in Science Teaching  
- SCE 5765: Data-Driven Science Instruction  
- SCE 6045: Environmental Education Methods and Materials  
- SCE 6117: Science Education in the Elementary School  
- SCE 6246: Science Instruction in Informal Settings  
- SCE 6338: Secondary Science Methods and Assessment  
- SCE 6647: Global Studies Methods in Science Education  
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM 6805: The Emergent Middle School  
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment  
- ESE 6215: The Secondary School Curriculum  
- ESE 6344: Classroom Practices and Assessment in Secondary Education  
- ESE 6345: Effective Teaching and Classroom Management  
- ESE 6905: Individual Work  
- ESE 6939: Special Topics  
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society  
- EDF 6520: History of Education  
- EDF 6544: Philosophical Foundations of Education  
- EDF 6606: Socioeconomic Foundations of Education  
- EDF 6616: Education and American Culture  
- EDF 6630: Educational Sociology  
- EDF 6812: Comparative Education  
- EDF 6820: Education in Latin America  
- EDF 7555: Values and Ethics in Education  
- EDF 7934: Seminar in Educational Foundations

Social Studies Education
Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Mathematics Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Mathematics Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6385: Foreign Languages Teaching Methods
- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education
• LAE 6298: Literacy & Language Instruction
• LAE 6319: Language Arts in the Elementary School
• LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
• LAE 6348: Teaching Multiliteracies
• LAE 6365: Language Arts: Language and Composition
• LAE 6366: Language Arts: Literature
• LAE 6407: Early Childhood Children's Literature
• LAE 6446: Teaching Adolescent Literature in the Secondary School
• LAE 6714: Children's Literature in the Childhood Curriculum
• LAE 6861: Technology and Media Literacy
• LAE 6865: Teaching Media Literacy with the Internet
• LAE 6869: Teaching Digital Storytelling
• LAE 6939: Literacy, Family, and Culture
• LAE 6945: Practicum and Assessment for Teachers of Secondary School English
• LAE 6946: Children's Literature in Educational Settings
• LAE 7006: Language Acquisition and Education
• LAE 7519: Language and Inquiry
• LAE 7715: Research in Children's Literature
• LAE 7934: Seminar in Composition Theory and Practice
• LAE 7936: Seminar in English Language Arts

Mathematics Education

• MAE 5327: Middle School Mathematics Methods
• MAE 5332: Secondary School Mathematics Methods and Assessment
• MAE 5395: Multicultural Mathematics Methods
• MAE 5396: Using Formative Assessment to Improve Mathematical Learning
• MAE 5347: Teaching K-8 Mathematics for Understanding
• MAE 5945: Secondary School Mathematics Practicum
• MAE 6313: Problem Solving in School Mathematics
• MAE 6615: Individualizing Instruction in Mathematics
• MAE 6641: Readings and Research in Mathematics Education
• MAE 7899: Mathematics Education Seminar

Reading Education

• RED 5046: Foundations of Reading in Grades PreK-12
• RED 5316: Reading in the Primary Grades
• RED 5337: Reading in the Secondary School
• RED 5355: Reading Instruction in the Intermediate Grades
• RED 5399: Practices in Beginning Reading Instruction
• RED 6346: Seminar in Reading
• RED 6520: Classroom Literacy Assessment and Instruction
• RED 6546C: Diagnosis of Reading Difficulties
• RED 6548C: Remediation of Reading Difficulties
• RED 6647: Trends in Reading
• RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
• RED 7019: Foundations of Literacy
• RED 7817: Understanding Reading Difficulties

Science Education

• SCE 5316: Inquiry-Based Science Teaching
• SCE 5355: Foundations of Science Teaching
• SCE 5695: Diversity and Equity in Science Teaching
• SCE 5765: Data-Driven Science Instruction
• SCE 6045: Environmental Education Methods and Materials
• SCE 6117: Science Education in the Elementary School
• SCE 6246: Science Instruction in Informal Settings
• SCE 6338: Secondary Science Methods and Assessment
• SCE 6647: Global Studies Methods in Science Education
• SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

• EDM 6005: The Emergent Middle School
• EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
• ESE 6215: The Secondary School Curriculum
• ESE 6344: Classroom Practices and Assessment in Secondary Education
• ESE 6345: Effective Teaching and Classroom Management
Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6816: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Reading Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Reading Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
EDG 6348: Instructional Coaching for Enhanced Student Learning
EDG 6445: Meeting the Educational Needs of Students Living in Poverty
EDG 7359: Professional Development and Teacher Learning
EEC 6946: Practicum in Early Childhood Education
EME 6059: Blended Learning Environments
MAE 6916: Inquiry in Mathematics Teaching

General Courses

EDG 6947: Teacher Leadership for Educational Change
EDG 6207: Transforming the Curriculum
EDG 6226: Foundations of Research in Curriculum & Instruction
EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EME 6076: Virtual School Philosophy and Pedagogy
EME 6156: Games and Simulations for Teaching and Learning
EME 6235: Managing Educational Projects
EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

EDE 5940: Integrated Teaching and Learning
EDE 6225: Practices in Childhood Education
EDE 6266: Teaching and Learning in Elementary Classrooms
EDE 6325: Teacher Inquiry/Action Research
EDE 6905: Individual Work
EDE 6910: Supervised Research
EDE 6932: Special Topics
EDE 6948: Internship in Elementary Schools
EDE 7047: Issues in Teacher Education
EDE 7935: Seminar in Curriculum & Instruction
EDE 6356: Teaching, Learning and Assessment
EDE 7224: Critical Pedagogy
EDE 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDE 7303: Teacher Learning and Socialization in High Poverty Schools
EDE 7326: Differentiated Supervision and Teacher Professional Development
EDE 7982: Practitioner Research: Theory & Practice

Educational Technology

EME 5054: Foundations of Educational Technology
EME 5207: Designing Technology-Rich Curricula
EME 5315: Communicating with Technology
EME 5316: Educational Technology Management Issues
EME 5403: Instructional Computing I
EME 5404: Instructional Computing II
EME 5405: Internet in K-12 Instruction
EME 5431: Integrating Technology in the Mathematics Classroom
EME 5432: Integrating Technology into Social Science Classroom
EME 5433: Integrating Technology into Science Classroom
EME 6066: Issues and Trends in Educational Technology Research
EME 6205: Digital Photography and Visual Literacy
EME 6208: Designing Integrated Media Environments I
EME 6209: Designing Integrated Media Environments II
EME 6405: Educational Technology and Teaching
EME 6458: Distance Teaching and Learning
EME 6505: Educational Television Design and Production
EME 6602: Human-Computer Interactivity and the Learner
EME 6806: Advanced Instructional Design
EME 6809: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design
ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6385: Foreign Languages Teaching Methods
- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education
- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Science Education

College

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Science Education
Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6912: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
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- EDG 7979: Advanced Research
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- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6226: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDE 6956: Teaching, Learning and Assessment
- EDE 7224: Critical Pedagogy
- EDE 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDE 7303: Teacher Learning and Socialization in High Poverty Schools
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Educational Technology

- EME 5054: Foundations of Educational Technology
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• EME 5404: Instructional Computing II
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• EME 5432: Integrating Technology into Social Science Classroom
• EME 5433: Integrating Technology into Science Classroom
• EME 6066: Issues and Trends in Educational Technology Research
• EME 6205: Digital Photography and Visual Literacy
• EME 6208: Designing Integrated Media Environments I
• EME 6209: Designing Integrated Media Environments II
• EME 6405: Educational Technology and Teaching
• EME 6458: Distance Teaching and Learning
• EME 6505: Educational Television Design and Production
• EME 6602: Human-Computer Interactivity and the Learner
• EME 6606: Advanced Instructional Design
• EME 6609: Instructional Design
• EME 6716: Organization and Administration of Educational Media Centers
• EME 6935: Seminar: Distance Education Issues and Applications
• EME 6945: Practicum in Educational Media and Instructional Design
• EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

• FLE 6165: Bilingual-Bicultural Education
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• FLE 6385: Foreign Languages Teaching Methods
• FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
• TSL 5142: ESOL Curriculum, Methods, and Assessment
• TSL 5325: Secondary ESOL Teaching Strategies
• TSL 6145: Curriculum and Materials Development for ESOL K-12
• TSL 6171: TESL I: Materials and Techniques
• TSL 6172: TESL II: Materials for Special Purposes
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Language and Literacy Education

• LAE 6298: Literacy & Language Instruction
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• LAE 6446: Multicultural Literature for Children and Adolescents
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• LAE 6455: International Children's Literature
• LAE 6616: Seminar in Children's Literature
• LAE 6635: Teaching Adolescent Literature in the Secondary School
• LAE 6714: Children's Literature in the Childhood Curriculum
• LAE 6881: Technology and Media Literacy
• LAE 6885: Teaching Media Literacy with the Internet
• LAE 6889: Teaching Digital Storytelling
• LAE 6939: Literacy, Family, and Culture
• LAE 6945: Practicum and Assessment for Teachers of Secondary School English
• LAE 6946: Children's Literature in Educational Settings
• LAE 7096: Language Acquisition and Education
• LAE 7519: Language and Inquiry
• LAE 7715: Research in Children's Literature
• LAE 7934: Seminar in Composition Theory and Practice
• LAE 7936: Seminar in English Language Arts

Mathematics Education

• MAE 5327: Middle School Mathematics Methods
• MAE 5332: Secondary School Mathematics Methods and Assessment
• MAE 5395: Multicultural Mathematics Methods
• MAE 5396: Using Formative Assessment to Improve Mathematical Learning
• MAE 5347: Teaching K-8 Mathematics for Understanding
• MAE 5945: Secondary School Mathematics Practicum
• MAE 6313: Problem Solving in School Mathematics
• MAE 6615: Individualizing Instruction in Mathematics
• MAE 6641: Readings and Research in Mathematics Education
MAE 7899: Mathematics Education Seminar

Reading Education

RED 5046: Foundations of Reading in Grades PreK-12
RED 5316: Reading in the Primary Grades
RED 5337: Reading in the Primary Grades
RED 5339: Practices in Beginning Reading Instruction
RED 6346: Seminar in Reading
RED 6520: Classroom Literacy Assessment and Instruction
RED 6546C: Diagnosis of Reading Difficulties
RED 6548C: Remediation of Reading Difficulties
RED 6647: Trends in Reading
RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
RED 7019: Foundations of Literacy
RED 7817: Understanding Reading Difficulties

Science Education

SCE 5316: Inquiry-Based Science Teaching
SCE 5355: Foundations of Science Teaching
SCE 5695: Diversity and Equity in Science Teaching
SCE 5765: Data-Driven Science Instruction
SCE 6045: Environmental Education Methods and Materials
SCE 6117: Science Education in the Elementary School
SCE 6246: Science Instruction in Informal Settings
SCE 6338: Secondary Science Methods and Assessment
SCE 6647: Global Studies Methods in Science Education
SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

EDM 6005: The Emergent Middle School
EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
ESE 6215: The Secondary School Curriculum
ESE 6344: Classroom Practices and Assessment in Secondary Education
ESE 6345: Effective Teaching and Classroom Management
ESE 6905: Individual Work
ESE 6939: Special Topics
ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

EDF 5552: Role of School in Democratic Society
EDF 6520: History of Education
EDF 6544: Philosophical Foundations of Education
EDF 6606: Socioeconomic Foundations of Education
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EDF 6630: Educational Sociology
EDF 6812: Comparative Education
EDF 6820: Education in Latin America
EDF 7555: Values and Ethics in Education
EDF 7934: Seminar in Educational Foundations

Social Studies Education

SSE 5320: Middle School Social Studies Methods
SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
SSE 6046: Perspectives in Social Studies Education
SSE 6117: Social Studies Education—Elementary School
SSE 6133: Secondary School Social Studies Methods and Assessment
SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

EDE 6325: Teacher Inquiry/Action Research
EDG 6047: Teacher Leadership for Educational Change
EDG 6207: Transforming the Curriculum
EDG 6415: Culturally Responsive Classroom Management
EDG 6953: TLSI Online Portfolio Preparation
Social Studies Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Social Studies Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
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- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

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- EDE 6932: Special Topics
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- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7242: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
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- EME 5433: Integrating Technology into Science Classroom
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- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
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- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
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- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6385: Foreign Languages Teaching Methods
- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6573: Methods of Teaching ESOL K-12
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- TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
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- LAE 6446: Multicultural Literature for Children and Adolescents
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- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
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- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6612: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

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- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

College of Engineering

Dear: C. Abernathy

Complete faculty listings: Follow this link.

The College of Engineering is organized into a number of departments focusing on today's most pressing engineering questions. There is an interdisciplinary culture at the core of Gator Engineering, and researchers regularly collaborate with colleagues in departments and colleges beyond their own.

For more information, please see our website: http://www.eng.ufl.edu

Departments and Programs within the College of Engineering

College of Engineering Courses

Agricultural and Biological Engineering Department

College of Agricultural and Life Sciences

Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

**Agricultural production** includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

**Biological engineering** includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

**Information systems** includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis, and expert systems techniques to biological and agricultural systems.

**Land and water resources** includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling, and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management, and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.
Agricultural and Biological Engineering (Engineering)

College

- College of Agricultural and Life Sciences
- College of Engineering

Department/School

Agricultural and Biological Engineering Department

Agricultural and Biological Engineering Program

The degrees of Master of Science, Master of Engineering, and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences.

Requirements for these degrees are given in the Graduate Degrees section of this catalog. Additional information can also be found on the graduate studies pages on the department website at www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

- Agricultural production includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.
- Biological engineering includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science. Information systems includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.
- Land and water resources includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.
- Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Degrees Offered with a Major in Agricultural and Biological Engineering

Doctor of Philosophy

without a concentration
concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Agricultural and Biological Engineering Courses

- ABE 5015: Empirical Models of Crop Growth and Yield Response
- ABE 5038: Recent Developments and Applications in Biosensors
- ABE 5152: Electro-Hydraulic Circuits and Controls
Biomedical Engineering Department

Chair: C. Schmidt
Graduate Coordinator: D. Hintenlang

Complete faculty listing by department: [Follow this link](http://www.bme.ufl.edu).

The mission of the J. Crayton Pruitt Family Department of Biomedical Engineering (BME) is to educate students with strong engineering and science backgrounds for Master's and/or Ph.D. degrees in biomedical engineering. Graduates in BME typically apply their skills and training directly to engineering solutions to clinical problems in medicine. The BME mission is accomplished through a core program of study that has strong collaborations with faculty in the Colleges of Engineering and Medicine. The Biomedical Engineering Department faculty members work collaboratively with joint, affiliate, and adjunct faculty from many other departments in the College of Engineering, the College of Medicine, and local industry. This diversity ensures students the highest-quality education and varied opportunities for cutting-edge research. The BME Department currently focuses in: neural engineering, biomaterials, tissue engineering, biomechanics, nanomedicine, biomedical imaging and medical physics. A concentration in Medical Physics is available at both the M.S. and Ph.D. level and prepares students for clinical or research careers in medical imaging or radiation therapy. The Medical Physics concentration is fully accredited by CAMPEP. Additional information on admissions requirements, faculty, and research projects is available at: [http://www.bme.ufl.edu](http://www.bme.ufl.edu).

BME graduate students are admitted directly through the BME Department. The BME Graduate Academic Committee reviews and makes all decisions regarding admission. Each student's research adviser must hold a Graduate Faculty appointment in the BME Department. Supervisory committees for BME students normally include at least one member from the College of Engineering and one from the College of Medicine to emphasize the need for a clinical focus in the research.

Other

Biomedical Engineering
Biomedical Engineering Program Information

The master's degree (thesis or nonthesis) requires at least 30 semester hours. The Ph.D. degree requires at least 90 semester credit hours beyond the bachelor's degree. No more than 30 hours of a master's degree from another institution will be transferred to the Ph.D. degree. If a student holds a master's degree in a discipline different from the doctoral program, the master's work will not be counted toward the doctoral degree unless the BME Department successfully petitions the Dean of the Graduate School. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Complete BME program details and courses available are listed in the Biomedical Engineering Graduate Guidelines, on the BME website (which also offers information on available areas of study). Graduate-level courses in either the College of Engineering or the College of Medicine may be applied toward the BME degree programs with the approval of the supervisory committee chair and the graduate coordinator.

Combined program: Biomedical Engineering also offers a combined bachelor's/master's degree program in collaboration with the other departments in the College of Engineering. This program allows qualified students to earn both a bachelor's degree and a master's degree within 5 years for a net savings of 1 year. Contact the BME academic services office for more information or see http://www.bme.ufl.edu/academics/combined.

Degrees Offered with a Major in Biomedical Engineering

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

concentration in Medical Physics

Master of Engineering

Master of Science

without a concentration

concentration in Medical Physics
Courses

- BME 5052L: Biomedical Engineering Laboratory
- BME 5085: Patents, Product Development, and Technology Transfer
- BME 5401: Biomedical Engineering and Physiology I
- BME 5407: Molecular Biomedical Engineering
- BME 5500: Biomedical Instrumentation
- BME 5703: Statistical Methods for Biomedical Engineering
- BME 5704: Advanced Computational Methods for Biomedical Engineering
- BME 5937: Special Topics
- BME 6010: Clinical Preceptorship
- BME 6324: Stem Cell Engineering
- BME 6330: Cell and Tissue Engineering
- BME 6360: Neural Engineering
- BME 6502: Introduction to Medical Imaging
- BME 6505: Advanced Diagnostic Radiological Physics
- BME 6522: Biomedical Multivariate Signal Processing
- BME 6533: Radiologic Anatomy
- BME 6534: Advanced Therapeutic Radiological Physics
- BME 6535: Radiological Physics, Measurements and Dosimetry
- BME 6590: Medical Physics
- BME 6591: Therapeutic Radiological Physics I
- BME 6592: Therapeutic Radiological Physics II
- BME 6593: Therapeutic Radiological Physics III
- BME 6705: Mathematical Modeling of Biological and Physiological Systems
- BME 6905: Individual Work in Biomedical Engineering
- BME 6907: BME Project
- BME 6910: Supervised Research
- BME 6936: Biomedical Engineering Seminar
- BME 6938: Special Topics in Biomedical Engineering
- BME 6940: Supervised Teaching
- BME 6971: Research for Master's Thesis
- BME 7979: Advanced Research
- BME 7980: Research for Doctoral Dissertation
- EEE 6504: Adaptive Signal Processing
- EEE 6512: Image Processing and Computer Vision
- ENU 5615C: Nuclear Radiation Detection and Instrumentation
- ENU 5615L: Nuclear Radiation Detection and Instrumentation Lab
- ENU 5626: Radiation Biology
- ENU 5658: Imaging System Analysis with Medical Physics Applications
- ENU 6015: Radiation Interaction Basics and Applications I
- ENU 6052: Radiation Transport Basics and Applications
- ENU 6627: Therapeutic Radiological Physics
- ENU 6636: Medical Radiation Shielding & Protection
- ENU 6657: Diagnostic Radiological Physics
- ENU 6659: Nuclear Medicine Instrumentation and Procedure

College of Engineering and College of Medicine Courses

- Click here for information about available College of Engineering courses.

Chemical Engineering Department

Chair: R. Dickinson.
Graduate Coordinator: A. Chauhan.
Complete faculty listing by department: Follow this link.

The Ph.D., M.E., and M.S. degrees in chemical engineering require course work in three core areas:

- The chemical engineering basic area, consisting of three core courses in the mathematical, the molecular, and the continuum bases of chemical engineering
- The chemical engineering science and systems area, consisting of a selection of courses in such areas as transport phenomena, electrochemical engineering, thermodynamics, kinetics, reaction engineering, process control, separation processes, and heat and mass transfer
- The research specialty area, consisting of courses designed to build depth in a field of specialization. Courses may be from other academic units, or may be chemical engineering courses such as colloid science, corrosion, polymer science, advanced materials, and biochemical engineering

Other

Chemical Engineering
College

College of Engineering

Department/School

Chemical Engineering Department

Degrees Offered with a Major in Chemical Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Courses

- BME 6221: Biomolecular Cell Mechanics
- BME 6322: Dynamics of Cellular Processes
- ECH 5708: Disinfection, Sterilization, and Preservation
- ECH 5938: Topics in Colloid Science
- ECH 6126: Thermodynamics of Reaction and Phase Equilibria
- ECH 6207
- ECH 6270: Continuum Basis of Chemical Engineering
- ECH 6272: Molecular Basis of Chemical Engineering
- ECH 6285: Transport Phenomena
- ECH 6326: Computer Control of Processes
- ECH 6506: Chemical Engineering Kinetics
- ECH 6526: Reactor Design and Optimization
- BME 6644: Pharmacokinetics
- ECH 6709: Electrochemical Engineering Fundamentals and Design
- ECH 6726: Interfacial Phenomena I
- ECH 6727: Interfacial Phenomena II
- ECH 6843: Experimental Basis of Chemical Engineering
- ECH 6847: Mathematical Basis of Chemical Engineering
- ECH 6851: Impedance Spectroscopy
- ECH 6905: Individual Work
- ECH 6910: Supervised Research
- ECH 6926: Graduate Seminar
- ECH 6937: Topics in Chemical Engineering I
- ECH 6939: Topics in Chemical Engineering III
- ECH 6940: Supervised Teaching
- ECH 6971: Research for Master's Thesis
- ECH 6XXX
- ECH 7938: Advanced Special Chemical Engineering Topics for Doctoral Candidates
- ECH 7979: Advanced Research
- ECH 7980: Research for Doctoral Dissertation

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
Civil and Coastal Engineering Department

Chair: K. Hatfield  
Graduate Coordinator: A. Drescher  
Complete faculty listing by department: Follow this link.

The Department of Civil and Coastal Engineering offers two distinct graduate programs: civil engineering and coastal and oceanographic engineering. All degrees except the Ph.D. are available in a thesis or nonthesis option. The nonthesis option has two formats: report and 30-hour non-report. Students who elect the nonthesis report must successfully complete a document of substantial engineering content for a minimum of two hours credit in CGN 6974 for civil engineering majors, or EOC 6905 for coastal and oceanographic engineering majors.

Civil and Coastal Engineering degree programs include areas of specialization in construction, civil engineering management, geotechnical engineering, water resources and hydrology, public works, structural engineering, civil engineering materials, geosensing systems engineering, coastal engineering, oceanographic engineering and offshore structures, and transportation engineering.

Minor or supporting work is encouraged from a variety of related or allied fields of study. Ph.D. students are required to take a preliminary examination. Requirements for the M.S., M.E., and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Other

Civil Engineering

College

College of Engineering

Department/School

Civil and Coastal Engineering Department

Civil Engineering Program

The civil engineering program is offered through the Department of Civil and Coastal Engineering with the following degrees: Master of Engineering, Master of Science, and Doctor of Philosophy. The master's degree in civil engineering is also offered through the Electronic Delivery of Graduate Engineering (EDGE) program, which is a distance learning program delivered either via streaming video or DVD directly to the students. Subject to approval by the supervisory committee, graduate-level courses taken through the Departments of Environmental Engineering Sciences, Geological Sciences, and Mechanical and Aerospace Engineering are considered as major credit.

For courses taken through the Department of Civil and Coastal Engineering, credit hours graded S/U will not count toward graduation except for:

- 6 hours of CGN 6971 or EOC 6971 for thesis students
- 3 hours of CGN 6974 for students working on the M.E. report
- CGN 7979 or EOC 7979
- CGN 7980 or EOC 7980

Degrees Offered with a Major in Civil Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems
concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Courses

- CCE 5035: Construction Planning and Scheduling
- CCE 5405: Construction Equipment and Procedures
- CCE 6037: Civil Engineering Operations I
- CCE 6038: Innovative Construction Techniques
- CCE 6505: Computer Applications in Construction Engineering
- CCE 6507: Computer Applications in Construction Engineering II
- CCE 6516: Topics in Airborne Laser Mapping Technology
- CEE 5105: Geotechnical Engineering
CEG 5114: Advanced Geotechnical Aspects of Landfill Design
CEG 5115: Foundation Design
CEG 5205C: In-situ Measurement of Soil Properties
CEG 5206: Geosensing I
CEG 5805: Ground Modification Design
CEG 6015: Advanced Soil Mechanics
CEG 6116: Advanced Shallow Foundation Design
CEG 6117: Advanced Deep Foundation Design
CEG 6201: Experimental Determination of Soil Properties
CEG 6207: Geosensing II
CEG 6405: Seepage in Soils
CEG 6505: Numerical Methods of Geomechanics
CEG 6515: Earth Retaining Systems and Slope Stability
CES 5010: Probabilistic and Stochastic Methods in Civil Engineering
CES 5116: Finite Elements in Civil Engineering
CES 5325: Design of Highway Bridges
CES 5606: Topics in Steel Design
CES 5607: Behavior of Steel Structures
CES 5715: Prestressed Concrete
CES 5726: Design of Concrete Structures
CES 5801: Design and Construction in Timber
CES 5835: Design of Reinforced Masonry Structures
CES 6106: Advanced Structural Analysis
CES 6108: Structural Dynamics
CES 6165: Computer Methods in Structural Engineering
CES 6551: Design of Folded Plates and Shells
CES 6588: Protective Structures
CES 6590: Impact Engineering
CES 6591: Applied Protective Structures
CES 6592: Retrofit Protective Structures
CES 6593: Advanced Protective Structures
CES 6706: Advanced Reinforced Concrete
CES 6855: Condition Assessment of Structures
CGN 5606: Public Works Management
CGN 5715: Experimentation and Instrumentation in Civil Engineering Materials Research
CGN 6155: Civil Engineering Practice I
CGN 6156: Construction Engineering II
CGN 6505: Properties, Design and Control of Concrete
CGN 6506: Bituminous Materials
CGN 6525: Sustainable Materials
CGN 6905: Special Problems in Civil Engineering
CGN 6910: Supervised Research
CGN 6936: Civil Engineering Graduate Seminar
CGN 6940: Supervised Teaching
CGN 6971: Research for Master's Thesis
CGN 6972: Research for Engineer's Thesis
CGN 6974: Master of Engineering or Engineer Degree Report
CGN 7979: Advanced Research
CGN 7980: Research for Doctoral Dissertation
CWR 5125: Groundwater Flow I
CWR 5127: Evaluation of Groundwater Quality
CWR 5235: Open Channel Hydraulics
CWR 6115: Surface Hydrology
CWR 6236: Sediment Transport I
CWR 6255: Diffusive and Dispersive Transport
CWR 6525: Groundwater Flow II
CWR 6537: Contaminant Subsurface Hydrology
TTE 5305: Advanced Transportation Systems Analysis
TTE 5006: Advanced Urban Transportation Planning
TTE 5256: Traffic Engineering
TTE 5805: Geometric Design of Transportation Facilities
TTE 5835: Pavement Design
TTE 5837: Pavement Management Systems
TTE 6205: Freeway Operations and Simulation
TTE 6259: Urban Streets Simulation and Control
TTE 6267: Traffic Flow Theory
TTE 6306: Computational Methods in Transportation Engineering
TTE 6315: Highway Safety Analysis
TTE 6505: Discrete Choice Analysis
TTE 6606: Urban Transportation Models

Civil and Coastal Engineering Departmental Courses

- CES 6571: Design of Temporary Structures
- CES 6585: Wind Engineering
- CGN 5125: Legal Aspects of Civil Engineering
- CGN 5315: Civil Engineering Systems
- CGN 5605: Public Works Planning
- CGN 6150: Engineering Project Management
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6240: Mixing and Transport in Turbulent Flow
- TTE 6207: Advanced Highway Capacity Analysis
Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM5616: Intermediate Fluid Dynamics
- ENV/5518: Field Methods in Environmental Hydrology
- ENV/5565: Hydraulic Systems Design
- ENV/6050: Advanced Pollutant Transport
- ENV/6052: Immiscible Fluids in Porous Media
- ENV/6441: Water Resources Planning and Management
- ENV/6508: Wetland Hydrology
- ENV/6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Coastal and Oceanographic Engineering

College

   College of Engineering

Department/School

   Civil and Coastal Engineering Department

Coastal and Oceanographic Engineering Program

The coastal and oceanographic engineering program is offered through the Department of Civil and Coastal Engineering with the following degrees: Master of Engineering, Master of Science, and Doctor of Philosophy degree. Subject to approval by the supervisory committee, graduate-level courses taken through the Departments of Environmental Engineering Sciences, Geological Sciences, and Mechanical and Aerospace Engineering are considered as major credit.

For courses taken through the Department of Civil and Coastal Engineering, credit hours graded S/U will not count toward graduation except for

- 6 hours of CGN 6971 or EOC 6971 for thesis students
- 3 hours of CGN 6974 for students working on the M.E. report
- CGN 7979 or EOC 7979
- CGN 7980 or EOC 7980

Degrees Offered with a Major in Coastal and Oceanographic Engineering

Doctor of Philosophy

Master of Engineering
Master of Science

Coastal and Oceanographic Engineering Courses

- EGM 5816: Intermediate Fluid Dynamics
- EOC 5860: Port and Harbor Engineering
- EOC 6196: Littoral Processes
- EOC 6430: Coastal Structures
- EOC 6650: Numerical Simulation Techniques in Coastal and Ocean Engineering
- EOC 6905: Individual Study in Coastal and Oceanographic Engineering
- EOC 6932: Selected Field and Laboratory Problems
- EOC 6934: Advanced Topics in Coastal and Oceanographic Engineering
- EOC 6939: Graduate Seminar
- EOC 6971: Research for Master's Thesis
- EOC 6972: Research for Engineer's Thesis
- EOC 7979: Advanced Research
- EOC 7980: Research for Doctoral Dissertation
- OCP 5293: Coastal Processes
- OCP 6050: Physical Oceanography
- OCP 6165: Ocean Waves I: Linear Theory
- OCP 6165L: Ocean Waves Laboratory
- OCP 6167: Ocean Waves II: Nonlinear Theory
- OCP 6168: Data Analysis Techniques for Coastal and Ocean Engineers
- OCP 6169: Random Sea Analysis
- OCP 6295: Estuarine and Shelf Hydrodynamics I
- OCP 6297: Coastal and Estuarine Sediment Transport
- OCP 6298: Coastal Sediment Transport Processes

Civil and Coastal Engineering Departmental Courses

- CES 6571: Design of Temporary Structures
- CES 6585: Wind Engineering
- CGN 5125: Legal Aspects of Civil Engineering
- CGN 5315: Civil Engineering Systems
- CGN 5605: Public Works Planning
- CGN 6150: Engineering Project Management
- CWR 6128: Variable-Density Groundwater Flow
- CWR 6240: Mixing and Transport in Turbulent Flow
- TTE 6207: Advanced Highway Capacity Analysis

Hydrology / Water Resources Shared Courses

- CQN 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM 5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6441: Water Resources Planning and Management
- ENV 6508: Wetland Hydrology
- ENV 6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
Computer and Information Science and Engineering Department

College of Engineering

Chair: Paul Gader
Graduate Coordinator: Jih-kwon Peir

Complete faculty listing by department: Follow this link.

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Engineering
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems**: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS.

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background.

All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B, to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A minimum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: [http://www.cise.ufl.edu](http://www.cise.ufl.edu)

Other

Computer Engineering

College

College of Engineering

Department/School

Computer and Information Science and Engineering Department
Computer Engineering Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science and the Doctor of Philosophy degrees in Computer Engineering through the College of Engineering. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in Algorithms, Computer Vision, Databases, Graphics and Modeling, Machine Learning, Networks, and Systems, with active labs in Bioinformatics; Computational Science and Intelligence; Vision, Graphics and Medical Imaging; Database Systems Research and Development; Data Science Research; Mobile and Pervasive Computing; Human-Centered Computing; and Cybersecurity.

Specific degree requirements and options may be found here: http://cise.ufl.edu/academics/grad

Instructions for application for admission may be found here: http://cise.ufl.edu/admissions/grad

Degrees Offered with a Major in Computer Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

without a concentration

concentration in Digital Arts and Sciences

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5805: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6685: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6156: High Performance Computer Architecture
- CEN 5035: Software Engineering
- CEN 6070: Software Testing and Verification
- CEN 6075: Software Specification
- CIS 6805: Individual Study
- CIS 6910: Supervised Research
- CIS 6930: Special Topics in CIS
- CIS 6935: Graduate Seminar
- CIS 6940: Supervised Teaching
- CIS 6971: Research for Master's Thesis
The Department of Computer and Information Science and Engineering offers the Master of Science degree in Digital Arts and Sciences through the College of Engineering. Minimum requirements for this degree are given in the Graduate Degrees section of this catalog.

This specialized program integrates engineering and design and was created for students with an interest in video games, human-computer interaction, 3D modeling and animation, virtual reality, and computer graphics. The curriculum includes core computer science with a special emphasis on human-centered computing and provides students the flexibility to focus on both computer science and design, and to create software that is computationally complex, user friendly and aesthetically pleasing.

Specific degree requirements and options may be found here: [http://cise.ufl.edu/academics/grad](http://cise.ufl.edu/academics/grad)

Instructions for application for admission may be found here: [http://cise.ufl.edu/admissions/grad](http://cise.ufl.edu/admissions/grad)

### Degrees

**Master of Science**

### Computer and Information Science and Engineering Departmental Courses
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practice/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Electrical and Computer Engineering Department

Chair: J. Harris.
Graduate Coordinators: G. Bosman, J. McNair

Complete faculty listing [Follow this link].

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the [Graduate Degrees Section](#) of this catalog. For more information about our program, please visit the link below.

Other

Electrical and Computer Engineering

College
Electrical and Computer Engineering Program Information

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in computer engineering, devices, electromagnetics and energy systems, electronics, and signals and systems.

Graduate students in the Department of Electrical and Computer Engineering have bachelor's degrees from many areas: electrical engineering, other engineering disciplines, chemistry, mathematics, physics, and other technical fields. The Department of Electrical and Computer Engineering offers both thesis and nonthesis options for the master's degrees.

In the thesis option a student shall complete a minimum of 30 semester credit hours with a maximum of 6 semester credit hours of EEL 6971 (Research for Master's Thesis). While the Graduate School sets the minimum requirements, the supervisory committee determines the appropriate number of thesis hours a student shall be required to take for the thesis. Other course requirements include a minimum of 18 hours at the 5000 and 6000 level in electrical and computer engineering. Excluded from satisfying these course requirements are EEL 5905 and EEL 6905 (Individual Work), EEL 6910 (Supervised Research), EEL 6932 (Graduate Seminar), EEL 6940 (Supervised Teaching), and EEL 6971 (Research for Master’s Thesis). No more than 6 hours of Individual Work (EEL 5905 or EEL 6905) may be counted toward the degree.

In the nonthesis option a student shall complete a minimum of 30 semester credit hours with a maximum of 6 semester credit hours of Individual Work (EEL 5905 or EEL 6905). The course requirements include a minimum of 21 semester credit hours at the 5000 or 6000 level in electrical and computer engineering. Excluded from satisfying these course requirements are EEL 5905 and EEL 6905 (Individual Work), EEL 6910 (Supervised Research), EEL 6932 (Graduate Seminar), EEL 6940 (Supervised Teaching), and EEL 6971 (Research for Master’s Thesis).

The Department also offers a combined bachelor’s/master’s degree program. This program allows qualified students to earn both a bachelor’s degree and master’s degree with a saving of one semester. Qualified students may begin their master’s programs while seniors, counting up to 12 hours of specified electrical and computer engineering graduate courses for both bachelor’s and master’s degree requirements. Bachelor’s/master’s program admission requirements are (1) satisfaction of Graduate School admission requirements for the master’s degree, (2) an upper-division (undergraduate) GPA of at least 3.3, and (3) completion of at least 7 EEL core courses and 2 EEL laboratories. Students with a GPA between 3.3 and 3.59 can double count up to 6 hours, while students with a GPA of 3.6 or higher can double count up to 12 hours.

All prospective doctoral students must take the written part of the Ph.D. qualifying examination within the first year of enrollment. Other requirements for the doctoral degree, as well as requirements for master’s and engineer degrees, are given in the Electrical and Computer Engineering Department’s Graduate Guidelines (see http://www.ece.ufl.edu/content/graduate-academics) and in the front section of this catalog.

The following course listing indicates the major areas of faculty interest. Special topics courses EEL 5934 and EEL 6935 cover a wide variety of subjects for which there are no present courses.

Degrees Offered with a Major in Electrical and Computer Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Courses

- CNT 6805: Network Science and Applications
- EEE 5317C: Introduction to Power Electronics
- EEE 5320: Bipolar Analog IC Design
- EEE 5322: VLSI Circuits and Technology
- EEE 5364: Fundamentals of Data Converters
- EEE 5400: Future of Microelectronics Technology
- EEE 5405: Microelectronic Fabrication Technologies
- EEE 5426: Introduction to Nanodevices
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
Environmental Engineering Sciences Department

Director: K. Hatfield
Graduate Coordinator: P. Chadik

Complete faculty listing Follow this link.

The Department of Environmental Engineering Sciences offers graduate study in the following areas: Air Resources; Biogeochemical Systems; Environmental Nanotechnology; Solid and Hazardous Waste Management; Storm Water, Water Supply and Waste Water; Sustainability Science & Engineering Systems Ecology and Ecological Engineering and Water Resources. Students graduated from the program will demonstrate depth in individual focus areas as well as breadth of core knowledge concepts in all areas. Please visit the link below for more information about our program in Environmental Engineering Sciences.

Other

Environmental Engineering Sciences

College

College of Engineering

Department/School

Environmental Engineering Sciences Department

Environmental Engineering Sciences Program Information

Graduate study is offered leading to the degrees Master of Engineering, Master of Science, and Doctor of Philosophy in the field of environmental engineering sciences. Our graduate research and education areas are

**Air Resources**
- Monitoring of air pollutants: indoor, ambient, industrial, and occupational
- Monitoring methodology and instrumentation development
- Formation and fate of air pollutants
- Air quality modeling
- Air pollution control: system, process and materials
- Sustainability of air quality
- Health effects and environmental impact of air pollutant

**Biogeochemical Systems**
- Green Engineering
- Microbiology of Natural and Engineered Systems
- Environmental Fate and Transport of Pollutants in Soils and Aquatic Systems
- Biological and Chemical Remediation of Contaminated Systems
- Environmental Toxicology and Nanotoxicology
- Effects of Climate and Land Use Changes on Biogeochemical Cycles
- Aquatic Geochemistry and Water Treatment

**Environmental Nanotechnology**
- Manufacturing and tailoring of nanomaterials and nanodevices for application in environmental and human health research
- Environmental fate and transport of nanomaterials
- Environmental implications of nanomaterials

**Solid and Hazardous Waste Management**
- Bioreactor Landfills
- Combustion and Thermal Treatment Residuals
- Contaminated Soil Characterization and Treatment
- Construction and Demolition Debris
- Electronic Waste
- Hazardous Waste
- Landfill Design and Operations
- Landfill Gas and Leachate
- Recycling and Beneficial Use of Wastes
- Treated Wood
- Waste Characterization and Leaching
- Solid Waste Management in Developing Countries

**Stormwater, Water Supply and Wastewater**
- Fundamental characterization of aqueous and particulate phase contaminants including emerging contaminants: representative ambient monitoring, methodology and load quantification.
- Sourcing and generation of aqueous and particulate phase contaminants, physics and chemistry of contaminant transport and fate.
- Water contaminant control: systems, unit operation and processes, and materials development, in particular innovative mass transfer materials and low impact development materials.
• Water reuse as part of the urban water cycle: volumetric and contaminant load impacts
• Unit operation and process modeling: scalable physical models and computational fluid dynamics (CFD).
• Integrated physical, chemical, biological and thermal treatment phenomena for water cycle components.
• Coupling fundamental monitoring and material balance testing with urban water modeling.
• Fundamental and applied studies of physical-chemical water treatment processes, such as adsorption, coagulation, ion exchange, and oxidation, for a wide range of water qualities including surface water, groundwater, membrane concentrate, landfill leachate, and human urine.
• Innovative applications of ion exchange for water treatment.
• Fundamental studies in aquatic chemistry with a focus on the role of natural organic matter.
• Fundamental and applied studies of adsorption and photocatalysis, including surface optimization
• Bottom up integrated urban water system simulation and optimization

**Sustainability Science & Engineering**

• Rational design of nanomaterial through acute and full-life-cycle toxicity assessment
• Life cycle assessment calculations and comparisons of alternative energy and materials options
• Industrial ecology
• Corporate water resources sustainability
• Campus green building codes
• Green laboratory techniques
• Operation of buildings to meet green energy requirements

**Systems Ecology and Ecological Engineering**

• Ecological Engineering
• Emerge Analysis
• Wetlands ecosystem research
• Ecological Modeling
• Estuarine Systems

**Water Resources**

• Contaminant transport and fate
• Decision support systems
• Ecohydrology and hydrologic restoration
• Hydrology
• Stormwater control
• Water resources planning and management
• Water conservation
• Urban water infrastructure

Graduate students can also combine one or more of the above areas with specialties in other departments at the University of Florida.

The department participates in the hydrologic sciences interdisciplinary concentration that is offered through 9 departments in 3 colleges. This concentration is described under Interdisciplinary Graduate Studies.

Direct admission into the Master of Science and Doctor of Philosophy programs requires a bachelor’s degree in engineering or in a basic science such as chemistry, geology, physics, biology, or mathematics. Persons with a degree in a nontechnical field may also be admitted into this program after completing appropriate technical courses. Direct admission into the Master of Engineering program requires a bachelor’s degree in engineering.

Requirements for a master’s degree normally take 12 to 24 months to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, and may be completed in 3 years, but often takes longer, depending on prior academic experience.

**Concurrent program**: The department offers a combined bachelor’s/master’s degree program. This program allows qualified students to earn both a bachelor’s degree and a master’s degree, with a savings of 12 credits.

**Joint program**: The Environmental Engineering Sciences Department, in partnership with the Levin College of Law, offers a joint program leading to the M.S. or M.E. degree in environmental engineering sciences and the Juris Doctor degree. Twelve credits of appropriate course work are counted toward both degrees.

Degrees Offered with a Major in Environmental Engineering Sciences

**Doctor of Philosophy**

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences
concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Courses

- CEG 5206: Geosensing I
- CWR 6115: Surface Hydrology
- CWR 6116: Advanced Surface Hydrology
- CWR 6262: Environmental Biochemistry of Trace Metals
- CWR 6536: Stochastic Subsurface Hydrology
- CWR 6537: Contaminant Subsurface Hydrology
- EES 5105: Advanced Wastewater Microbiology
- EES 5107: Ecological and Biological Systems
- EES 5207: Environmental Chemistry
- EES 5245: Water Quality Analysis
- EES 5305C: Ecological and General Systems
- EES 5306: Energy Analysis
Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM 5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6116: Air Pollution Sampling and Analysis
- ENV 6126: Air Pollution Control Design
- ENV 6130: Aerosol Mechanics
- ENV 6146: Atmospheric Dispersion Modeling
- ENV 6215: Health Physics
- ENV 6216: Radioactive Wastes
- ENV 6301: Advanced Solid Waste Containment Design
- ENV 6435: Advanced Water Treatment Process Design
- ENV 6435C: Advanced Water Treatment Process Design
- ENV 6435L: Water Treatment Process Design Laboratory
- ENV 6437: Advanced Wastewater System Design
- ENV 6438: Advanced Potable Water Systems Design
- ENV 6441: Water Resources Planning and Management
- ENV 6446: Advanced Stormwater Control Systems
- ENV 6508: Wetland Hydrology
- ENV 6510: Groundwater Restoration
- ENV 6511: Biological Wastewater Treatment
- ENV 6556: Advanced Waste Treatment Operations
- ENV 6617: Principles of Green Engineering Design and Sustainability
- ENV 6905: Individual Work
- ENV 6910: Supervised Research
- ENV 6916: Nonthesis Project
- ENV 6932: Special Problems in Environmental Engineering
- ENV 6935: Graduate Environmental Engineering Seminar
- ENV 6971: Research for Master's Thesis
- ENV 7979: Advanced Research
- ENV 7980: Research for Doctoral Dissertation
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Industrial and Systems Engineering Department

Chair: J. Geunes.
Graduate Coordinator: J. C. Smith and P. Momcilovic.

Complete faculty listing by department: Follow this link.

The Department of Industrial and Systems Engineering offers the Master of Engineering and the Master of Science degrees, each with a thesis or nonthesis option, with specialization in engineering management, manufacturing and logistics systems engineering, operations research, quality engineering, and special interest options such as health systems. In addition, the Department offers the Engineer degree and the Doctor of Philosophy degree with specialization in linear, combinatorial, nonlinear, and global optimization; supply chain management and e-commerce; financial engineering; manufacturing management; facilities location and layout; quality engineering; and stochastic processes.

Complete descriptions of the requirements for the M.E., M.S., Engineer, and Ph.D. degrees are provided in the General Information section of this catalog.

A degree in one of the engineering disciplines or in mathematics, statistics, physics, computer sciences, quantitative management, or similar fields is prerequisite. Where the student's background is deficient, an articulation program of foundation courses will be required.

The Department offers a combined bachelor's/master's degree program of B.S.I.S.E./Master of Science (Management), B.S.I.S.E./Master of Engineering or Master of Science, and a B.S. from disciplines within the College of Engineering/Master of Science or Master of Engineering. Contact the graduate coordinator for information.

Other

Industrial and Systems Engineering

College

College of Engineering

Department/School

Industrial and Systems Engineering Department

Degrees Offered with a Major in Industrial and Systems Engineering

Doctor of Philosophy

- without a concentration
  - concentration in Quantitative Finance

Engineer
Master of Engineering

Master of Science

Industrial and Systems Engineering Courses

- EIN 6227: Advanced Quality Management and Engineering for Business Processes
- EIN 6336: Advanced Production and Inventory Control
- EIN 6357: Advanced Engineering Economy
- EIN 6367: Facilities Layout and Location
- EIN 6392: Manufacturing Management
- EIN 6905: Special Problems
- EIN 6910: Supervised Research
- EIN 6918: Graduate Seminar
- EIN 6940: Supervised Teaching
- EIN 6979: Advanced Research
- EIN 7960: Research for Doctoral Dissertation
- ESI 5236: Reliability Engineering
- ESI 6162C: Advanced Industrial Applications of Microprocessors
- ESI 6314: Deterministic Methods in Operations Research
- ESI 6323: Models for Supply Chain Management
- ESI 6341: Intro to Stochastic Optimization
- ESI 6355: Decision Support Systems for Industrial and Systems Engineers
- ESI 6417: Linear Programming and Network Optimization
- ESI 6418: Linear Programming Extensions and Applications
- ESI 6420: Fundamentals of Mathematical Programming
- ESI 6429: Introduction to Nonlinear Optimization
- ESI 6446: Discrete Optimization Theory
- ESI 6449: Integer Programming
- ESI 6470: Principles of Manufacturing Systems Engineering
- ESI 6492: Global Optimization
- ESI 6529: Digital Simulation Techniques
- ESI 6533: Advanced Simulation Design and Analysis
- ESI 6546: Stochastic Modeling and Analysis
- ESI 6552: Systems Architecture
- ESI 6553: Systems Design
- ESI 6555: Systems Management
- ESI 6912: Advanced Topics in ISE

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6039: Engineering Leadership
- EGN 6442: Engineering Innovation
- EGN 6529: Digital Simulation Techniques
- EGN 6533: Advanced Simulation Design and Analysis
- EGN 6546: Stochastic Modeling and Analysis
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Materials Science and Engineering Department

Chair: S. Phillpot
MSE Graduate Coordinator: J. J. Mecholsky, Jr.
NE Graduate Coordinator: E. Dugan

Complete faculty listing by department: Follow this link.

The Department of Materials Science and Engineering offers the Master of Science and Doctor of Philosophy degrees in Materials Science & Engineering (MSE) and Nuclear Engineering (NE). Requirements for these degrees are described in the General Information section of this catalog.

Degrees in MSE include specific areas of research and study in biomaterials, ceramics, composites, computational materials science, electronic materials, metals, polymers, nanomaterials, and nuclear materials. Degrees in NE include specific areas of research and study in advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security.

Nontraditional Degree Programs: The Department offers combined bachelor/master's degree programs: MSE BSMS, NE BSMS, and students may also combine the MSE BS with the
MS awarded through the Dept. of Biomedical Engineering (BME). The combined bachelor/master’s program allows qualified students to earn both degrees in materials science and engineering with savings of a tangible number of credit hours. Qualified students are allowed to begin master’s course work in their junior years and double count specific graduate courses for both degrees. The master’s degree may be completed within 2 to 3 semesters after completing the bachelor’s degree. Program admission requirements are (1) satisfaction of Graduate School admission requirements prior to the beginning of the senior year, (2) an upper division GPA of at least 3.5 in MSE and 3.4 in NE, (3) for MSE, completion of a minimum of 18 credit hours of courses, (4) admission by the Department’s Graduate Admission Committee and approval by the College of Engineering and the Graduate School. For more information, contact the Department.

The J.D./M.S. in MSE (thesis/nonthesis) is a joint degree program culminating in both the Juris Doctor degree, awarded by the College of Law, and the Master of Science (thesis/nonthesis), awarded by the College of Engineering. Under this program, a student can earn both degrees in approximately 1 year less than it would take to attain both degrees if pursued consecutively.

Concurrent M.D./Ph.D. degrees are offered through a collaborative program between the College of Medicine and Materials Science and Engineering. For more information, please contact the Department.

To be eligible for regular admission to the graduate program within the Department, the student must hold a B.S. in an appropriate major. Because of the breadth of MSE graduate programs, students with degrees in materials, ceramics, metallurgy, other engineering, mathematics, or science areas (such as biology, chemistry, or physics) have found ample opportunities to pursue their research and training areas of interest.

The faculties of the Department of Materials Science and Engineering (MSE) of the University of Florida (UF) and the University of Roma Tor Vergata (URTV) have approved a cooperative degree program in Materials Science and Engineering culminating in a Doctor of Philosophy degree, awarded by both universities. Contact the Department for details.

Other

Materials Science and Engineering

College

College of Engineering

Department/School

Materials Science and Engineering Department

Degrees Offered with a Major in Materials Science and Engineering

Doctor of Philosophy

without a concentration

in concentration in Clinical and Translational Science

Master of Engineering

Master of Science

Courses
College of Engineering Courses

- EMA 5008: Particle Science and Technology Theory and Practice
- EMA 5095: Critical Analysis of Research in Materials Science & Engineering
- EMA 5108: Vacuum Science and Technology
- EMA 5365: Biomimetic Synthesis
- EMA 6006: Thin and Thick Films
- EMA 6105: Fundamentals and Applications of Surface Science
- EMA 6106: Advanced Phase Diagrams
- EMA 6107: High Temperature Materials
- EMA 6109: Physical Chemistry of High Temperature Materials
- EMA 6110: Electron Theory of Solids for Materials Scientists I
- EMA 6111: Electron Theory of Solids for Materials Scientists II
- EMA 6114: Advanced Materials Principles 2
- EMA 6128: Materials Microstructures
- EMA 6136: Diffusion, Kinetics, and Transport Phenomena
- EMA 6165: Polymer Physical Science
- EMA 6166: Polymer Composites
- EMA 6226: Synthesis and Properties of Metallic Nanostructures
- EMA 6227: Advanced Mechanical Metallurgy II
- EMA 6266: Mechanical Properties of Polymers
- EMA 6313: Advanced Materials Principles I
- EMA 6315: Colloidal Hydrodynamics
- EMA 6316: Materials Thermodynamics
- EMA 6319: Applied Colloid and Interfacial Chemistry for Engineers
- EMA 6412: Synthesis and Characterization of Electronic Materials
- EMA 6416: Organic Electronics
- EMA 6445: Electroceramics
- EMA 6446: Solid State Ionsics
- EMA 6448: Ceramic Processing
- EMA 6461: Polymer Characterization
- EMA 6507: Scanning Electron Microscopy and Microanalysis
  - EMA 6507C
- EMA 6507L: Scanning Electron Microscopy and Microanalysis Lab
- EMA 6510: Survey of Materials Analysis Techniques
- EMA 6512C: X-ray Scattering for Thin Film Analysis
- EMA 6518: Transmission Electron Microscopy
- EMA 6518L: Transmission Electron Microscopy Laboratory
- EMA 6519L: Specialized Research Techniques in Materials Science
- EMA 6540: Fundamentals of Crystallography
- EMA 6541: Applied Crystallography and Powder Diffraction
- EMA 6580: Science of Biomaterials I
- EMA 6581C: Polymeric Biomaterials
- EMA 6588: Mechanical Behavior of Biomaterials
- EMA 6590: Advances in Biomaterials and Tissue Engineering for Healthcare
- EMA 6591: Clinical Applications of Biomaterials and Tissue Engineering
- EMA 6616: Advanced Electronic Materials Processing
- EMA 6625: Advanced Metals Processing
- EMA 6667: Polymer Processing
- EMA 6671: Fracture of Brittle Materials
- EMA 6803: Classical Methods in Computational Materials Science
- EMA 6804: Quantum Methods in Computational Materials Science
- EMA 6805: Mathematical Methods in Materials Science I
- EMA 6806: Mathematical Methods in Materials Science II
- EMA 6808: Error Analysis and Optimization Methodologies in Materials Research
- EMA 6905: Individual Work in Materials Science and Engineering
- EMA 6910: Supervised Research
- EMA 6936: Seminar in Materials Science and Engineering
- EMA 6938: Special Topics in Materials Science and Engineering
- EMA 6971: Research for Master's Thesis
  - EMA 6971A
  - EMA 6971B
  - EMA 6971C
- EMA 7979: Advanced Research
- EMA 7980: Research for Doctoral Dissertation
- ENU 6805: Introduction to Nuclear Reactor Materials

Mechanical and Aerospace Engineering Department

Chair: David W. Hahn
Graduate Coordinator: D. W. Mikolaitis
The Department of Mechanical and Aerospace Engineering offers the degrees of Master of Science (thesis or nonthesis), Master of Engineering (thesis or nonthesis), Engineer, and Doctor of Philosophy in aerospace engineering and mechanical engineering. Minimum requirements for these degrees are given in the General Information section of this catalog. Additional information can be found at [http://www.mae.ufl.edu/graduate](http://www.mae.ufl.edu/graduate). Prospective students are expected to have strong backgrounds in engineering. For the first year of study, each student is generally required to take a minimum of three regular courses each semester. There are three areas of specialization available for graduate studies: dynamics, systems, and control; solid mechanics, design, and manufacturing; thermal science and fluid dynamics. Within a specialization there are unique opportunities to conduct analytical, experimental, and/or numerical study in a wide variety of challenging problems. The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Aerospace Engineering

Degree Programs

- Doctor of Philosophy
- Master of Engineering
- Master of Science

Courses

Mechanical and Aerospace Engineering Departmental Courses

- BME 5580: Introduction to Microfluidics and BioMEMS
- EAS 5938: Special Topics in Aerospace Engineering
- EAS 6135: Molecular Theory of Fluid Flows
- EAS 6138: Gasdynamics
- EAS 6242: Advanced Structural Composites
- EAS 6415: Guidance and Control of Aerospace Vehicles
- EAS 6906: Aerospace Research
- EAS 6910: Supervised Research
- EAS 6935: Graduate Seminar
- EAS 6939: Special Topics in Aerospace Engineering
- EAS 6971: Research for Master's Thesis
- EAS 7979: Advanced Research
- EAS 7980: Research for Doctoral Dissertation
- EGM 5005: Laser Principles and Applications
- EGM 5111L: Experimental Stress Analysis
- EGM 5121C: Data Measurement and Analysis
- EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
- EGM 5584: Biomechanics of Soft Tissue
- EGM 5586: Intermediate Fluid Dynamics
- EGM 5933: Special Topics in Engineering Science and Mechanics
- EGM 6006: Laser-Based Diagnostics
- EGM 6321: Principles of Engineering Analysis I
- EGM 6322: Principles of Engineering Analysis II
- EGM 6323: Principles of Engineering Analysis III
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6940: Entrepreneurship for Engineers
- EGN 6942: Engineering Innovation
- EGN 6309: Engineering Leadership

Mechanical Engineering

College
Degrees Offered with a Major in Mechanical Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Mechanical and Aerospace Engineering Departmental Courses

- BME 5580: Introduction to Microfluidics and BioMEMS
- EAS 5938: Special Topics in Aerospace Engineering
- EAS 6138: Gasdynamics
- EAS 6242: Advanced Structural Composites
- EAS 6415: Guidance and Control of Aerospace Vehicles
- EAS 6905: Aerospace Research
- EAS 6910: Supervised Research
- EAS 6915: Graduate Seminar
- EAS 6939: Special Topics in Aerospace Engineering
- EAS 6971: Research for Master's Thesis
- EAS 7979: Advanced Research
- EAS 7980: Research for Doctoral Dissertation
- EGM 5005: Laser Principles and Applications
- EGM 5111L: Experimental Stress Analysis
- EGM 5121C: Data Measurement and Analysis
- EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
- EGM 5584: Biomechanics of Soft Tissue
- EGM 5586: Intermediate Fluid Dynamics
- EGM 5933: Special Topics in Engineering Science and Mechanics
- EGM 6006: Laser-Based Diagnostics
- EGM 6321: Principles of Engineering Analysis I
- EGM 6322: Principles of Engineering Analysis II
- EGM 6323: Principles of Engineering Analysis III
- EGM 6341: Numerical Methods of Engineering Analysis I
- EGM 6342: Fundamentals of Computational Fluid Dynamics
- EGM 6352: Advanced Finite Element Methods
- EGM 6365: Structural Optimization
- EGM 6570: Principles of Fracture Mechanics
- EGM 6611: Continuum Mechanics
- EGM 6671: Inelastic Materials
- EGM 6812: Fluid Mechanics I
- EGM 6813: Fluid Mechanics II
- EGM 6855: Bio-Fluid Mechanics and Bio-Heat Transfer
- EGM 6905: Individual Study
- EGM 6910: Supervised Research
- EGM 6934: Special Topics in Engineering Mechanics
- EGM 6936: Graduate Seminar
- EGM 6971: Research for Master's Thesis
- EGM 7819: Computational Fluid Dynamics
- EGM 7845: Turbulent Fluid Flow
- EGM 7979: Advanced Research
- EGM 7980: Research for Doctoral Dissertation
- EML 5045: Computational Methods for Design and Manufacturing
- EML 5104: Classical and Statistical Thermodynamics
The Department offers the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy in nuclear engineering sciences with emphases in nuclear power engineering, medical physics, and health physics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The medical physics and health physics options are offered through interdepartmental programs in cooperation with the College of Medicine (see the Health Physics and Medical Physics description under Interdisciplinary Graduate Studies).

Combined Program — The Department also offers a B.S.N.E./M.S. degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of one semester. Qualified students may begin their master's program while seniors counting 12 hours of specified nuclear engineering sciences graduate courses for both the bachelor's and master's degree requirements. Seniors admitted to the combined program are eligible for teaching and research assistantships. Program admission requirements are (1) satisfaction of Graduate School admission requirements for a master's degree, (2) an upper-division (undergraduate) GPA of at least 3.6, and (3) completion of specified bachelor's degree requirements.

The graduate program has two major programs, Nuclear Engineering and Medical Physics. Specific areas of research and study in Nuclear Engineering include advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of national security. The Medical Physics program is a CAMPEP accredited program designed to meet the professional requirements for a career in clinical service or research and development. Areas of Medical Physics study and research include diagnostic medical imaging, radiation therapy, nuclear medicine imaging, and radiation dosimetry.

The requirement for admission to the graduate program in nuclear engineering sciences is a bachelor's degree in an approved program in engineering or in the sciences. Students applying to the Medical Physics program should have completed the equivalent of at least a minor in physics. If the student's background is considered deficient for the planned course of study, an articulation program of background courses will be required.

Depending on professional objectives, the student may select a non-thesis option for the MS degree and substitute 8 credits of graduate-level course work, of which at least 6 credits are in nuclear engineering sciences, including 4-credit (minimum) special project, ENU 6936. Completion of 32 credits will meet the minimum requirements for the non-thesis MS degree.
Normally, the requirements for a master's degree can be completed in 12 months. Students in the medical physics option usually take 21 to 24 months to complete the master's degree, which requires 40-42 credit hours. For a master’s degree in health physics, a student must complete 42 hours of credit. If articulation work is required, it may take longer, depending upon the extent of the student’s deficiency.

Other

Nuclear Engineering Sciences

College

College of Engineering

Department/School

Nuclear and Radiological Engineering Department

Degrees Offered with a Major in Nuclear Engineering Sciences

Doctor of Philosophy

without a concentration

concentration in Imaging Science and Technology

Master of Engineering

Master of Science

Courses

- ENU 5142: Reliability and Risk Analysis for Nuclear Facilities
- ENU 5176L: Principles of Nuclear Reactor Operations Laboratory
- ENU 5186: Nuclear Fuel Cycles
- ENU 5196: Nuclear Reactor Power Plant System Dynamics and Control
- ENU 5518L: Nuclear Engineering Laboratory II
- ENU 5615C: Nuclear Radiation Detection and Instrumentation
- ENU 5615L: Nuclear Radiation Detection and Instrumentation Lab
- ENU 5626: Radiation Biology
- ENU 5668: Imaging System Analysis with Medical Physics Applications
- ENU 5705: Advanced Concepts for Nuclear Energy
- ENU 6051: Radiation Interaction Basics and Applications I
- ENU 6052: Radiation Transport Basics and Applications
- ENU 6053: Radiation Interaction Basics and Applications II
- ENU 6061: Survey of Medical Radiological Physics
- ENU 6106: Nuclear Reactor Analysis I
- ENU 6107: Nuclear Reactor Analysis II
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

College of Health and Human Performance

Dear: M. Reid

Complete faculty listings: Follow this link.

Research and teaching in HHP has an impact on almost every aspect of the human condition. The college’s four centers – the Florida Center for Health Promotion, Center for Exercise Science, and the Eric Friedheim Tourism Institute – as well as its three primary departments – Applied Physiology and Kinesiology, Health Education and Behavior, and Tourism, Recreation, and Sport Management Department – place the college firmly in a position to influence and improve an array of societal problems and challenges.

For more information about the College of Health and Human Performance, please see our website: http://hhp.ufl.edu

Departments and Programs within the College of Health and Human Performance

Other

Health and Human Performance

Health and Human Performance Program Information

The Ph.D. in Health and Human Performance is a single college-wide Ph.D. program with 6 concentrations that are housed and administered by the three departments, according to the following organizational structure:

- **Applied Physiology and Kinesiology (APK):** Ph.D. students in APK study the immediate and lasting effects of exercise and its use in disease prevention and rehabilitation. APK Ph.D. concentrations include Exercise Physiology and Biobehavioral Science, with further specializations in biomechanics, motor control and learning, exercise and performance psychology, and sports medicine/athletic training.
- **Health Education & Behavior (HEB):** Ph.D. students in HEB systematically investigate health promotion strategies aimed at modifying behaviors which will improve individual, family, workplace, and community health and well-being. The HEB Ph.D. concentration is in Health Behavior.
- **Tourism, Recreation, and Sport Management (TRSM):** TRSM Ph.D. students study the impact of tourism, recreation activities, professional and amateur sports, ecotourism, parks and beaches on the personal, social, economic, environmental and resource infrastructures of society. Ph.D. concentrations in TRSM include Natural Resource Recreation, Sport Management, and Tourism.

Students are expected to be involved in research throughout their Ph.D. program, which requires approximately three to five years of full-time study for completion. Graduates of the program are trained to assume positions as post-doctoral research scientists, or entry level professorships at colleges and universities throughout the country. The program of study is developed by the student and the supervisory committee based on the student's background, interests, and career goals, as well as faculty expertise. By design, the program is multidisciplinary and flexible, permitting students to tailor their scholarly experience to the development of research skills in their areas of concentration.

For more information, please see our website: http://gradprograms.hhp.ufl.edu/index.php/doctoral-program
Degrees Offered with a Major in Health and Human Performance

Doctor of Philosophy

without a concentration

concentration in Applied Physiology and Kinesiology

  optional second concentration in Clinical and Translational Science

concentration in Biobehavioral Science

concentration in Clinical and Translational Science

concentration in Exercise Physiology

concentration in Health Behavior

  optional second concentration in Clinical and Translational Science

concentration in Historic Preservation

concentration in Recreation, Parks, and Tourism

concentration in Sport Management

Applied Physiology and Kinesiology Departmental Courses

- APK 5127: Assessment in Exercise Science
- APK 5404: Sport Psychology
- APK 6111L: Practicum in Exercise Physiology
- APK 6116C: Physiological Bases of Exercise and Sport Sciences
- APK 6118: Neuromuscular Adaptation to Exercise
- APK 6126: Cardiopulmonary Pathologies
- APK 6128: EKG Interpretation
- APK 6205C: Nature and Bases of Motor Performance
- APK 6206: Planning Motor Actions
- APK 6210: Controlling Motor Actions
- APK 6225: Biomechanical Instrumentation
- APK 6225C: Biomechanics of Human Motion
- APK 6406: Exercise Psychology
- APK 6408: Performance Enhancement
• APK 6410: Seminar in Exercise Psychology
• APK 6415: Seminar in Sport Psychology: Current Topics
• APK 6900: Directed Independent Study
• APK 6940: Advanced Practicum in Exercise and Sport Science
• APK 7107: Cardiovascular Exercise Physiology
• APK 7108: Environmental Stress Exercise Physiology
• APK 7117: Exercise Metabolism
• APK 7124: Free Radicals in Aging, Exercise and Disease
• APK 7129: Pulmonary Function during Exercise
• ATR 6124: Clinical Anatomy for the Exercise Sciences
• ATR 6145: Human Pathophysiology for the Exercise Sciences
• ATR 6215: Evidence-Based Orthopedic Exam I: Upper-Extremity
• ATR 6216: Evidence-Based Orthopedic Exam II: Lower-Extremity
• ATR 6304: Rehabilitation and Modalities of Athletic Injuries
• ATR 6624: Athletic Training Research and Technology I
• ATR 6625: Athletic Training Research and Technology II
• ATR 6934: Seminar in Athletic Training
• HLP 6515: Evaluation Procedures in Health and Human Performance
• HLP 6535: Research Methods in Health and Human Performance
• HLP 6911: Research Seminar
• HLP 6935: Variable International Topics
• HLP 7979: Advanced Research in Health and Human Performance
• HLP 7980: Research for Doctoral Dissertation
• HSC 5135: Emotional Health Education
• HSC 5138: Human Sexuality
• HSC 5142: Drug Education
• HSC 5315C: Teaching Health in Elementary Schools
• HSC 5536C: Medical Terminology for the Health Professions
• HSC 5576: Nutrition Education for Special Populations
• HSC 5606: Spirituality and Health
• HSC 5618: Advanced Exercise Therapy, Adapted Physical Activity, & Health
• HSC 5626: Minority/Health Issues
• HSC 5657: Health and End-of-Life Issues
• HSC 5926: Seminar in Health Education
• HSC 5956: Writing for Professional Publications
• HSC 6037: Philosophy and Principles of Health Education
• HSC 6216: Environmental Health
• HSC 6235: Patient Health Education
• HSC 6318: Planning Health Education Programs
• HSC 6506: Epidemiology
• HSC 6567: Health Promotion and Programming in Gerontology
• HSC 6571: Contemporary Issues in Health Promotion
• HSC 6575: Women's Health Issues
• HSC 6596C: HIV/AIDS Education
• HSC 6603: Theories of Health Behavior and Practice in Health Education
• HSC 6605: Scientific Foundations of Holistic Health
• HSC 6625: Trends in International Health
• HSC 6629: Health Promotion for Priority Populations
• HSC 6637: Social Marketing and Health
• HSC 6646: Community Health Methods in Injury Prevention & Control
• HSC 6665: Health Communication
• HSC 6667: Health Communication Programs
• HSC 6668: Interpersonal Communication and Health
• HSC 6695: Worksite Health Promotion
• HSC 6712: Evaluating Health Education Programs
• HSC 6735: Research Methods in Health Education
• HSC 6850: Internship in Health Education
• HSC 6904: Readings in Health Education
• HSC 6905: Independent Study
• HSC 6910: Supervised Research
• HSC 6935: Current Topics in Health Education
• HSC 6940: Supervised Teaching
• HSC 6971: Research for Master's Thesis
• HSC 6973: Project in Lieu of Thesis
• HSC 7904: Advanced Readings in Health Education
• HSC 7905: Advanced Independent Study in Health Education
Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMG 6076: Introduction to Hospitality and Tourism
- HMG 6608: Hospitality Law and Risk Management
- HMG 6747: Marketing in Hospitality and Tourism
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6536: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- LEI 5188: Trends in Leisure Studies
- LEI 5121: Outdoor Recreation and Park Management
- LEI 6108: Contemporary Theories of Recreation and Leisure
- LEI 6325: Ecotourism
- LEI 6326: Sport Tourism
- LEI 6336: Tourism Planning and Development
- LEI 6351: Heritage Tourism
- LEI 6439: Campus Recreation Administration and Programming
- LEI 6513: Administrative Procedures in Leisure Services
- LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
- LEI 6557: Recreation Management/Development in the Coastal Zone
- LEI 6562: Advanced Marketing for Recreation, Parks, and Tourism
- LEI 6895: Tourism Theory and Concepts
- LEI 6903: Readings in Recreation, Parks, and Tourism
- LEI 6905: Directed Independent Study
- LEI 6910: Supervised Research
- LEI 6931: Special Topics in Recreation, Parks, and Tourism
- LEI 6935: Seminar in Recreation, Parks, and Tourism
- LEI 6940: Supervised Teaching
- LEI 6944: Practicum in Leisure Studies
- LEI 6971: Research for Master's Thesis
- LEI 7170: Foundations of Leisure Behavior
- LEI 7901: Recreation, Parks, and Tourism in Higher Education
- LEI 7904: Advanced Readings in Recreation, Parks, and Tourism
- LEI 7905: Advanced Independent Study in Recreation, Parks and Tourism
- LEI 7910: Advanced Supervised Research
- LEI 7933: Advanced Special Topics in Recreation, Parks, and Tourism
- LEI 7938: Advanced Seminar in Recreation, Parks, and Tourism
- SPM 6910: Supervised Research
- SPM 6918: Sport Sociology
- SPM 65016: Sport Ethics
- SPM 5309: Sport Marketing
- SPM 5506: Sport Finance
- SPM 5936: Current Topics in Sport Management
- SPM 6006: Contemporary Sport Industry
- SPM 6036: Research Seminar in Sport Management
- SPM 6106: Management and Planning of Sport and Physical Activity Facilities
- SPM 6158: Management and Leadership in Sport
- SPM 6308: Study of Sport Consumer Behaviors
- SPM 6726: Issues in Sport Law
- SPM 6905: Directed Independent Study
- SPM 6910: Supervised Research
- SPM 6947: Graduate Internship in Sport Management
- SPM 6948: Advanced Practicum in Sport Management
- SPM 6971: Research for Master's Thesis

Applied Physiology and Kinesiology Department

Chair: S. Dodd  
Graduate Coordinator: E. Christou

Complete faculty listing by department: Follow this link.

The Ph.D. program is offered with concentrations in biobehavioral science and exercise physiology. Students in the biobehavioral science concentration specialize in one of four areas: biomechanics, exercise / performance psychology, motor control / learning, or sports medicine. These interdisciplinary concentrations focus on preparing students as researchers with a blend of course work and research training.

A program leading to the Master of Science degree in applied physiology and kinesiology (thesis and non-thesis options) is also offered. Areas of concentration for the master's program include athletics/training sports medicine, biobehavioral science, clinical exercise physiology, exercise physiology, and human performance. The thesis option gives the student an opportunity to study, conduct research, and prepare a thesis in an area of special interest. The non-thesis option offers the student a specialization in a selected area of study, with additional work in other areas. A comprehensive written examination is required for this option, as is a capstone internship experience. Requirements for these degrees are given in the General Information section of the University of Florida » 2014-2015 Graduate Catalog.
Athletic training/sports medicine: This concentration provides comprehensive academic preparation, research, and clinical experience in the areas of injury prevention, assessment, treatment, rehabilitation, and therapeutic modalities.

Biobehavioral Science: This thesis mandatory concentration is multidisciplinary and flexible, permitting students to tailor their scholarly experience to the development of research skills in one of several related disciplines: biomechanics, motor control and learning, and exercise and performance psychology. Each area of specialization is briefly described below:

- **Biomechanics:** The specialization in biomechanics draws from the fields of neuroscience, engineering, and medicine. The course work and training include kinematics and kinetics of movement. Course work also includes anatomy/kinesiology, biomechanics, engineering, neuroscience, medicine, psychology, physical therapy, and statistics.

- **Motor learning/control:** This interdisciplinary specialization draws on experiences and a knowledge base in the movement and sport sciences, cognitive sciences, and physical therapy. Students are prepared to conduct research and provide expertise in traditional motor performance and learning settings.

- **Exercise/performance psychology:** This area of specialization provides the basis for understanding and influencing the underlying thought processes and attitudes that will ultimately determine the performance of individuals involved in sport, exercise, and other achievement oriented activities. The primary emphasis is to develop the scientific background and skills necessary for doctoral training and research.

Clinical exercise physiology: The purpose of this non-thesis program is to give students the opportunity to develop advanced knowledge and competencies in Exercise Physiology. Clinical Exercise Physiologists typically practice in hospitals, clinics and wellness centers as part of a health care team that administers tests and develops programs of exercise, counseling, and education for patients with cardiopulmonary, metabolic, and musculoskeletal diseases.

Exercise physiology: This thesis mandatory area of concentration is concerned with the scientific study of how the various physiological systems of the human body respond to physical activity. It is a multidisciplinary field with strong ties to the basic life sciences and medicine, and application to clinical, normal, and athletic populations.

Human performance: This non-thesis master's concentration merges a range of specializations within the Department into a curriculum that provides educational experiences to graduate students interested in studying the factors that determine human performance in both athletic and nonathletic domains. This flexible approach allows students to focus on specific applications that best meet their individual interests. Human performance incorporates components such as nutrition, psychology, motor behavior, and physiology that are applicable to athletic and clinical populations.

Other

Applied Physiology and Kinesiology

College

College of Health and Human Performance

Department/School

Applied Physiology and Kinesiology Department

Applied Physiology and Kinesiology Program Information

Graduate study in Applied Physiology and Kinesiology (APK) is focused on research in concentration areas including athletic training biomechanics; motor control and learning exercise physiology; and exercise and performance psychology. Graduate students are exposed to and directly involved in research covering the full multidisciplinary spectrum of human potential from young to old, fit to unfit, healthy to diseased, able-bodied to disabled, and from the casual recreational participant to the high-level athlete. In addition to human performance issues, APK faculty and students study the immediate and lasting effects of exercise and its use in disease prevention and rehabilitation.

For more information, please see our website: [http://apk.hhp.ufl.edu/index.php/current-students/prospective-students](http://apk.hhp.ufl.edu/index.php/current-students/prospective-students).

Degrees Offered with a Major in Applied Physiology and Kinesiology

Master of Science

without a concentration

concentration in Athletic Training/Sports Medicine

concentration in Biobehavioral Science
concentration in Clinical Exercise Physiology

concentration in Exercise Physiology

concentration in Human Performance

Applied Physiology and Kinesiology Departmental Courses

- APK 5127: Assessment in Exercise Science
- APK 5404: Sport Psychology
- APK 6111L: Practicum in Exercise Physiology
- APK 6116C: Physiological Bases of Exercise and Sport Sciences
- APK 6118: Neuromuscular Adaptation to Exercise
- APK 6126: Cardiopulmonary Pathologies
- APK 6128: EKG Interpretation
- APK 6205C: Nature and Bases of Motor Performance
- APK 6206: Planning Motor Actions
- APK 6210: Controlling Motor Actions
- APK 6225: Biomechanical Instrumentation
- APK 6225C: Biomechanics of Human Motion
- APK 6406: Exercise Psychology
- APK 6408: Performance Enhancement
- APK 6410: Seminar in Exercise Psychology
- APK 6415: Seminar in Sport Psychology: Current Topics
- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- APK 7107: Cardiovascular Exercise Physiology
- APK 7108: Environmental Stress Exercise Physiology
- APK 7117: Exercise Metabolism
- APK 7124: Free Radicals in Aging, Exercise and Disease
- APK 7129: Pulmonary Function during Exercise
- ATR 6124: Clinical Anatomy for the Exercise Sciences
- ATR 6145: Human Pathophysiology for the Exercise Sciences
- ATR 6215: Evidence-Based Orthopedic Exam I: Upper-Extremity
- ATR 6216: Evidence-Based Orthopedic Exam II: Lower-Extremity
- ATR 6304: Rehabilitation and Modalities of Athletic Injuries
- ATR 6624: Athletic Training Research and Technology I
- ATR 6625: Athletic Training Research and Technology II
- ATR 6934: Seminar in Athletic Training
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 6935: Variable International Topics
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- PET 5936: Special Topics/Seminars
- PET 6910: Supervised Research
- PET 6940: Supervised Teaching
- PET 6947: Graduate Internship in Exercise and Sport Sciences
- PET 6971: Research for Master's Thesis

Department of Health Education & Behavior

Chair: Jalie A. Tucker
Graduate Coordinator: Christine B. Stopka

Complete faculty listing by department: Follow this link.

The Department of Health Education & Behavior offers a Doctor of Philosophy (Ph.D.) in Health and Human Performance with a concentration in Health Behavior, a non-thesis 30-credit hour Master of Science and a 36-credit Master of Science (M.S.) in Health Education and Behavior. Requirements for the Ph.D. and M.S. degrees are given in the General Information section of this catalog.

The Ph.D. degree program trains health behavior researchers for academic positions in federal health agencies such as the Centers for Disease Control and Prevention and the National Institutes of Health for postdoctoral research fellowships and for the private sector.

The 30-credit hour, non-thesis M.S. degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a
minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector. Full-time students can complete this M.S. option in one year. This degree may also give students unique and distinguishing training experiences when applying to professional schools such as law, medicine, physician assistant, dentistry, chiropractic, osteopathy, nursing, occupational therapy, and physical therapy.

The 36-credit hour project in lieu of thesis, and the 36-credit hour thesis options are designed for students interested in developing research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically can complete these options in about 4 semesters.

The Department also offers an accelerated B.S./M.S. program in health education and behavior to enable students to receive both B.S. and M.S. degrees with a reduction of 12 credits (about one semester of course work).

Students who complete a graduate degree program in the Department of Health Education & Behavior acquire a range of skills required to research, plan, implement, and evaluate health promotion policies and programs aimed at improving the health and well-being of individuals, families, and communities. Specific skills include:

- Conducting needs and capacity assessments to identify health priorities
- Planning, implementing, and evaluating health promotion policies and programs
- Conducting research on questions associated with health problems and their determinants and health promotion policies and programs
- Administering and managing health promotion programs
- Advocating for health promotion policies and programs in schools, communities, health care facilities, and worksites
- Developing social marketing and health communication messages and campaigns
- Researching and developing social media and new media-based health promotion applications
- Serving as a resource person for health information and referrals
- Using a variety of teaching-learning strategies appropriate to the target audience and setting
- Writing scholarly and professional articles
- Working collaboratively with public and private agencies, nongovernmental organizations (NGOs) and the private sector to achieve the goal of a healthier population.

This degree prepares the health promotion specialists and health behavior scientists to work in:

- Local, state, and federal health, education and social agencies
- Nongovernmental health organizations
- Schools and universities
- Healthcare settings
- Private sector

Sample position titles for individuals with this degree include:

- Health education specialist
- Health promotion specialist
- Public health advisor or public health analyst
- Health promotion coordinator or health promotion consultant
- Campus health educator or patient health educator,
- Health communication specialist
- Wellness specialist
- Wellness promotion coordinator
- Prevention specialist

For additional information, visit [http://www.hhp.ufl.edu/heb](http://www.hhp.ufl.edu/heb)

Other

Health Education and Behavior

College

College of Health and Human Performance

Department/School

Department of Health Education & Behavior

Health Education and Behavior Program Information

The 30-credit hour, non-thesis in the Master of Science in Health Education and Behavior degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector.

The 30-credit, non-thesis Pre-Professional Health Science Track is designed for students seeking a career in health care. This option allows you to choose a minimum of 12 credits of basic science elective coursework which are prerequisites for dental, medical, nursing, occupational therapy, physician assistant, physical therapy, and other health professional programs including 6 credits of undergraduate science courses (3000-4999). This degree track prepares students who are interested in graduate studies in the health sciences and or pursuing health professional training. Full-time students can complete the 30-credit hour M.S. options in one year.

The 30-credit hour Project In Lieu Of Thesis Option, in the Master of Science in Health Education and Behavior degree programs are designed for students interested in improving their research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically complete these options in about 4 semesters.

For more information, please see our website: [http://heb.hhp.ufl.edu/index.php/academia/graduate-programs/masters-programs](http://heb.hhp.ufl.edu/index.php/academia/graduate-programs/masters-programs).

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Sample position titles for individuals with this degree include:

- Health education specialist
- Health promotion specialist
- Public health advisor or public health analyst
- Health promotion coordinator or health promotion consultant
- Campus health educator or patient health educator,
- Health communication specialist
- Wellness specialist
- Wellness promotion coordinator
- Prevention specialist

For additional information, visit [http://www.hhp.ufl.edu/heb](http://www.hhp.ufl.edu/heb)

Other

Health Education and Behavior

College

College of Health and Human Performance

Department/School

Department of Health Education & Behavior

Health Education and Behavior Program Information

The 30-credit hour, non-thesis in the Master of Science in Health Education and Behavior degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector.

The 30-credit, non-thesis Pre-Professional Health Science Track is designed for students seeking a career in health care. This option allows you to choose a minimum of 12 credits of basic science elective coursework which are prerequisites for dental, medical, nursing, occupational therapy, physician assistant, physical therapy, and other health professional programs including 6 credits of undergraduate science courses (3000-4999). This degree track prepares students who are interested in graduate studies in the health sciences and or pursuing health professional training. Full-time students can complete the 30-credit hour M.S. options in one year.

The 30-credit hour Project In Lieu Of Thesis Option, in the Master of Science in Health Education and Behavior degree programs are designed for students interested in improving their research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically complete these options in about 4 semesters.

For more information, please see our website: [http://heb.hhp.ufl.edu/index.php/academia/graduate-programs/masters-programs](http://heb.hhp.ufl.edu/index.php/academia/graduate-programs/masters-programs).
Degrees Offered with a Major in Health Education and Behavior

Master of Science

Health Education and Behavior Departmental Courses

- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 6935: Variable International Topics
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- HSC 5135: Emotional Health Education
- HSC 5138: Human Sexuality
- HSC 5142: Drug Education
- HSC 5315C: Teaching Health in Elementary Schools
- HSC 5536C: Medical Terminology for the Health Professions
- HSC 5576: Nutrition Education for Special Populations
- HSC 5606: Spirituality and Health
- HSC 5618: Advanced Exercise Therapy, Adapted Physical Activity, & Health
- HSC 5626: Minority/Health Issues
- HSC 5657: Health and End-of-Life Issues
- HSC 5925: Seminar in Health Education
- HSC 5956: Writing for Professional Publications
- HSC 6037: Philosophy and Principles of Health Education
- HSC 6216: Environmental Health
- HSC 6235: Patient Health Education
- HSC 6318: Planning Health Education Programs
- HSC 6506: Epidemiology
- HSC 6567: Health Promotion and Programming in Gerontology
- HSC 6571: Contemporary Issues in Health Promotion
- HSC 6575: Women’s Health Issues
- HSC 6596: HIV/AIDS Education
- HSC 6603: Theories of Health Behavior and Practice in Health Education
- HSC 6605: Scientific Foundations of Holistic Health
- HSC 6625: Trends in International Health
- HSC 6629: Health Promotion for Priority Populations
- HSC 6637: Social Marketing and Health
- HSC 6646: Community Health Methods in Injury Prevention & Control
- HSC 6665: Health Communication
- HSC 6667: Health Communication Programs
- HSC 6668: Interpersonal Communication and Health
- HSC 6695: Worksite Health Promotion
- HSC 6712: Evaluating Health Education Programs
- HSC 6735: Research Methods in Health Education
- HSC 6850: Internship in Health Education
- HSC 6904: Readings in Health Education
- HSC 6905: Independent Study
- HSC 6910: Supervised Research
- HSC 6935: Current Topics in Health Education
- HSC 6940: Supervised Teaching
- HSC 6971: Research for Master’s Thesis
- HSC 6973: Project in Lieu of Thesis
- HSC 7904: Advanced Readings in Health Education
- HSC 7905: Advanced Independent Study in Health Education
- HSC 7937: Advanced Seminar in Health Education
- PET 5127: Advanced Instructors of Adapted Aquatics
- PET 5936: Special Topics/Seminars
- PET 6910: Supervised Research
- PET 6940: Supervised Teaching
- PET 6947: Graduate Internship in Exercise and Sport Sciences
- PET 6971: Research for Master’s Thesis
- PHC 6105: Health Promotion Policy and Practice

Tourism, Recreation, and Sport Management Department

College of Health and Human Performance
The degree Master of Science is offered by the Department of Tourism, Recreation, and Sport Management with programs in sport management and in recreation, parks, and tourism. Both programs offer thesis and non-thesis formats. The Department participates in the Ph.D. program in Health and Human Performance. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Master's program provides advanced preparation of tourism, recreation, and parks and sport management professionals for positions of leadership in planning, developing, administering, and marketing of programs in a variety of employment settings; public and private. Concentrations of study may be developed in a number of areas, such as:

- Natural resource recreation management
- Tourism and commercial recreation
- Campus recreation
- Recreation administration and supervision
- Sport management

The Doctoral program is offered through the College of Health and Human Performance with concentrations in tourism; natural resource recreation and sport management. These interdisciplinary specializations blend course work and research. The curriculum is individualized, and applicants with degrees from unrelated fields can be accepted into the program. However, their previous work will be evaluated and their programs planned according to their individual needs, interests, and career objectives.

Combined program: The Department offers a combined bachelor's/master's degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of approximately one semester. Up to 12 approved graduate credit hours can be utilized toward both degrees.

MS/MSM Concurrent Degree Program: This joint degree program is offered through the College of Business Administration (Master of Science in Business Management [MSM]) and the College of Health and Human Performance's, Department of Tourism, Recreation and Sport Management (Master of Science in Sport Management [MS]). Applicants must apply to both programs and be admitted to both to participate. The MS/MSM is a non-thesis degree. The MS/MSM is designed for students who seek a graduate business degree and who lack the work experience necessary for admission to the MBA program. The MS/MSM curriculum is similar to the first year of the MBA program, giving students a good foundation in business principles. Concurrent degree students can share up to 9 credit hours of the same coursework towards both degree programs. They do not have to graduate during the same semester. Students admitted into the concurrent program must work closely with both departments to verify all requirements are being met during their course of study.

MS/J.D. joint program: This 98-credit-hour joint degree program culminates in the Master of Science and the Juris Doctor degrees. Applicants must meet the entrance requirements for the Department of Tourism, Recreation, and Sport Management and the College of Law. Admission to the second degree program is required no later than the end of the fourth consecutive semester after beginning one of the degree programs. The student's supervisory committee comprises faculty members from both the Department of Tourism, Recreation, and Sport Management and the College of Law. Students admitted into the joint program are permitted to share up to 12 credit hours of the same coursework towards both degree programs. Students must graduate during the same semester from both programs.

Other

Recreation, Parks, and Tourism

College

College of Health and Human Performance

Department/School

Tourism, Recreation, and Sport Management Department

Recreation, Parks, and Tourism Program Information

The Master of Science in Recreation, Parks and Tourism offers the following four areas of concentration:

1. Tourism and Commercial Recreation
   - Travel activities to and staying outside one's usual environment; hospitality, transportation
   - Recreation activities covered by fees, charges or other non-tax revenues; theme/amusement/water parks, movie theaters, sport/fitness/health clubs, resorts
   - Examples of employers include: travel agencies, cruise lines, dance studios, special event companies, resorts, multipurpose sports clubs and health & fitness clubs

2. Natural Resource Recreation
   - Park(s) management, protected areas, wilderness conservation
   - State parks, river floating, horseback riding, hiking trails
   - Beach management, rivers and lakes, sustainability
   - Outdoor recreation leadership
   - Conservation management, planning, and policy
   - Federal agencies (National Parks, U.S. Army Corp of Engineers)

3. Recreation Administration and Supervision
   - City/state public parks
   - City pools
   - City skate parks, family parks
   - Public tennis courts
   - City sports teams/leagues, youth sports
   - Organized group and youth camps
   - Military recreation departments (Morale, Welfare & Recreation [MWR] programs)
4. Campus Recreation Programming & Administration

- college campus intramural recreation programs
- campus fitness / exercise centers

Graduates of the Master of Science in Recreation, Parks & Tourism will be trained for middle and/or upper level management positions, in their respective fields mentioned above. Students can choose between three options: 1.) Thesis, or 2.) Non-Thesis Internship, or 3.) Non-Thesis with Paper.

For more information, please see our website: http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/recreation-parks-and-tourism

Degrees Offered with a Major in Recreation, Parks, and Tourism

Master of Science

without a concentration

concentration in Historic Preservation

concentration in Natural Resource Recreation

concentration in Therapeutic Recreation

concentration in Tourism

concentration in Tropical Conservation and Development

Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMD 6076: Introduction to Hospitality and Tourism
- HMD 6608: Hospitality Law and Risk Management
- HMD 6747: Marketing in Hospitality/Tourism
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- LEI 5188: Trends in Leisure Studies
- LEI 5121: Outdoor Recreation and Park Management
- LEI 6106: Contemporary Theories of Recreation and Leisure
- LEI 6325: Ecotourism
- LEI 6326: Sport Tourism
- LEI 6336: Tourism Planning and Development
- LEI 6351: Heritage Tourism
- LEI 6439: Campus Recreation Administration and Programming
- LEI 6513: Administrative Procedures in Leisure Services
- LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
- LEI 6557: Recreation Management/Development in the Coastal Zone
- LEI 6652: Advanced Marketing for Recreation, Parks, and Tourism
- LEI 6895: Tourism Theory and Concepts
Sport Management

College

College of Health and Human Performance

Department/School

Tourism, Recreation, and Sport Management Department

Sport Management Program Information

Sport Management integrates concepts of management, marketing, finance, and law to apply to sport organizations at various levels and prepares students for a variety of volunteer and employment opportunities at the professional, collegiate, community, and amateur level sport entities. Its focus is on the business and organization aspects of sport, not coaching or athletic performance.

For more information, please see our website: http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/sport-management.

Degrees Offered with a Major in Sport Management

Master of Science

without a concentration

concentration in Historic Preservation
concentration in Tropical Conservation and Development

Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMG 6076: Introduction to Hospitality and Tourism
- HMG 6608: Hospitality Law and Risk Management
- HMG 6747: Marketing in Hospitality and Tourism
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- LEI 6108: Contemporary Theories of Recreation and Leisure
- LEI 6325: Ecotourism
- LEI 6326: Sport Tourism
- LEI 6336: Tourism Planning and Development
- LEI 6351: Heritage Tourism
- LEI 6439: Campus Recreation Administration and Programming
- LEI 6513: Administrative Procedures in Leisure Services
- LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
- LEI 6557: Recreation Management Development in the Coastal Zone
- LEI 6621: Advanced Marketing for Recreation, Parks, and Tourism
- LEI 6695: Tourism Theory and Concepts
- LEI 6903: Readings in Recreation, Parks, and Tourism
- LEI 6905: Directed Independent Study
- LEI 6910: Supervised Research
- LEI 6931: Special Topics in Recreation, Parks, and Tourism
- LEI 6935: Seminar in Recreation, Parks, and Tourism
- LEI 6940: Supervised Teaching
- LEI 6944: Practicum in Leisure Studies
- LEI 6971: Research for Master's Thesis
- LEI 7170: Foundations of Leisure Behavior
- LEI 7901: Recreation, Parks, and Tourism in Higher Education
- LEI 7904: Advanced Readings in Recreation, Parks, and Tourism
- LEI 7905: Advanced Independent Study in Recreation, Parks and Tourism
- LEI 7910: Advanced Supervised Research
- LEI 7933: Advanced Special Topics in Recreation, Parks, and Tourism
- LEI 7936: Advanced Seminar in Recreation, Parks, and Tourism
- PET 6910: Supervised Research
- PET 6910: Supervised Research
- SPM 5016: Sport Sociology
- SPM 5206: Sport Ethics
- SPM 5309: Sport Marketing
- SPM 5506: Sport Finance
- SPM 5936: Current Topics in Sport Management
- SPM 6006: Contemporary Sport Industry
- SPM 6036: Research Seminar in Sport Management
- SPM 6106: Management and Planning of Sport and Physical Activity Facilities
- SPM 6158: Management and Leadership in Sport
- SPM 6308: Study of Sport Consumer Behaviors
- SPM 6726: Issues in Sport Law
- SPM 6905: Directed Independent Study
- SPM 6910: Supervised Research
- SPM 6947: Graduate Internship in Sport Management
- SPM 6948: Advanced Practicum in Sport Management
- SPM 6971: Research for Master's Thesis

College of Journalism and Communications

Dean: D. McFarlin
Senior Associate Dean for Graduate Studies and Research: D. Treise

Graduate Coordinators:
(Advertising) J. R. Goodman
(International Communication) M. Leslie
(Journalism) R. Rodgers
(Public Relations) M. A. Ferguson
(Science/Health Communication) D. Treise
(Telecommunication) J. Clary.

Complete faculty listings: Follow this link.

Through the Division of Graduate Studies and Research, the College of Journalism and Communications offers the Doctor of Philosophy degree, the Master of Arts in Mass Communication (thesis or project option) degree, and the Master of Advertising (thesis) degree. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Doctoral students work closely with faculty members in research leading to a dissertation embodying a humanities, law/policy, or social sciences approach. Emphases within these approaches
for which faculty members have expertise include advertising, journalism, public relations, telecommunication, international communication, and political communication. Details of doctoral faculty research interests and other aspects of the program are given in the College's Ph.D. Handbook.

Master's students may complete a thesis in advertising, journalism, public relations, telecommunication, international communication, or science/health communication. With the approval of the Sr. Associate Dean of Graduate Studies and Research and other faculty members, master's students may develop an individualized program of study, with thesis, to meet their specific needs and interests. A project in lieu of thesis option is available for some specializations.

**Mass Communication/Law joint degree programs:** Programs leading to the Master of Arts in Mass Communication or the Doctor of Philosophy and the Juris Doctor are offered under the joint auspices of the College of Journalism and Communications and the College of Law. For students interested in scholarship or practice of communication law or in reporting on the law, the programs offer the opportunity to blend relevant work from the two colleges. Students must meet the entrance requirements of both colleges. A thesis or dissertation is required. Interested students should apply for admission to both the Graduate School and the College of Law, noting on the applications the joint nature of the admission requests. Further information on the programs and on application procedures is available from the Holland Law Center and from the Division of Graduate Studies and Research of the College of Journalism and Communications.

**General admission:** Admission is granted to applicants with and without background in mass communication. Students without academic preparation in mass communication or appropriate experience may be required to take articulation work. These courses are taken concurrently with general graduate courses, starting in the first term of registration. Some degree plans require a background course in statistics. Students who have satisfied that requirement must provide written verification. Including articulation courses, the master's degree normally can be earned in one and one-half or two years of full-time study. Doctoral studies require three or more years of full-time study and research. Students who may require articulation courses should contact the Sr. Associate Dean of Graduate Studies and Research.

**Grading policy:** Any student whose cumulative GPA falls below 3.0 will be placed on probation. Any doctoral student who receives one grade below B- or a Master's student who receives one grade below C+ will be placed on probation, with the exception of courses taken from the Levin College of Law. For these courses, any student receiving one grade below C in any course from the Levin College of Law will be placed on probation. A requirement of the probation is that the student must achieve or maintain a cumulative grade point average of 3.0 or higher at the end of the next academic term in residence. A student who fails to satisfy the requirement will be suspended. A Doctoral student who accumulates two grades below "B-" or a Master's student who accumulates two grades below C+ during graduate studies will be suspended, as will a student who receives one grade of "D+" or lower at any time. Students will be allowed only one suspension.

**Combined degree program:** The College offers a combined bachelor's/master's program. For information, contact the Associate Dean for Graduate Studies.

For additional information, please see our website: [http://www.jou.ufl.edu/grad](http://www.jou.ufl.edu/grad)

College of Journalism and Mass Communication Courses

**Other**

**Advertising**

**College**

College of Journalism and Communications

**Advertising Program Information**

The Master of Advertising (M.Adm.) program is designed to develop leaders in the profession by providing students with

1. the theoretical, research and decision-making skills essential for strategic advertising and integrated communications planning, as well as
2. the opportunity to develop expertise in a specialized area such as account management, research, creative strategy, media planning, new technology and advertising sales management.

Students without basic course background or substantial professional experience in marketing or advertising are required to complete articulation courses before entering the program. These prerequisite courses include Introduction to Advertising and Introduction to Marketing.

A minimum of 33 graduate level credit hours, including a thesis, is required. In some areas of specialization, with permission from the departmental graduate faculty, a terminal project may be elected in lieu of a thesis.

Students select a supervisory committee to guide their course selection as well as thesis topic or project in lieu of thesis and completion of the thesis or project. Students will complete and orally defend their theses or projects. The student's supervisory committee is responsible for the evaluation of the document and the final defense.

The deadline for Fall applications is January 30 for international applicants and April 1 for domestic students. Applications may be considered after the April 1 deadline, if space is available. The Master of Advertising program does not accept any applications for Spring.

For admissions information and application materials, contact Sarah G. Lee.

For information about the advertising curriculum and program requirements, contact Dr. Robyn Goodman.

For more information, please see our website: [http://www.jou.ufl.edu/academics/masters/master-of-advertising](http://www.jou.ufl.edu/academics/masters/master-of-advertising)

**Degrees Offered with a Major in Advertising**

**Master of Advertising**

College of Journalism and Communications Courses
Mass Communication

College

Mass Communication Program Information

Ph.D. in Mass Communication

The Ph.D. degree is a research degree. The Ph.D. program is designed to help develop knowledge, attitudes, and skills so graduates can make important contributions to understanding mass communication. Faculty members help students lay the foundation for a lifetime of significant, creative work.

The doctoral program prepares students for a variety of opportunities in mass communication. Graduates are expected to teach at colleges and universities; conduct research for organizations in advertising, journalism, public relations, telecommunication, and other mass communication fields; do consulting and conduct research and contribute to policy in government and private organizations. Doctoral students in the College of Journalism and Communications gain valuable experience in both teaching and research. Assistantships help prepare students for academic and other research positions. Students in the program have consistently been among the nation's leaders in winning top-paper awards at national and regional scholarly meetings.

Master of Arts in Mass Communication (MA/MC)

There are several specializations available for the Master of Arts in Mass Communication:

- Science and Health Communications specialization
- Telecommunication specialization
- Public Relations specialization
- Journalism specialization

The Science and Health Communications specialization program is designed to teach scientists and health specialists to communicate effectively via media, and to teach mass media specialists the background science to translate the language of science and health into meaningful and understandable stories for their audiences. Those goals are achieved through theoretical writing and applied courses. At least two aspects of the program make it unique among science communication programs nationwide. First, other existing science communication programs in the U.S. focus on training journalists. UF's program is open to journalists who want to specialize in covering science and health, offers training for people planning to work as public affairs or public information officers for science and health organizations, for other communication specialists, and for scientists who need to be able to communicate with the public about their work. Second, the program focuses on training students to understand and communicate effectively about science and health policy. For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mame-sciencehealth-communication.

For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mame-telecommunication.

The International/Intercultural Communication specialization: The field of international communication encompasses the study of international journalism (both print and broadcast) and international business and marketing communication. The field of intercultural communication focuses on the interactions between people of different cultures, values and histories. Through their study, students learn to appreciate and engage diverse cultures and media, gaining the knowledge and skills you need to thrive in today’s challenging global community. The international/intercultural communication track in mass communication culminates with the student writing a thesis on an international/intercultural topic in communication, applying one or more of the methods used in communication research. For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mame-internationalinterculturalcommunication-specialization.

VIC 5315: Corporate and Brand Identity on the Web
VIC 5325: Digital Imagery in Web Design
VIC 5326: Digital Media Layout and Design
VIC 6316: Brand Management

For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mame-telecommunication.
 Degrees Offered with a Major in Mass Communication

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Master of Arts in Mass Communication

College of Journalism and Communications Courses

- ADV 5005: Advertising Planning
- ADV 6006: Theories of Advertising
- ADV 6305: Advanced Media Planning
- ADV 6325: Advertising and Social Media
- ADV 6405: International Advertising
- ADV 6503: Advertising Creative Strategy and Research
- ADV 6505: Advertising Research Methods
- ADV 6602: Advertising Management
- COM 6315: Advanced Research Methods
- COM 6338: Advanced Web Topics I, Advanced Design
- COM 6940: Supervised Teaching
- FIL 6061: History of Documentary Film I
- FIL 6062: History of Documentary Film II
- FIL 6101: Advanced Radio, Television, and Film Writing
- FIL 6315: Writing for Documentary I
- FIL 6317: Producing and Writing the Documentary
- FIL 6335: Business of Documentary
- FIL 6340: Issues and Problems in Documentary
- FIL 6365: Documentary Pre-Production Planning
- FIL 6396: Documentary Procedures II
- FIL 6397: Documentary Field Production
- FIL 6378: Documentary Research Methods
- FIL 6380: Advanced Post-Production Techniques
- JOU 5007: History of Journalism
- JOU 5705: Issues and the Press
- JOU 6102: Reporting Workshop
- JOU 6114: Journalist Bootcamp
- JOU 6309: Seminar in Journalism as Literature
- JOU 6344: Journalist Toolkit 1
- JOU 6349: Journalist Toolkit 2
- JOU 6502: Newsroom Management
- MMC 5005: Mass Communication History
- MMC 5006: Introduction to Multimedia Communication
- MMC 5015: Electronic Publishing
- MMC 5206: Advanced Law of Mass Communication
- MMC 5277: Web Design Principles
- MMC 5306: International Communication
- MMC 5315: Survey of Foreign Correspondence
- MMC 5427: Research Methods in Digital Communication
- MMC 5636: Introduction to Social Media
- MMC 5708: Foundations of Intercultural Communication
- MMC 6202: Legal Problems of Mass Communication
- MMC 6278: Advanced Web Topics II
- MMC 6307: Seminar in International Communication
- MMC 6400: Mass Communication Theory
- MMC 6402: Seminar in Mass Communication Theory
- MMC 6405: Seminar in Mass Communication and Public Opinion
Fredric G. Levin College of Law

Dear: R. Jerry II

Complete faculty listing: Follow this link.

The University of Florida Levin College of Law has a longstanding tradition of producing national leaders, including current American Bar Association President Stephen Zack, and is one of the nation's best values in legal education.

For more information, please see our website: http://www.law.ufl.edu

Departments and Programs within Levin College of Law

Levin College of Law Courses

Comparative Law Department

Director and Graduate Coordinator: P.A. Malavet.

Complete faculty listing by department: Follow this link.

The LL.M. in Comparative Law degree is designed for graduates of foreign law schools who want to enhance their understanding of the American legal system and the English common law system from which it evolved. Requirements for this degree are given in the General Information section of this catalog.

The program begins with Introduction to American Law, a 4-credit summer course that gives students a foundation in the American legal process. It also helps students acclimate to the College of Law and the University community before starting the academic year. During the fall and spring terms, and with the director's approval, students choose their remaining 22 credits from more than 100 Juris Doctor and LL.M. in Taxation courses and seminars. For admission information consult the College of Law Prospectus or write to the Comparative Law...
Other

Comparative Law

College

Fredric G. Levin College of Law

Department/School

Comparative Law Department

Degrees Offered with a Major in Comparative Law

Master of Laws in Comparative Law

without a concentration

concentration in Tropical Conservation and Development

Courses

- LAW 7801: Introduction to the Legal System of the United States for LL.M in Comparative Law, Part II
- LAW 7805: Legal Writing and Research for LL.M in Comparative Law
- LAW 7906: Directed Research for LL.M in Comparative Law
- LAW 7932: Introduction to the Legal System of the United States for LLM in Comparative Law, Part I

Taxation Departmental Courses

- LAW 7802: Taxation of Property Transactions
- LAW 7804: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
- LAW 7614: U.S. International Tax I
- LAW 7615: U.S. International Tax II
- LAW 7617: Partnership Taxation
- LAW 7623: Taxation of Gratuitous Transfers
- LAW 7625: Income Taxation of Trusts and Estates
- LAW 7626: Estate Planning
- LAW 7632: Deferred Compensation
- LAW 7633: Tax Exempt Organizations
- LAW 7640: Civil Tax Procedure
- LAW 7641: Procedures in Tax Fraud Cases
- LAW 7650: State and Local Taxation
- LAW 7660: Tax Policy
- LAW 7680: Comparative Taxation
- LAW 7682: Income Tax Treaties
- LAW 7683: Transfer Pricing
- LAW 7905: Independent Study
- LAW 7910: Supervised Research
- LAW 7911: Federal Tax Research
Environmental and Land Use Law Department

Director and Graduate Coordinator: Christine A. Klein
Complete faculty listing by department: [Follow this link](#).

Florida's sensitive, varied and beautiful natural environment makes the University of Florida a natural choice for students who want to focus on the national and global issues of land use and environmental law. Florida provides a perfect setting to study first-hand the efforts to reconcile growth and conservation.

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

For more information, please see the program page below and our website: [http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law](http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law).

Other

Environmental and Land Use Law

College

Fredric G. Levin College of Law

Department/School

Environmental and Land Use Law Department

Environmental and Land Use Law Program Information

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

Students admitted to the program work with the LL.M. Program Director to design an individual course of study tailored to their particular interests. In addition to a broad range of academic courses, UF Law offers a wealth of environmental skills and field courses such as the Conservation Clinic, Environmental Dispute Resolution and Wetlands & Watersheds. LL.M. students may also apply for a seat in the spring break field course (previous offerings have included Sustainable Development in Belize, Central America, and Ocean and Coastal Law in Marineland, Florida); the South Florida Everglades field course offered in May (course availability varies) and the Summer Environmental Law Study Abroad Program in Costa Rica.

The program also capitalizes on the many outstanding programs at the University of Florida in disciplines related to environmental and land use law practice, including wildlife ecology, environmental engineering, urban and regional planning, and interdisciplinary ecology. The UF LL.M. program is unique in requiring that 6 of the 26 required credit hours must be from relevant graduate level courses that have substantial non-law content and are offered outside the law school or jointly by the law school and another department. In addition to completing required coursework, LL.M. candidates must complete a written project in connection with a seminar or the Conservation Clinic.

Six credit hours of coursework in graduate-level courses listed outside the law school or jointly listed by the law school and another graduate department and approved by the LL.M. Program Director are required. For elective courses, please visit [http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law/degree-requirements](http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law/degree-requirements).

For more information about the Environmental and Land Use Law Program, please see our website: [http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law](http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law), or contact:

University of Florida
Levin College of Law
P.O. Box 117625
Gainesville, FL 32611-7625
Phone: 352-273-0777
Email: elulp@law.ufl.edu

Degrees Offered with a Major in Environmental and Land Use Law

Master of Laws in Environmental and Land Use Law

Courses
Taxation Department

Chair and Graduate Coordinator: M. K. Friel.

Complete faculty listing by department: Follow this link.

Graduate study in the field of taxation leading to the Master of Laws in Taxation degree or to the Master of Laws in International Tax degree is available in the College of Law.

Applicants for admission to the Graduate School for these degrees must hold a law degree from an accredited law school or in the case of international students, from a recognized foreign university but need not submit scores on the Graduate Record Examination. For further information concerning admission consult the Graduate Tax Program Catalog, or write the Tax Office, 320 Holland Law Center.

Other

International Taxation

College

Fredric G. Levin College of Law

Department/School

Taxation Department

Degrees Offered with a Major in International Taxation

Master of Laws in International Taxation

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions
- LAW 7604: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
- LAW 7614: U.S. International Tax I
- LAW 7615: U.S. International Tax II
- LAW 7617: Partnership Taxation
- LAW 7623: Taxation of Gratuitous Transfers
- LAW 7625: Income Taxation of Trusts and Estates
- LAW 7626: Estate Planning
- LAW 7632: Deferred Compensation
- LAW 7633: Tax-Exempt Organizations
- LAW 7640: Civil Tax Procedure
- LAW 7641: Procedures in Tax Fraud Cases
- LAW 7650: State and Local Taxation
- LAW 7660: Tax Policy
- LAW 7680: Comparative Taxation
- LAW 7682: Income Tax Treaties
- LAW 7683: Transfer Pricing
- LAW 7905: Independent Study
- LAW 7910: Supervised Research
- LAW 7911: Federal Tax Research
- LAW 7931: Current Federal Tax Problems

Taxation
College

Fredric G. Levin College of Law

Department/School

Taxation Department

Degrees Offered with a Major in Taxation

Master of Laws in Taxation

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions
- LAW 7604: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
- LAW 7614: U.S. International Tax I
- LAW 7615: U.S. International Tax II
- LAW 7617: Partnership Taxation
- LAW 7623: Taxation of Gratuitous Transfers
- LAW 7625: Income Taxation of Trusts and Estates
- LAW 7626: Estate Planning
- LAW 7632: Deferred Compensation
- LAW 7633: Tax Exempt Organizations
- LAW 7640: Civil Tax Procedure
- LAW 7641: Procedures in Tax Fraud Cases
- LAW 7650: State and Local Taxation
- LAW 7660: Tax Policy
- LAW 7680: Comparative Taxation
- LAW 7682: Income Tax Treaties
- LAW 7683: Transfer Pricing
- LAW 7905: Independent Study
- LAW 7910: Supervised Research
- LAW 7911: Federal Tax Research
- LAW 7931: Current Federal Tax Problems

College of Liberal Arts and Sciences

Interim Dean: David Richardson

Complete faculty listings: Follow this link.

The College of Liberal Arts and Sciences constitutes the intellectual core of the university. Its principal mission is to lead the academic quest to understand our place in the universe, and to help shape our society and environment.

For more information, please see our website: http://www.clas.ufl.edu

Departments and Programs within the College of Liberal Arts and Sciences

College of Liberal Arts and Sciences Courses

Other

Genetics and Genomics

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Medicine
The highlight of the first year core training is the research rotations program. Student laboratory rotations are a particularly exciting feature of the genetics and genomics doctoral program, and epitomize the philosophy that good geneticists are broadly trained and integrative. Many current Graduate Faculty members still vividly recall the transforming effects of their rotations during graduate school—they didn’t always end up where they expected! Rotations can open students’ eyes to areas of genetics that they had never considered and entice them into considering brand new career opportunities. Each student will sample the breadth and depth of genetics research at UF by carrying out three 8-week modules consisting of design, implementation, and analysis of genetics experiments. Each rotation is conducted in close association with a Graduate Faculty member. To ensure that students fully experience the impressive breadth of genetics research at UF, their rotations are hosted by Graduate Faculty in at least two different colleges. Students will also take PCB 5065, Advanced Genetics; GMS 6181, Special Topics in Microbiology (among the topics are genomics and bioinformatics, and ethics for genetics research); STA 6166, Statistical Methods I; and other electives as desired. In addition, throughout their tenure in the program, students participate in the Genetics Seminar, which is an opportunity to present their rotation plans and results of research to faculty and other students.

Prospective students should have strong backgrounds in biology and other hard sciences. Exceptional students with other backgrounds will also be considered. The research statement required as part of the application has a particularly important part in the admissions decision. Each applicant must describe his/her research interests, so that Graduate Faculty can evaluate knowledge of the discipline, fit to the program, and ability to articulate and motivate an interesting research problem. The required letters of recommendation are also extremely important in helping identify applicants with exceptional aptitude for genetics, and with research experience and promise.

For more information, write to the Genetics and Genomics Graduate Program, Attn: Graduate Secretary, Genetics Institute, University of Florida, PO Box 100196, Gainesville, FL 32610-0196.

Expanded information can be found at http://www.ufgi.ufl.edu.
Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link.
For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the programs website at http://www.animal.ufl.edu/amcb/.

Other

Animal Molecular and Cellular Biology

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine

Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
- Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the programs website at http://www.animal.ufl.edu/amcb/.

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5905: Individual Study
- ALS 6046: Grant Writing
- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
Anthropology Department

Chair: S. deFrance
Graduate Coordinator: P. Collings

Complete faculty listing by department: Follow this link.

The Anthropology Department takes pride in maintaining a holistic perspective, bridging the four traditional fields that have composed the discipline: sociocultural, archaeological, biological, and linguistic anthropology. Both graduate students and faculty conduct research that cut across the four-fields, and extend anthropological investigations into other disciplines.

The graduate program is a mentoring program emphasizing the PhD degree. Students are mentored by faculty advisors, together with supervisory committees chosen by students with the advice of advisors. Graduate students are expected to be in residence to attend classes and seminars, and receive individualized training. Distance-education graduate degrees are not offered. Students formally report on their progress each year, and the progress of each graduate student is evaluated by the faculty in their primary field.

Students receiving graduate degrees are well-prepared intellectually and professionally for success in a wide variety of careers, and become leaders in developing the next generation of anthropology. The department offers teaching experience and resources for presenting conference papers, submitting grant proposals, conducting fieldwork, and other activities appropriate to their professionalization. Graduate students are welcome to contribute to discussions in departmental meetings, and serve on some departmental committees.
Anthropology

College

College of Liberal Arts and Sciences

Department/School

Anthropology Department

Anthropology Program

The department of Anthropology offers graduate work leading to the Master of Arts (thesis or nonthesis option) and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog. For more information, visit the departmental website: [http://anthro.ufl.edu](http://anthro.ufl.edu). Graduate training is offered in cultural anthropology, archeology, and biological anthropology.

Each graduate student should specify a major field of study among the four fields of anthropology. In addition, each must choose one of three tracks: the specialized track in which a student focuses on one field of anthropology, the multifield track in which a student combines two fields, or the interdisciplinary track in which a student adds study in a second discipline to anthropology. Knowledge of a foreign language or of statistics may be required by the student's supervisory committee.

The department generally requires applicants to have acceptable scores on the GRE (verbal and quantitative portions) and a 3.2 overall grade point average based on a 4.0 system. Previous work in anthropology is an asset but not a strict requirement for admission. Potential applicants are urged to visit the website to familiarize themselves with the specializations of our faculty and to indicate in their application those faculty with whom they might work. Barring special circumstances, the Department restricts admission to applicants interested in earning a Ph.D. Entering students who have earned a master's degree may apply for direct admission to the doctoral program. Students who enter without an M.A. will generally work for their M.A. on the way to the Ph.D. This requires either a formally-defended thesis or written comprehensive exams combined with a high-quality paper or research report. With their adviser's permission, they may opt to bypass the M.A.

Students enrolled in the M.A. program who wish to continue their studies for a Ph.D. must apply to the Department for certification.

New students are admitted into the graduate program only in the fall of each academic year. The deadline for receiving completed applications for admission into the graduate program is December 15, though the department encourages early applications.

Degrees Offered with a Major in Anthropology

Doctor of Philosophy

- without a concentration

- concentration in Historic Preservation

- concentration in Tropical Conservation and Development

- concentration in Women's/Gender Studies

Master of Arts
without a concentration

concentration in Historic Preservation

concentration in Tropical Conservation and Development

Master of Arts in Teaching

without a concentration

concentration in Tropical Conservation and Development

Courses

- ANG 5012: Fantastic Anthropology and Fringe Science
- ANG 5085: Collection and Analysis of Visual Data in Anthropology
- ANG 5126: Zooarcheology
- ANG 5158: Florida Archeology
- ANG 5162: Maya Archeoastronomy and Ethnoastronomy
- ANG 5164: The Inca and Their Ancestors
- ANG 5172: Historical Archeology
- ANG 5194: Principles of Archeology
- ANG 5255: Rural Peoples in the Modern World
- ANG 5265: Methods in Ethnoecology
- ANG 5266: Economic Anthropology
- ANG 5303: Women and Development
- ANG 5310: The North American Indian
- ANG 5323: Peoples of Mexico and Central America
- ANG 5327: Maya and Aztec Civilizations
- ANG 5330: The Tribal Peoples of Lowland South America
- ANG 5331: Peoples of the Andes
- ANG 5336: The Peoples of Brazil
- ANG 5341: Anthropology of the Caribbean
- ANG 5352: Peoples of Africa
- ANG 5354: Anthropology of Modern Africa
- ANG 5395: Visual Anthropology
- ANG 5420: Social Network Analysis in Cultural Anthropology
- ANG 5426: Kinship and Social Organization
- ANG 5464: Culture and Aging
- ANG 5485: Research Design in Anthropology
- ANG 5486: Computing for Anthropologists
- ANG 5488: Geospatial Analysis in Cultural Anthropology
- ANG 5525: Human Osteology and Osteometry
- ANG 5531: Culture and Nutrition
- ANG 5546: Seminar: Human Biology and Behavior
- ANG 5620: Language and Culture
- ANG 5621: Proseminar in Cultural and Linguistic Anthropology
- ANG 5700: Applied Anthropology
- ANG 5702: Anthropology and Development
- ANG 5711: Culture and International Business
- ANG 5743: Human Rights Missions in Forensic Anthropology
- ANG 5744: International Forensic Fieldwork in Human Rights
- ANG 5824L: Field Sessions in Archeology
Astronomy Department

Chair: C. Telesco
Graduate Coordinator: V. Sarajedini.

Complete faculty listing by department: Follow this link.

The University of Florida's Astronomy Department is one of the largest in the country. Research is an integral part of the graduate program. Students have opportunities to work with faculty and staff on a broad range of astronomical problems using in-house, national and international, and ground- and space-based facilities. Support for graduate studies is available through fellowships, research assistantships, and teaching assistantships. For more information on the program, please follow the link below or visit our website.

Other

Astronomy
College

College of Liberal Arts and Sciences

Department/School

Astronomy Department

Astronomy Program Information

The Astronomy Department offers graduate programs leading to the M.S., M.S.T. or Ph.D. degrees in astronomy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Planetary Systems: Observational and theoretical studies concentrate in the areas of planet formation, the dynamical evolution of planetary systems and the detection and characterization of extrasolar planets. Members of the department are active in Kepler Mission and ground-based Dopple surveys to identify extrasolar planets. Researchers are also active in studying the origins and orbital evolution of interplanetary dust and small bodies in the solar system and around nearby stars.

Stellar populations: Observational studies concentrate on resolved stars in the Milky Way and nearby galaxies. Studies of particular classes of stars include various types of binary stars and blue stragglers. The goal of these studies is to apply our theoretical understanding of stellar structure and evolution to the properties of stars in a variety of environments.

Origins of stars and planets: Observational studies focus on the properties of giant molecular clouds, the collapse of molecular cloud cores, the formation of stars in clusters and in isolation, and the formation and evolution of circumstellar and protoplanetary disks. The department is active in several star formation surveys, involving many international ground- and space-based facilities. Theoretical studies emphasize the development of analytic models and numerical simulations, as well as their testing against observational constraints.

Structure and evolution of galaxies: Observational programs use multi-wavelength photometry of stars and star clusters in galaxies throughout the Local Group and in nearby groups, including the Milky Way, to study galaxy evolution. Other observations focus on the structure and dynamics of galaxies and their interstellar medium using neutral hydrogen (HI) and molecules such as carbon monoxide.

Extragalactic astronomy and cosmology: Observational programs investigate the nature of ultra-luminous galaxies, active galactic nuclei (AGNs), and the formation and chemical evolution of distant galaxies and clusters of galaxies. Theoretical investigations focus on the emission/absorption features in AGN spectra, the star-formation and chemical-evolution properties of galaxies, and applications of general relativity and particle physics to conditions in the very early universe.

Instrumentation programs: The UF Infrared Astrophysics Laboratory is a world leader in designing and constructing advanced near-infrared and mid-infrared instrumentation for major telescopes around the world, including the 8m Gemini North and South Telescopes and the 10m Gran Telescopio Canarias. Instrumentation is also developed in the area of high precision Doppler techniques for planet searches and the development of high contrast imaging techniques for direct imaging of extrasolar planets.

Computing facilities: The Astronomy Department maintains a network of high-performance computers running Linux and OS-X. The local network is maintained by a full-time systems manager. Astronomy students have access to supercomputing facilities maintained by the UF High Performance Computing Center, including thousands of CPU cores with high-performance networking.

Degrees Offered with a Major in Astronomy

Doctor of Philosophy

Master of Science

Master of Science in Teaching

Courses

- AST 5113: Solar System Astrophysics I
- AST 5114: Solar System Astrophysics II
Biology Department

The Department of Biology offers two graduate programs: Botany and Zoology. Both programs offer graduate work leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are available in the Graduate Degrees section of this catalog.

More information regarding these programs is available by following the links below and by visiting our departmental website: http://www.biology.ufl.edu.

Botany Program Information

Chair: Craig W. Osenberg
Graduate Coordinator: W. Bradley Barbazuk

The Department of Biology offers graduate work in Botany leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Department offers studies in the areas of biochemistry, molecular biology, cell biology, physiology, ecology, systematics, and evolution. Specific areas of specialization include anatomy/morphology with emphasis on extant and fossil vascular plants; ecology and environmental studies including ecosystem ecology, conservation biology and genetics, fire ecology, exotic invasive species, and tropical botany and ecology; cell biology with emphasis on the cytoskeleton and cell morphogenesis; physiology, biochemistry, and molecular biology with emphasis on photosynthesis, growth and development of angiosperms, protein phosphorylation and signal transduction, global analysis of spatial patterns of gene expression, plant secondary metabolism and proteomics; systematics with emphasis on DNA- and morphology-based phylogenetic analyses, phylogeographic studies, molecular evolution/development, and monographic and floristic studies. To be considered for admission to graduate studies, students should have:

- The equivalent of an undergraduate degree in botany or biology with basic course work in their area of interest
- Acceptable GRE scores (verbal, quantitative, and analytical writing)
- Letters of recommendation
- International students must submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System 6), MELAB (Michigan English Language Assessment Battery 77), or successful completion of the UF English Language Institute program. The program of graduate study for each student will be determined by a supervisory committee, and deficiencies in background coursework will be made up early in the graduate program. No more than 9 credits of BOT 6905 may be used to satisfy the credit requirements for a master's degree.

Degrees Offered with a Major in Botany
Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
The Department of Biology offers graduate programs in Zoology leading to the Master of Science in Teaching, Master of Science, and Doctor of Philosophy degrees. The requirements for these degrees can be found in the Graduate Degrees section of this catalog.

Our program emphasizes Integrative Biology, with integration accomplished through a focus on the theoretical foundations provided by evolutionary biology and ecology. Our faculty has expertise in ecology, evolution, behavior, comparative and environmental physiology, genetics, development, and phylogenetics. We work in a variety of terrestrial and aquatic environments and geographic regions (tropics through subpolar), and on a range of organisms (including plants). Our faculty value integrative research (e.g., by crossing levels of organization from gene expressions to species interactions), linking theory with data (through use of statistical and mathematical tools), and using natural history to guide the development and testing of rigorous conceptual frameworks. Many of our faculty also are interested in applying and testing basic science in applied contexts (e.g., conservation biology and ecotoxicology).

Our approach is highlighted through our first-year, required, graduate course, Integrative Principles. Each student's supervisory committee will recommend additional courses according to the academic background and research plans of the student.

### Degrees Offered with a Major in Zoology

#### Doctor of Philosophy

- **without a concentration**

- concentration in Animal Molecular and Cellular Biology

- concentration in Tropical Conservation and Development

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Zoology

College

College of Liberal Arts and Sciences

Department/School

Biology Department

Zoology Program Info

Chair: Craig W. Osenberg  
Graduate Coordinator: W. Bradley Barbazuk

The Department of Biology offers graduate programs in Zoology leading to the Master of Science in Teaching, Master of Science, and Doctor of Philosophy degrees. The requirements for these degrees can be found in the Graduate Degrees section of this catalog.

Our program emphasizes Integrative Biology, with integration accomplished through a focus on the theoretical foundations provided by evolutionary biology and ecology. Our faculty has expertise in ecology, evolution, behavior, comparative and environmental physiology, genetics, development, and phylogenetics. We work in a variety of terrestrial and aquatic environments and geographic regions (tropics through subpolar), and on a range of organisms (including plants). Our faculty value integrative research (e.g., by crossing levels of organization from gene expressions to species interactions), linking theory with data (through use of statistical and mathematical tools), and using natural history to guide the development and testing of rigorous conceptual frameworks. Many of our faculty also are interested in applying and testing basic science in applied contexts (e.g., conservation biology and ecotoxicology).

Our approach is highlighted through our first-year, required, graduate course, Integrative Principles. Each student's supervisory committee will recommend additional courses according to the academic background and research plans of the student.
concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Tropical Conservation and Development

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Zoology Courses

- BOT 6726C: Principles of Systematic Biology
- PCB 5307C: Limnology
- PCB 5415C: Behavioral Ecology
- PCB 5615: Molecular Evolution and Systematics
- PCB 6049: Seminar in Ecology
- PCB 6377C: Physiological Ecology of Vertebrates
- PCB 6447C: Community Ecology
- PCB 6675C: Evolutionary Biogeography
- PCB 6695: Seminar in Evolutionary Biology
- ZOO 5115C: Vertebrate Paleontology
- ZOO 5486C: Mammalogy
- ZOO 6005: Integrative Principles of Zoology I
- ZOO 6308: Dynamic Optimization Modeling in Behavioral and Evolutionary Ecology
- ZOO 6406: Biology of Sea Turtles
- ZOO 6456C: Ichthyology
- ZOO 6542: Nutritional Ecology
- ZOO 6905: Individual Studies
- ZOO 6910: Supervised Research
- ZOO 6920: Zoology Colloquium
- ZOO 6927: Special Topics in Zoology
- ZOO 6931: Seminar in Marine Turtle Biology
- ZOO 6939: Seminar in Animal Behavior
- ZOO 6971: Research for Master's Thesis
ZOO 7979: Advanced Research  
ZOO 7980: Research for Doctoral Dissertation

Chemistry Department

Chair: W. Doliber  
Graduate Coordinator: B. W. Smith  
Complete faculty listing: Follow this link.

The Department of Chemistry granted its first master's degree in 1909 and the first Ph.D. in 1930. Specializations in biochemistry, organic, physical, inorganic and analytical are offered with extensive interdisciplinary research opportunities (e.g., bio/nano-science, particle science, green chemistry, polymer chemistry, chemical physics, health related biochemistry, chemistry-engineering, and genomics).

The Department presently offers the Master of Science and Doctor of Philosophy degrees with a major in chemistry. The non-thesis Master of Science in Teaching degree is also offered with a major in chemistry.

Other

Chemistry

College

College of Liberal Arts and Sciences

Department/School

Chemistry Department

Chemistry Program

The department offers the Master of Science (thesis or nonthesis) and Doctor of Philosophy degrees with a major in chemistry and specialization in biochemistry, analytical, organic, inorganic, or physical chemistry. The nonthesis degree Master of Science in Teaching is also offered with a major in chemistry. New graduate students should have adequate undergraduate training in inorganic, analytical, organic, and physical chemistry. Normally this will include as a minimum a year of general chemistry, one semester of quantitative analysis, one year of organic chemistry, one year of physical chemistry, and one semester of advanced inorganic chemistry. Additional courses in instrumental analysis, biochemistry, and advanced physical and organic chemistry are desirable. Deficiencies in any of these areas may be corrected during the first year of graduate study. Such deficiencies are determined by a series of placement tests given prior to registration, and the results of these tests are used in planning the student's program. Doctoral candidates are required to complete at least 9 semester credits of courses specified by the division of the Chemistry Department in which they choose to specialize, as well as at least 9 semester credits of out-of-major-division courses. There are some minor restrictions on courses that may be used to meet this requirement. Additional courses may be required by the student's supervisory committee or major professor.

Ph.D. candidates must serve not less than one year as teaching assistants. This requirement will be waived only when, in the opinion of the department, unusual circumstances justify such action. A chemical physics option is offered for students who will be doing research in areas of physical chemistry which require a strong background in physics. For this option, a student meets the departmental requirements for concentration in physical chemistry, except that only one out-of-major division course is required. In addition, a minimum of 14 credits in 4000 level or higher physics courses or a minimum of 7 such credits in physics and 7 in 4000 level or higher mathematics courses is required. Candidates for the master's degree are required to complete any two core courses. The Master of Science degree in chemistry has both thesis and nonthesis options. The nonthesis degree Master of Science in Teaching is offered with a major in chemistry and requires a written paper of substantial length (30 to 50 pages) on an approved topic pertaining to some phase of chemistry, under the course CHM 6905.

Degrees Offered with a Major in Chemistry

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science
concentration in Imaging Science and Technology

Master of Science

Master of Science in Teaching

Courses

- CHM5224: Basic Principles for Organic Chemistry
- CHM5235: Organic Spectroscopy
- CHM5275: The Organic Chemistry of Polymers
- CHM5305: Chemistry of Biological Molecules
- CHM5413L: Advanced Physical Chemistry Laboratory
- CHM5511: Physical Chemistry of Polymers
- CHM6036: Chemical Biology
- CHM6037: Chemical Biology and Biochemistry Seminar
- CHM6153: Electrochemical Processes
- CHM6154: Chemical Separations
- CHM6155: Spectrochemical Methods
- CHM6158C: Electronics and Instrumentation
- CHM6159: Mass Spectrometric Methods
- CHM6165: Chemometrics
- CHM6180: Special Topics in Analytical Chemistry
- CHM6190: Analytical Chemistry Seminar
- CHM6222: Advanced Principles of Organic Chemistry
- CHM6226: Advanced Synthetic Organic Chemistry
- CHM6227: Topics in Synthetic Organic Chemistry
- CHM6251: Organometallic Compounds
- CHM6271: The Chemistry of High Polymers
- CHM6301: Enzyme Mechanisms
- CHM6302: Chemistry and Biology of Nucleic Acids
- CHM6303: Methods in Computational Biochemistry and Structural Biology
- CHM6306: Special Topics in Biological Chemistry Mechanisms
- CHM6381: Special Topics in Organic Chemistry
- CHM6390: Organic Chemistry Seminar Presentation
- CHM6391: Organic Chemistry Seminar Discussion
- CHM6430: Chemical Thermodynamics
- CHM6441: Statistical Thermodynamics
- CHM6470: Chemical Bonding and Spectra I
- CHM6471: Chemical Bonding and Spectra II
- CHM6480: Elements of Quantum Chemistry
- CHM6490: Theory of Molecular Spectroscopy
- CHM6520: Chemical Physics
- CHM6580: Special Topics in Physical Chemistry
- CHM6586: Computational Chemistry
- CHM6590: Physical Chemistry Seminar
- CHM6620: Advanced Inorganic Chemistry I
- CHM6621: Advanced Inorganic Chemistry II
- CHM6626: Applications of Physical Methods in Inorganic Chemistry
- CHM6628: Chemistry of Solid Materials
- CHM6670: Inorganic Biochemistry
- CHM6680: Special Topics in Inorganic Chemistry
- CHM6690: Inorganic Chemistry Seminar
- CHM6720: Chemical Dynamics
- CHM6805: Individual Problems, Advanced
- CHM6810: Supervised Research
- CHM6934: Advanced Topics in Chemistry
- CHM6935: Chemistry Colloquium
- CHM6943: Internship in College Teaching
- CHM6971: Research for Master's Thesis
- CHM7485: Special Topics in Theory of Atomic and Molecular Structure
- CHM7979: Advanced Research
- CHM7980: Research for Doctoral Dissertation
- CHS5110L: Radiochemistry Laboratory
Classics Department

Chair: Victoria Pagán.
Graduate Coordinator: Jennifer Rea.
Complete faculty listing: Follow this link.

The department offers the following degrees and programs: the Doctor of Philosophy in classical studies; the Master of Arts degree in classical studies or Latin; the Master of Latin degree, and the Master of Arts in Teaching degree in Latin. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Within the Ph.D. program are three tracks:

- Philology (prepares students for careers in colleges and universities)
- Classical civilization (available via distance course work)
- Latin and Roman studies (available via distance course work).

Requirements for the philology track of the doctoral degree include:

- 60 credit hours after the M.A. (or a total of 90 credit hours)
- Five additional seminars after the M.A. in classics at the 500 level or higher
- Three of the following seminars: GRW 6425, GRW 6105, LAT 6425, LNW 6105, and CLA 6805
- A reading knowledge of two modern languages, one of which must be German
- Reading lists in Greek and Roman authors
- Supervised experience in teaching Latin, Greek, or civilization courses is advised
- Successful completion of a series of qualifying examinations appropriate to the chosen specialization (Greek reading; Latin reading; classical Greek literature in its historical context; classical Latin literature in its historical context; special author/topic)
- An oral preliminary examination, dissertation, and final examination

The M.A. degree in classical studies is recommended for students who plan to continue on to the doctoral level. The M.A. degree in Latin is recommended for students who plan to pursue a career in secondary teaching. Both M.A. programs require 30 credit hours, including 6 credits of GRW 6971 or LNW 6971, a thesis, and final examination.

The Master of Latin degree is a non-thesis degree, designed for currently employed and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of classics, and enhance their professional qualifications through a program of summer course work and directed independent study and/or distance learning courses during the regular academic year. The Master of Arts in Teaching, a non-thesis degree, is offered with a program in Latin and is intended for students preparing to teach in community colleges or high schools.

Other

Classical Studies

College

College of Liberal Arts and Sciences

Department/School

Classics Department

Classical Studies Program Information

(The following information refers only to our on-campus programs. Please visit the Distance Learning Homepage for further details on our Distance Learning programs, especially aimed at elementary, secondary, or community college teachers.)

Ph.D. in Classical Studies

The Ph.D. program in classical studies is a traditional course of study in Greek and Latin language and literature that prepares students for careers in research and teaching at colleges and universities. Students awarded a TA position receive a stipend plus a full tuition waiver. The University also offers competitive fellowships. The department routinely provides research fellowships for its Ph.D. candidates. Department awards are also available for study abroad opportunities. Students are expected to become Florida residents after one year.

M.A. in Classical Studies

The Department of Classics at the University of Florida offers an M.A. degree in Classical Studies. Students awarded a TA position receive a stipend plus a full tuition waiver. Students are expected to become Florida residents after one year.

The Master of Arts in Classical Studies is recommended for students who plan to continue their studies at the doctoral level

For minimum degree requirements, see the Graduate Degrees section of the catalog. For additional requirements, please see the department website: http://classics.ufl.edu.

Admissions Requirements to the Classical Studies Programs:

Admission into the university and the program for Classics is ultimately determined and granted according to the rules established by the Graduate School of the University of Florida (see the Graduate Catalog).

Submission of Graduate Record Examination (GRE) scores, with a minimum score of 1000 (combined verbal and quantitative). Competitive applicants for funding awards from the department typically have a combined score of at least 1200.

Ph.D. program (Level II) requirements include:
1. M.A. in Classics or the equivalent.
2. A GPA of at least 3.25 in previous graduate work, and an undergraduate average of at least 3.0.
3. Demonstrated reading knowledge of German, French, Italian or Modern Greek (competency in the second language to be demonstrated before the completion of the second year at Level II).
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the applicant's record gives evidence of the capacity to undertake and complete guided independent reading and research at the doctoral level.

Master's program (Level I) requirements include:

1. Extensive study of Greek and Latin, with at least three years of coursework in one language and at least two years in the other language.
2. At least six hours in one or more of the following ancient history, ancient art, archaeology, philosophy, literary criticism, linguistics.
3. A GPA of at least 3.0.
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the record shows promise on other grounds.

Degrees Offered with a Major in Classical Studies

Doctor of Philosophy

Master of Arts

Classics Departmental Courses

- CLA6125: Augustan Age
- CLA6515: Roman Dynasty, Nero and the Julio-Claudians
- CLA6705: Greek and Roman Archeology
- CLA6805: The Classical Research Tradition
- CLA6885: Roman Law and Society
- CLA6895: Athenian Law and Society
- CLA6905: Individual Work
- CLA6930: Greece and the Near East
- CLT 6265: Greek Drama in Translation
- GRE 6425: Greek Prose Composition
- GRE 6755: Epigraphy
- GRK 6905: Individual Work in Modern Greek
- GRW 6105: The Greek Tradition
- GRW 6216: Greek Novel
- GRW 6316: Greek Tragedy
- GRW 6317: Ancient Greek Comedy
- GRW 6345: Greek Lyric Poetry
- GRW 6346: Pindar
- GRW 6347: Homer
- GRW 6386: Greek Historians
- GRW 6505: Plato
- GRW 6705: Attic Orators
- GRW 6905: Individual Work
- GRW 6930: Special Topics in Greek Literature
- GRW 6931: Comparative Study of Greek and Latin Literature
- GRW 6971: Research for Master's Thesis
- GRW 7979: Advanced Research
- GRW 7980: Research for Doctoral Dissertation
- LAT 6425: Latin Prose Composition
- LNW 5325: Roman Elegiac Poetry
- LNW 5655: Roman Poets: Horace
- LNW 5665: Roman Poets: Vergil
- LNW 5675: Roman Poets: Ovid
- LNW 6931: Comparative Study of Latin and Greek Literature
- LNW 6105: The Roman Tradition
- LNW 6225: The Ancient Roman Novel
- LNW 6335: Roman Oratory and Rhetoric
- LNW 6365: Studies in Roman Satire
- LNW 6385: Roman Historians
- LNW 6495: Late Latin Literature
- LNW 6905: Individual Work
- LNW 6933: Special Topics in Latin Literature
- LNW 6935: Proseminar in Classics
- LNW 6940: Supervised Teaching
- LNW 6971: Research for Master's Thesis
- LNW 7979: Advanced Research
- LNW 7980: Research for Doctoral Dissertation
Latin

College

College of Liberal Arts and Sciences

Department/School

Classics Department

Latin Program Information

(The following information refers only to our on-campus programs. Please visit the Distance Learning Homepage for further details on our Distance Learning MA and ML Programs, especially aimed at elementary, secondary, or community college teachers.)

The Department of Classics at the University of Florida offers an M.A. degree in Latin, an M.A.T. degree in Latin, as well as a Master of Latin degree. Students awarded a TA position receive a stipend plus a full tuition waiver. Students are expected to become Florida residents after one year.

The Master of Arts in Latin is a thesis degree designed specifically for students who are aiming toward a career in secondary teaching, but who still desire the writing experience and credential that a thesis provides.

The Master of Arts in the Teaching of Latin (M.A.T.) is recommended for students who wish to pursue a career in teaching and who want to include educational courses in their program. This is a non-thesis degree.

The Master of Latin (M.L.) degree is designed primarily for currently employed, and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of Classics, and enhance their professional qualifications. This is a non-thesis degree.

For minimum degree requirements, see the Graduate Degrees section of the catalog. For additional requirements, please see the department website: http://classics.ufl.edu.

Admission Requirements to the Latin Programs:

Admission into the university and the program for Classics is ultimately determined and granted according to the rules established by the Graduate School of the University of Florida (see the Graduate Catalog).

Submission of Graduate Record Examination (GRE) scores, with a minimum score of 1000 (combined verbal and quantitative). Competitive applicants for funding awards from the department typically have a combined score of at least 1200.

Master's level (Level I) requirements include:

1. Extensive study of Greek and Latin, with at least three years of coursework in one language and at least two years in the other language.
2. At least six hours in one or more of the following: ancient history, ancient art, archaeology, philosophy, literary criticism, linguistics.
3. A GPA of at least a 3.0.
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the record shows promise on other grounds.

Degrees

Master of Arts in Teaching

Master of Latin

Classics Departmental Courses

- CLA6125: Augustan Age
- CLA6515: Roman Dynasty: Nero and the Julio-Claudians
The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers Master of Engineering, Master of Science, Engineer, and Ph.D. degrees in computer engineering through the College of Engineering Master of Science degree in digital arts and sciences through the College of Engineering Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems**: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background. All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- **Computer and Information Science and Engineering Department**

  **College of Liberal Arts and Sciences**

  **Chair**: Paul Gader
  **Graduate Coordinator**: Jih-kwon Peir.

  [Complete faculty listing by department: Follow this link](#)

  The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

  The Department of Computer and Information Science and Engineering (CISE) offers Master of Engineering, Master of Science, Engineer, and Ph.D. degrees in computer engineering through the College of Engineering Master of Science degree in digital arts and sciences through the College of Engineering Master of Science degree in computer science through the College of Liberal Arts and Sciences.

  The CISE Department has six broad areas of specialization:

  - Computer systems: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
  - Database and information systems: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics
  - High-performance computing/applied algorithms: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
  - Computer graphics, modeling, and art: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
  - Intelligent systems and computer vision: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
  - Computer networks and security: wired and wireless networks, network routing and protocols, and QoS

  Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background. All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:
An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis. A minimum of 6 credit hours must be taken in CIS 6971.

The non-thesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below B, to be eligible to take the Ph.D. qualifying examinations.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 3 hours must be taken in CIS 7980. A maximum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: [http://www.cise.ufl.edu](http://www.cise.ufl.edu)

Other

Computer Science

College

College of Liberal Arts and Sciences

Department/School

Computer and Information Science and Engineering Department

Computer Science Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science degree in Computer Science through the College of Liberal Arts and Sciences. Minimum requirements for this degree are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in Algorithms, Computer Vision, Databases, Graphics and Modeling, Machine Learning, Networks, and Systems, with active labs in Bioinformatics; Computational Science and Intelligence; Vision, Graphics and Medical Imaging; Database Systems Research and Development; Data Science Research; Mobile and Pervasive Computing; Human-Centered Computing; and Cybersecurity.

Specific degree requirements and options may be found here: [http://cise.ufl.edu/academics/grad](http://cise.ufl.edu/academics/grad)

Instructions for application for admission may be found here: [http://cise.ufl.edu/admissions/grad](http://cise.ufl.edu/admissions/grad)

Degrees Offered with a Major in Computer Science

Master of Science

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
Sociology and Criminology & Law Department

Chair: Barbara Zsembik
Graduate Coordinator: Barbara Zsembik

The Department of Sociology and Criminology & Law offers several programs of graduate study leading to the Ph.D. in Sociology, the Ph.D. in Criminology, Law and Society, the MA in Sociology, the MA in Criminology, Law and Society, and a Joint MA in Criminology/JD degree. The department also partners with the School of Natural Resources and Environment Department to offer the Ph.D. or MA in Interdisciplinary Ecology. Advanced undergraduate majors may complete a combined BA/MA degree in Sociology or a combined BA/MA degree in Criminology, Law and Society.

Other

Criminology, Law and Society
Criminology, Law and Society Program Information

Requirements for the M.A. and Ph.D. degrees are given in the Graduate Degrees section of this catalog. The graduate program in criminology and law has two areas of special emphasis: crime and justice, and law and society. The degree programs are research-based and prepare students to conduct original exploration into relevant problems, issues, and policies.

**M.A. degree program:** Admission to the master’s degree program requires a bachelor’s degree from a criminology/criminal justice or relevant social science or humanities program (political science, sociology, anthropology, psychology, philosophy, history, women's studies, etc.). Qualified students may enter the master’s program as undergraduates through the combined B.A./M.A. program. Both M.A. options (thesis and nonthesis) require satisfactory completion of at least 36 credit hours.

**Ph.D. degree program:** The Doctor of Philosophy program includes a minimum of 90 semester hours of credit beyond the B.A. Students with a criminology or closely related M.A. received in the last 7 years from an accredited U.S. university may request that up to 30 hours credit from their M.A. work be counted toward this total. Those with an M.A. from this department may apply 36 hours. The Department requires Ph.D. students to complete at least 66 hours of course work (excluding research credits), including the M.A. hours. Qualifying examinations take place at the end of a student’s course work.

**Criminology, Law and Society/Law joint degree programs:** The Department of Sociology and Criminology & Law (CLS) and the College of Law offer a joint degree program leading to an M.A. or a Ph.D. in Criminology, Law and Society and a J.D. in law. The joint degree programs enable students to earn both the degrees (the J.D. and the M.A. or the J.D. and the Ph.D.) in less time than would be required to earn both degrees consecutively. Students wishing to pursue the joint program must be admitted to both the Graduate School and the College of Law. These requirements include both the LSAT and GRE. Admission to one may precede the other. Students are encouraged to announce their intent to seek a joint degree as soon as possible. CLS allows 12 hours of appropriate law school courses to be credited toward the CLS degree. The 12 credits selected from the law curriculum must be approved by the graduate coordinator on the recommendation of the student’s supervisory committee. The College of Law will permit 12 hours of credit earned in graduate courses to be credited toward the J.D.

**Degrees**

**Doctor of Philosophy**

**Master of Arts**

**Courses**

- CCJ 5934: Contemporary Issues in Criminology and Law
- CCJ 6936: Proseminar in Crime, Law, and Justice
- CJL 6039: Law and Society
- CCJ 6063: Communities and Crime
- CCJ 6658: Drugs, Crime, and Policy
- CCJ 6286: Criminal Justice Process
- CCJ 6619: Crime and the Life Course
- CCJ 6643: White Collar Crime
- CCJ 6705: Research Methods in Crime, Law, and Justice
- CCJ 6708: Research Issues in Crime and Deviance
- CCJ 6712: Evaluation Research
- CCJ 6905: Independent Study
- CCJ 6910: Supervised Research
- CCJ 6920: Seminar in Criminological Theory
- CCJ 6971: Research for Master's Thesis
- CCJ 7742: Research Methods in Crime, Law, and Justice II
- CCJ 7921: Professional Development in Criminology, Law, and Society
- CCJ 7979: Advanced Research
- CCJ 7980: Research for Doctoral Dissertation
- CJL 6089: Humanitarian Law
- CJL 6090: Law and Social Science
- CJL 6091: Anthropology of Law
- CJL 6095: Human Rights in Cultural Context
Sociology

College

College of Liberal Arts and Sciences

Department/School

Sociology and Criminology & Law Department

Sociology Program Information

Sociologists conduct research to understand the social forces that shape all of our lives, often in hopes of improving everyday life and the life chances of each person. Graduate studies in sociology provide the people skills and technical skills to organize information, communicate analytical research to academic and lay audiences, and prepare well-reasoned and carefully-written reports and documents that contribute to societal well-being. Our award-winning and internationally-known faculty successfully mentor graduate students to complete their studies and become established in their professional academic and nonacademic careers.

We offer particular expertise in these areas: environment and resources, families, aging, gender, health, sexualities, life course, and race-ethnicity in US and global perspectives. There is also considerable expertise in demography, social inequality, Latin American studies, Latino sociology, social psychology, deviance, and political sociology. We take great pride in the fact that our faculty are involved in interdisciplinary research projects that span nearly all of the University's colleges and academic programs, including the School of Natural Resources and the Environment, the Water Institute, the Emerging Pathogens Institute, the Center for Latin American Studies, the Center for European Studies, the Center for Women's Studies and Gender Research, the Health Science Center, and the Jewish Studies Center. Wherever you go on campus, you will most likely find at least one Sociologist from our department making major contributions.

Minimum requirements for the M.A. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Admission to either Sociology graduate program requires a bachelor's degree in Sociology or related social science as approved by the Department. Current UF students may also enter the M.A. program through the combined B.A./M.A. program. The Sociology graduate programs look for mature students with outstanding potential and research interests that complement those of our faculty.

Prospective students should examine the research interests of the Sociology Graduate Faculty to obtain a more detailed sense of faculty expertise and research areas; see the department website: http://soccrim.clas.ufl.edu/graduate/. Applications for admission and fellowship support are due December 1 of each year. Students planning to apply for admission should take the Graduate Record Examination at the earliest possible date.

Degrees Offered with a Major in Sociology

Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

Master of Arts

without a concentration
concentration in Tropical Conservation and Development

Courses

- SYA 6018: Classical Social Theories
- SYA 6126: Contemporary Sociological Theory
- SYA 6305: Methods in Social Research I
- SYA 6306: Methods in Social Research II
- SYA 6315: Qualitative Research Methods
- SYA 6327: Research Problems in Deviance
- SYA 6407: Quantitative Research Methods
- SYA 6905: Individual Work
- SYA 6910: Supervised Research
- SYA 6942: Applied Social Research Project
- SYA 6971: Research for Master's Thesis
- SYA 7933: Special Study in Sociology
- SYA 7979: Advanced Research
- SYA 7980: Research for Doctoral Dissertation
- SYD 6436: Metropolitan Growth and Development
- SYD 6517: Seminar in Environment and Society
- SYD 6518: Core Issues in Environmental and Resource Sociology
- SYD 6706: Racial and Ethnic Relations
- SYD 6707: Black and White Americans: Sociological Perspectives
- SYD 6807: Sociology of Gender
- SYD 6825: Men and Masculinities
- SYD 7808: Reproduction and Gender
- SYD 6107: American Families
- SYD 6126: Family Theories
- SYD 6175: Topics in Family Research
- SYD 6407: Health Disparities
- SYO 6115: Seminar in Symbolic Interaction
- SYP 6115: Seminar in Symbolic Interaction
- SYP 6117: Theories of Crime and Deviance
- SYP 6545: Sociology of Law
- SYP 6735: Sociology of Aging and the Life Course
- SYP 6736: Sociology of the Aged
- SYP 6745: Aging and End-of-Life Issues

English Department

Chair: K. Kidd
Graduate Coordinator: S. I. Dobrin

Complete faculty listing by department: Follow this link.

The Department of English offers the Master of Arts degree (thesis and nonthesis options) and the Doctor of Philosophy degree in English, along with the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog. For more information about our programs, please follow the hyperlinks below or visit our website: http://www.english.ufl.edu/programs.html.

Other

Creative Writing

College

College of Liberal Arts and Sciences

Department/School

English Department
Creative Writing Program Information

The Department of English offers the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.F.A. are provided in the Graduate Degrees section of this catalog. Full information concerning courses of study is available from the graduate coordinator.

Degrees

Master of Fine Arts

English Departmental Courses

- AML 6017: Studies in American Literature Before 1900
- AML 6027: Studies in 20th-Century American Literature
- CRW 6130: Fiction Writing
- CRW 6166: Studies in Literary Form
- CRW 6331: Verse Writing
- CRW 6906: Individual Work
- ENC 5236: Advanced Business Writing for Accounting
- ENC 6428: Digital English
- ENG 6016: Psychological Approaches to Literature
- ENG 6075: Literary Theory: Issues
- ENG 6076: Literary Theory: Theorists
- ENG 6077: Literary Theory: Forms
- ENG 6137: The Language of Film
- ENG 6138: Studies in the Movies
- ENG 6906: Individual Work
- ENG 6910: Supervised Research
- ENG 6932: Film and Video Production
- ENG 6971: Research for Master's Thesis
- ENG 7939: Seminar in Variable Topics
- ENG 7979: Advanced Research
- ENG 7980: Research for Doctoral Dissertation
- ENL 6206: Studies in Old English
- ENL 6216: Studies in Middle English
- ENL 6226: Studies in Renaissance Literature
- ENL 6236: Studies in Restoration and 18th-Century Literature
- ENL 6246: Studies in Romantic Literature
- ENL 6256: Studies in Victorian Literature
- ENL 6276: Studies in 20th-Century British Literature
- LAE 6940: Supervised Teaching
- LAE 6947: Writing Theories & Practices
- LIT 5335: Approaches to Children's and Adolescent Literature
- LIT 6037: Studies in Verse
- LIT 6047: Studies in Drama
- LIT 6309: Communications and Popular Culture
- LIT 6236: Postcolonial Studies
- LIT 6308: Studies in Comics and Animation
- LIT 6327: Studies in Folktale
- LIT 6357: African-American or African Diaspora Lit/Cultures
- LIT 6358: Theoretical Approaches to Black Cultural Studies
- LIT 6855: Issues in Cultural Studies
- LIT 6856: Cultural Studies: Interventions
- LIT 6857: Cultural Studies: Movements
- LIT 6934: Variable Topics
- SPC 6239: Studies in Rhetorical Theory

English

College

College of Liberal Arts and Sciences

Department/School
English Program Information

The Department of English offers the Master of Arts degree (thesis and nontesis options) and the Doctor of Philosophy degree in English with the specializations listed below. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog. Specific areas of specialization for the Master of Arts and the Doctor of Philosophy include literature (Medieval, Renaissance, Restoration, and 18th-century and 19th-century British literature, American literature to 1900, contemporary British and American literature), American studies, critical theory, cultural studies, film and media studies, feminisms, genders and sexualities, postcolonial studies, composition and rhetoric, comics and visual rhetoric, and children's literature.

New graduate students should have completed an undergraduate English major of at least 24 semester hours, and doctoral students should have a Master of Arts degree in English. Full information concerning courses of study is available from the graduate coordinator.

Degrees

Doctor of Philosophy

Master of Arts

English Departmental Courses

- AML 6017: Studies in American Literature Before 1900
- AML 6027: Studies in 20th-Century American Literature
- CRW 6130: Fiction Writing
- CRW 6166: Studies in Literary Form
- CRW 6331: Verse Writing
- CRW 6906: Individual Work
- ENC 5236: Advanced Business Writing for Accounting
- ENG 6428: Digital English
- ENG 6016: Psychological Approaches to Literature
- ENG 6075: Literary Theory: Issues
- ENG 6076: Literary Theory: Theorists
- ENG 6077: Literary Theory: Forms
- ENG 6137: The Language of Film
- ENG 6138: Studies in the Movies
- ENG 6906: Individual Work
- ENG 6910: Supervised Research
- ENG 6932: Film and Video Production
- ENG 6971: Research for Master's Thesis
- ENG 7939: Seminar in Variable Topics
- ENG 7979: Advanced Research
- ENG 7980: Research for Doctoral Dissertation
- ENL 6206: Studies in Old English
- ENL 6216: Studies in Middle English
- ENL 6226: Studies in Renaissance Literature
- ENL 6236: Studies in Restoration and 18th-Century Literature
- ENL 6246: Studies in Romantic Literature
- ENL 6256: Studies in Victorian Literature
- ENL 6276: Studies in 20th-Century British Literature
- LAE 6940: Supervised Teaching
- LAE 6947: Writing Theories & Practices
- LIT 5335: Approaches to Children's and Adolescent Literature
- LIT 6037: Studies in Verse
- LIT 6047: Studies in Drama
- LIT 6308: Studies in Comics and Animation
- LIT 6327: Studies in Folklore
- LIT 6357: African-American or African Diaspora Lit/Cultures
- LIT 6358: Theoretical Approaches to Black Cultural Studies
- LIT 6855: Issues in Cultural Studies
- LIT 6856: Cultural Studies: Interventions
- LIT 6857: Cultural Studies: Movements
- LIT 6934: Variable Topics
- SPC 6239: Studies in Rhetorical Theory
Geography Department

Chair: M. W. Binford
Graduate Coordinator: C. J. Matyas

Complete faculty listing by department: Follow this link.

The Department of Geography offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The focus of the Department is in human-environment interactions, with "environment" interpreted very broadly. The Department provides four main areas of specialization for graduate research: economic and cultural geography; resource management and land use and land cover change; medical geography; and physical geography. Economic and cultural geography concerns such topics as spatial economic theory and housing and care of the elderly. Resource management and land-use and land-cover change focus on agricultural change and resource conservation and development in the tropics and subtropics, and rural and urban land use and land cover change in tropical and temperate regions. Africa and Latin America are the primary areas of regional emphasis outside of the U.S. Physical geography in the Department concentrates on climatology, fluvial geomorphology, and hydrology. Medical geography studies the geographic aspects of human health including disease ecology and transmission and healthcare issues. Medical geography studies the geographic aspects of human health including disease ecology and transmission and healthcare issues.

The Department's extensive geographic information system, remote sensing, and computer cartography teaching and research facilities contribute to and support all of the areas of research. Faculty from the Department are also major participants in the Emerging Pathogens Institute, Florida Climate Institute, Land Use and Environmental Change Institute (L.U.E.C.I.), and the Water Institute. Prospective students should examine the research interests of the Graduate Faculty to obtain a more detailed sense of the Department's specialties (see the departmental website: www.geog.ufl.edu).

To ensure the incorporation of relevant interdisciplinary perspectives in each student's program, the Department maintains close ties with other departments in Liberal Arts and Sciences, and with programs in African studies, Latin American studies, the School of Natural Resources and Environment, the Institute on Aging, urban and regional planning, tropical agriculture, tropical ecology, water resources, the Warrington College of Business Administration, the College of Agricultural and Life Sciences, College of Public Health and Health Professions, and the Hydrogeological Sciences Academic Cluster. Certificates in certain of these fields may be obtained in addition to graduate degrees in geography. Geography administers the Graduate Certificate in Applied Atmospheric Sciences.

A graduate student should preferably have an undergraduate major in geography, but applicants with degrees in one of the social or physical sciences are accepted into the Department's graduate program. Deficiencies in undergraduate work in geography must be corrected concurrently with registration in graduate level courses. All students in the graduate program are required to take courses in contemporary geographic thought and geographic research skills.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Geography

College

College of Liberal Arts and Sciences

Department/School

Geography Department

Geography Program Information

The Department of Geography offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees Section of this catalog.

Degrees

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems
concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Arts

without a concentration

concentration in Applications of Geographic Technologies

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Arts in Teaching

without a concentration

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences
Master of Science

without a concentration

centration in Applications of Geographic Technologies

centration in Geographic Information Systems

centration in Hydrologic Sciences

centration in Tropical Conservation and Development

centration in Wetland Sciences

Courses

- GEA6419: Seminar: South America
- GEA6466: Seminar on Geography of Amazonia
- GEA6468: Resource Utilization and Conservation in Latin America
- GEO 5305: Environmental Biogeography
- GEO 5346: Natural Hazards
- GEO 5556: Geography of Innovation and Technological Change
- GEO 5605: Advanced Urban Geography
- GEO 5809: Geography of World Agriculture
- GEO 5905: Individual Study: Directed Reading
- GEO 5920: Geography Colloquium
- GEO 5945C: Field Course in Geography
- GEO 6118: Contemporary Geographic Thought and Research
- GEO 6119: Proposal Writing in Geography
- GEO 6160: Introduction to Quantitative Methods for Geographers
- GEO 6161: Intermediate Quantitative Methods for Geographers
- GEO 6166: Advanced Quantitative Methods for Spatial Analysis
- GEO 6255: Climatology
- GEO 6282: Fluvial Morphology
- GEO 6348: Floods Seminar
- GEO 6375: Land Change Science Seminar
- GEO 6429: Seminar: Cultural Geography
- GEO 6435: Seminar in Population
- GEO 6451: Medical Geography
- GEO 6495: Environment and Behavior
- GEO 6905: Individual Work
- GEO 6921: How to Survive and Thrive in Academia
- GEO 6931: Seminar in Cultural and Political Ecology
- GEO 6938: Selected Topics in Geography
- GEO 6971: Research for Master's Thesis
- GEO 7979: Advanced Research
- GEO 7980: Research for Doctoral Dissertation
- GEY 6341: Shelter and Care Options for U.S. Elderly
- GIS 5008C: Maps and Graphs
- GIS 5009C: Advanced Cartography
- GIS 5028C: Advanced Aerial Photo Interpretation
- GIS 5038C: Remote Sensing
- GIS 5107C: Geographic Information Systems in Research
• GIS 5306: Geographic Information Systems Applications in Environmental Systems
• GIS 5540: Business Geography and New Real Estate Market Analysis
• GIS 6104: Spatial Networks
• GIS 6425C: GIS Models for Public Health
• MET 5504: Weather and Forecasting
• MET 6530: Hurricanes
• MET 6565: Seminar in Atmospheric Teleconnections
• MET 6752: Atmospheric Data Analysis

Geological Sciences Department

Chair: P. A. Mueller.
Graduate Coordinator: J. M. Jaeger.

Complete faculty listing Follow this link.

The Department of Geological Sciences is composed of a group of internationally recognized faculty, graduate students, and dedicated support staff. Faculty and students in the Department of Geological Sciences are involved in exciting and groundbreaking research projects throughout the world and in Florida. The Department houses world-class analytical and computing facilities for research and teaching.

The Department has identified six primary areas of emphasis in its research and teaching programs: environmental geology and hydrology, paleoclimatology, tectonophysics, geochemistry and mineralogy/petrology, marine and coastal geology, and paleomagnetism. For more detailed information on current departmental activities, faculty, and research centers, see http://web.geology.ufl.edu. The Department has collaborative, interdisciplinary programs of study and research with the Florida Museum of Natural History, the Center for Wetlands Research, the Land Use and Environmental Change Institute (L.U.E.C.I.), and the hydrological sciences cluster.

Other

Geology

College

College of Liberal Arts and Sciences

Department/School

Geological Sciences Department

Geology Program

The Department of Geological Sciences offers programs leading to the Master of Science (thesis), the Master of Science in Teaching (nonthesis), and the Doctor of Philosophy degrees in geology. Requirements for these degrees are described in the General Information section of this catalog.

For admission to graduate status in the Department of Geological Sciences, a student must have a baccalaureate degree with a major in geology or a related field or its equivalent. Deficiencies in undergraduate preparation can be corrected by completing the undergraduate courses without credit while enrolled as a graduate student.

Applicants should take the GRE general test. The scores of this examination must be reported to the Department of Geological Sciences. Three letters of recommendation are also required for admission to the doctoral program and for financial aid applications at any level.

A minimum of 33 semester hours of graduate level courses are required for the Master of Science in geology. At least 24 hours must be in organized graduate-level geology courses (excluding research, teaching, special projects, etc.). Six hours of thesis research credit are required. All master's degrees are terminal; a separate and new application for admission to the doctoral program is required.

For the Master of Science in Teaching degree, at least 26 hours are required. Of these, 18 must be in organized graduate-level geology courses. The remaining 8 hours must be in approved electives. A minor in education is required. Candidates also must pass the final oral examination.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Degrees

Doctor of Philosophy
without a concentration

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses
The History Department offers the following graduate degrees: Master of Arts degree with fields of specialization in African, Asian, European, Latin American, and United States history, and the Doctor of Philosophy with fields of specialization in African, European, Latin American, and United States history. In addition to materials required by the Graduate School for admission, applicants must send directly to the History Department the following evidence of aptitude and interest: Three recommendations, from persons competent to evaluate your potential for graduate work; A 3- to 5-page essay identifying your career goals and particular areas of interest; a sample of your written work in history. Interested students should consult the department web page for more information.

Other

History

College

College of Liberal Arts and Sciences

Department/School

History Department

History Program

The Department of History offers the following graduate degrees: Master of Arts degree with fields of specialization in African, Asian, European, Latin American, and United States history...
and the Doctor of Philosophy degree with fields of specialization in African, European, Latin American, and United States history, or with a dual major which allows students to create their own major fields.

Master of Arts: This degree serves to prepare students for admission to a Ph.D. program, for a teaching career in high school or community colleges, or for a career in government or business.

Fields of specialization:
- African (East Africa, Southern Africa, West Africa)
- European (medieval, early modern, or modern)
- Latin American (colonial Latin America, post-Colonial Latin America, Brazil, and the Caribbean or Spanish America)
- United States history (early America, 19th century, 20th century)

Thesis option requirements:
- A minimum of 30 credit hours.
- At least 12 graduate-level regular course credit hours in your major field. In European, you must take at least two seminars in your area of specialization. In U.S. history, you must take the 19th-century America readings seminar, either the 20th-century or early America readings seminar, and at least one research seminar. In Latin American and African history, you must take the relevant readings seminars in your area of specialization, one other readings seminar, and at least one research seminar.
- At least 6 graduate-level regular course credit hours outside the major field (but in the Department of History). We recommend that you invest these regular course hours in readings seminars.
- Take 3 hours of historiography (HIS 6061) by the fourth semester of graduate study.
- Take 3 regular course credit hours from outside the Department. These should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.
- Complete a master's thesis. The semester you graduate, you must be registered for a minimum of 3 thesis research hours (HIS 6971) in the fall or spring term or 2 in a summer term. Your thesis should demonstrate your ability to handle primary-source material of your field, and a working knowledge of the secondary literature; and should demonstrate your ability to present research results in a coherent, well-written study. The student must complete the thesis and make it available to readers 2 weeks before the oral examination, complete the application for the degree at the Office of the University Registrar before the deadline, and take the examination.
- Each student must pass a final comprehensive oral examination at the end of the program.

Non-thesis option requirements:
- A minimum of 30 credit hours.
- At least 12 graduate-level regular course credit hours inside your major field. In European, you must take at least two seminars in your area of specialization. In U.S. history, you must take the 19th-century America readings seminar, either the 20th-century or the early America readings seminar, and at least one research seminar. In Latin American or African history, you must take the relevant readings seminars in your area of specialization, one other readings seminar, and at least one research seminar.
- At least 6 graduate-level regular course credit hours outside your major field (but in the Department of History). We recommend that you invest these regular course hours in readings seminars.
- Take 3 hours of historiography (HIS 6061) by your fourth semester of graduate study.
- Take 3 regular course credit hours from outside the Department. These should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.
- Complete a research seminar and/or a nonthesis project in history. Your primary goal in either is to complete an article-length essay (approximately 35 to 40 pages) of publishable or near-publishable quality. The essay should be based largely on primary sources.
- You must pass a final comprehensive oral and written examination conducted by your supervisory committee.

Supervisory committee for the M.A.: The committee normally consists of the chair and two other members of the graduate faculty. Additional members may be added if desirable. The committee assists in planning and supervising the student's program and conducts the final examination. The chair is also the thesis director if that option is chosen.

Duration: The M.A. program can be completed in 3 semesters of full-time registration but may take longer. The Department believes that normally no more than 4 semesters of full-time registration should be spent on the degree. These semesters need not be consecutive. The Board of Education has established 60 credit hours as a maximum for the master's degree. Up to 6 credits of graduate-level courses taken at another school with a grade of B or better may be transferred into the master's program if approved by the Graduate School.

Bachelor's/master's program: The Department offers a combined 4/1 degree program that enables outstanding undergraduates to obtain both the B.A. and M.A. degrees in history after successful completion of 150 credit hours. The program is designed for the students who wish to continue their education in history in past the bachelor's level but do not intend to pursue a doctorate in history or for students who wish to expand their training in a specific field before moving on to a doctoral program. The department offers a 4/1 degree program in the standard M.A. fields of study and offers two specialized tracks: oral history and academic publishing. Please see the Department website for more information. Students in this program are not eligible for departmentally controlled financial aid.

Doctor of Philosophy requirements:
- Professional competence in your major field, or major fields for students pursuing a dual degree.
- Knowledge of a minor, which may be drawn from the approved major fields of specialization for the doctorate (African, European, Latin American, or U.S. history), from approved minor fields (Atlantic history, gender, legal history), or may be self designed as a thematic research or teaching field. It must include at least 3 hours outside the historical area that defines your major field. Note: Students pursuing a dual major do not take a department minor field.
- At least 3 regular course credit hours from outside the Department; these should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.
- Pass a set of written and oral qualifying examinations testing competence in major and additional fields and your knowledge of the nature of history and the historian's task.
- A dissertation for which credit is given in HIS 7980.

History/Law joint degree program: The Department of History and the College of Law offer a program in legal history leading to either the M.A. or a Ph.D. degree in history and the J.D. in law. Because the faculties of history and law stress interdisciplinary training, students admitted to the joint degree program will be allowed to count a significant number of hours toward both degrees. Applicants must be accepted by both the Graduate School and the College of Law. Normally, students will complete the course and examination requirements of both degrees in 4 years. Students may begin their first year of work in either history or law, but they must complete the first year of law school within 1 year and they must do so within the first 2 years after admission to the joint degree program. For further information write to the Legal History Coordinator, Department of History, University of Florida, Box 117320, Gainesville, FL 32611-7320.

Degrees
Doctor of Philosophy

without a concentration

concentration in Historic Preservation

concentration in Women's/Gender Studies

Master of Arts

without a concentration

concentration in Historic Preservation

concentration in Jewish Studies

Courses

- AFH 5297: History of African Agriculture
- AFH 5348: History of West Africa
- AFH 5458: Southern Africa
- AFH 5934: Topics in African History
- AFH 6259: Seminar in Modern Africa
- AFH 6885: Theories and Methods of African History
- AFH 6934: Africa
- AFH 6936: Readings in African History
- AMH 5405: The South to 1860
- AMH 5905: Special Studies
- AMH 5930: Topics in United States History
- AMH 6198: Early American Society
- AMH 6199: Nineteenth Century America
- AMH 6290: Modern America
- AMH 6356: Research in U.S. History
- AMH 6406: Readings in Southern History, 1607-1865
- AMH 6465: Seminar in U.S. Urban History
- AMH 6508: Seminar in American Labor History
- AMH 6516: Seminar in American Foreign Relations and Expansion
- AMH 6557: Seminar in Constitutional or Legal History of the United States
- ASH 5388: Topics in East Asian History
- EUH 5546: Topics in British History
- EUH 5934: Topics in European History
- EUH 6126: Readings in Medieval History
- EUH 6174: Conversion in the Middle Ages
- EUH 6175: Ethnicity in the Middle Ages
- EUH 6176: Villages and Peasants in the Middle Ages
- EUH 6177: Economy and Society in Late Antiquity and the Early Middle Ages
- EUH 6213: Europe, 1500-1763
- EUH 6289: Readings, Modern Europe
- EUH 6469: Modern German History
Department of Languages, Literatures and Cultures

Other

French and Francophone Studies

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

French and Francophone Studies Program Information

Bachelor's/master's program: French and Francophone Studies offers a combined 4/1 degree program that enables outstanding undergraduates to obtain both the B.A. and M.A. degrees after successful completion of 152 credit hours. The program is designed for the students who wish to continue their education in French and Francophone Studies past the bachelor's level but do not intend to pursue a doctorate or for students who wish to expand their training in a specific field before moving on to a doctoral program. Since students in the bachelor's/master's program have a graduate classification, students receiving undergraduate scholarships or Pell grants should check with the funding provider to make sure that they will not lose eligibility.

Degrees

Master of Arts

Master of Arts in Teaching
Courses

- FLE 6385: Foreign Languages Teaching Methods
- FRE 6060: Beginning French for Graduate Students I
- FRE 6061: Beginning French for Graduate Students II
- FRE 6466: Advanced Translation and Stylistics
- FRE 6735: Special Studies in French Linguistics
- FRE 6736: The French language in the Americas
- FRE 6785: French Phonetics and Phonology
- FRE 6827: Sociolinguistics of French
- FRE 6845: History of the French Language
- FRE 6855: Structure of French
- FRE 6856: French in the 21st Century
- FRE 6940: Supervised Teaching
- FRE 6943: Romance Language Teaching Methods
- FRE 6945: Practicum in Advanced College Teaching
- FRE 6956: Overseas Studies in French
- FRW 6217: Seventeenth-Century French Prose
- FRW 6278: Readings in Eighteenth-Century Literature
- FRW 6288: Twentieth-Century French Novel
- FRW 6315: Seventeenth-Century French Drama
- FRW 6328: Twentieth-Century French Theater
- FRW 6346: French Poetry of the Renaissance
- FRW 6355: Modern French Poetry
- FRW 6396: French Cinema
- FRW 6416: Later French Medieval Literature
- FRW 6536: The Romantic Period
- FRW 6556: French Realism and Naturalism
- FRW 6715: The Philosophic Movement
- FRW 6780: Studies in Francophone Literature and Culture (Excluding the Caribbean and Sub-Saharan Africa)
- FRW 6805: Introduction to Graduate Study and Research
- FRW 6825: French Critical Theory
  - FRW 6827
- FRW 6900: Special Study in French Literature
- FRW 6905: Individual Work
- FRW 6910: Supervised Research
- FRW 6938: Seminar in French Literature
- FRW 6971: Research for Master's Thesis
- FRW 7979: Advanced Research
- FRW 7980: Research for Doctoral Dissertation

German

Chair: M. Watt
Graduate Coordinator: W. Hasty

Complete faculty listings: Follow this link.

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

Degrees

Doctor of Philosophy
without a concentration

collection in Women's/Gender Studies

Master of Arts

German Literature and Cinema

- GET 6295: Weimar Cinema
- GET 6299: New German Cinema and its Legacy
- GEW 6205: Foundations of Literary Study
- GEW 6266: History of the German Novel
- GEW 6305: Studies in German Drama and Theater
- GEW 6405: Medieval and Renaissance Literature
- GEW 6425: From Luther to Lessing: Early Modern German Literature
- GEW 6535: German Classical and Romantic Literature
- GEW 6558: Young Germany, Biedermeier, Realism, and Naturalism
- GEW 6725: Culture and Society in the Weimar Republic
- GEW 6726
- GEW 6735: Modern German Literature
- GEW 6736: Contemporary German Literature
- GEW 6745: Literature and Culture in the Third Reich
- GEW 6826: German Literary Theory
- GEW 6900: Seminar in Germanic Languages and Literatures
- GEW 6901: Special Study in Germanic Languages and Literatures
- GEW 6905: Independent Study
- GEW 6910: Supervised Research
- GEW 6971: Research for Master's Thesis
- GEW 7979: Advanced Research
- GEW 7980: Research for Doctoral Dissertation

German Language

- GER 6060: Beginning German for Graduate Students I
- GER 6061: Beginning German for Graduate Students II
- GER 6505: German Culture
- GER 6940: Supervised Teaching

Romance Languages (Language, Literature and Culture)

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

Degrees Offered with a Major in Romance Languages
Doctor of Philosophy

concentration in French and Francophone Studies

Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW 6930: Special Study in Romance Languages and Literatures
- SPN 6166: Teaching Spanish for the Professions
- SPN 6940: Supervised Teaching
- SPW 6545: Spanish Romanticism
- SPN 6705: Foundations of Hispanic Linguistics
- SPN 6845: History of the Spanish Language
- SPS 6905: Individual Study
- SPS 6910: Supervised Research
- SPS 6940: Supervised Teaching
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation
- SPW 6535: Spanish Romanticism

Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6715: Formal Instruction and Acquisition of Spanish
- SPN 6735: Special Study in Spanish Linguistics
- SPN 6785: Advanced Spanish Phonetics
- SPN 6827: Sociolinguistics of the Spanish-Speaking World
- SPN 6835: Spanish and Spanish-American Dialectology
- SPN 6845: History of the Spanish Language
- SPN 6848: Medieval Spanish Linguistics
- SPN 6855: Structure of Spanish
- SPN 6856: Spanish in Context: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FOL 6943: Romance Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6236: Spanish-American Narrative from the origins to Criollismo
- SPW 6269: Spanish Novel of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6286: Contemporary Spanish-American Narrative II
- SPW 6306: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPN 6425: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6629: The Generation of 1898
- SPW 6636: Introduction to Graduate Study and Research
- SPW 6692: Special Study in Spanish or Spanish-American Literature
- SPW 6905: Individual Work
- SPW 6910: Supervised Research
- SPW 6934: Seminar in Spanish American Literature and Culture
- SPW 6938: Seminar in Spanish Literature and Culture
- SPW 6971: Research for Master's Thesis
- SPW 7979: Advanced Research
- SPW 7980: Research for Doctoral Dissertation

Portuguese

- POW 6276: Twentieth-Century Brazilian Novel
- POW 6385: Brazilian Lyric
- POW 6386: Brazilian Drama
- POW 6905: Individual Work
- POW 6930: Rotating Topics in Brazilian or Portuguese Literature
Latin American Studies Department

Director: C. D. Deere.
Graduate Coordinator: R. F. Brown.

Complete faculty listing by department: Follow this link.

The Center for Latin American Studies offers the following graduate programs:

- Latin American Studies
- Sustainable Development Practice

Other

Latin American Studies

College

College of Liberal Arts and Sciences

Department/School

Latin American Studies Department

Latin American Studies Program

The Center for Latin American Studies offers the following graduate programs:

- An interdisciplinary Master of Arts degree
- Graduate certificate and advanced graduate certificate in Latin American studies in conjunction with disciplinary degrees in the Colleges of Agricultural and Life Sciences; Design, Construction, and Planning; Business Administration; Education; Fine Arts; Journalism and Communications; Law; and Liberal Arts and Sciences.

The graduate program in Latin American studies relies on over 250 courses with Latin American content taught in more than 35 academic units of the above colleges. The degree and certificate programs in Latin American studies are described on their website www.latam.ufl.edu/academics/graduate-programs. Complete course listings are available at the Center for Latin American Studies (319 Grinter Hall) and on the website.

Degrees

Master of Arts

without a concentration

concentration in Tropical Conservation and Development

Latin American Studies Courses

- FOT 6940: Translation Studies Practicum
- LAS 6008: Ecological Principles
- LAS 6220: Issues and Perspectives in Latin American Studies
Sustainable Development Practice

College

College of Liberal Arts and Sciences

Department/School

Latin American Studies Department

Sustainable Development Practice Program

Director: G. Galloway
Program Coordinator: C. Tarter

The Master of Sustainable Development Practice (MDP) Program offers the following academic programs:

- An interdisciplinary Master’s degree in Sustainable Development Practice
- A graduate certificate in Sustainable Development Practice

The MDP Program is jointly administered by the Center for Latin American Studies and the Center for African Studies. The Master’s degree is described in the Other Master’s Degrees section of the Graduate Catalog. The certificate program is described in the Interdisciplinary Graduate Certificates section of the Graduate Catalog. More information about the MDP Program can also be found at the website http://www.africa.ufl.edu/mdp/index.html.

Degrees

Master of Sustainable Development Practice

Sustainable Development Courses

- AFS 6905: Individual Work in African Studies
- EVR 5705: Natural Resources and Innovation Systems
- LAS 6291: Conservation and Development Skills
- LAS 6938: Seminar in Modern Latin American Studies
- LAS 6943: Development Theory and Practice in Latin America
- PHC 6445: Global Public Health and Development II
- PHC 6764: Global Public Health and Development I

African Studies Courses

- AFS 5061: Africana Bibliography
- AFS 6060: Research Problems in African Studies
- AFS 6305: Development Theory and Practice Intro
- AFS 6307: Foundations of Economics for Sustainable Development
- AFS 6357: Anthropology of Humanitarian Intervention
- AFS 6905: Individual Work in African Studies
Latin American Studies Courses

- FOT 6940: Translation Studies Practicum
- LAS 6008: Ecological Principles
- LAS 6220: Issues and Perspectives in Latin American Studies
- LAS 6290: Tropical Conservation and Development
- LAS 6291: Conservation and Development Skills
- LAS 6292: Tropical Conservation and Development Research Methods
- LAS 6293: Design and Methods of Research in Latin American Studies
- LAS 6295: Latin American Business Environment
- LAS 6296: Latin American Business Topics
- LAS 6905: Individual Work
- LAS 6938: Seminar in Modern Latin American Studies
- LAS 6940: Tropical Conservation and Development Practicum
- LAS 6943: Development Theory and Practice in Latin America
- LAS 6971: Research for Master's Thesis

Additional Course Offerings

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6005: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6006: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6302: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6342: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
Linguistics Department

Chair: F. McLaughlin
Graduate Coordinator: E. Potsdam
Complete faculty listing by department: Follow this link

The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

Requirements for these degrees are given in the Graduate Degrees section of this catalog. For detailed information on the program, please visit the link below. For further information on the program, including financial aid, please visit [http://lin.ufl.edu](http://lin.ufl.edu).

Other

Linguistics

College

College of Liberal Arts and Sciences

Department/School

Linguistics Department

Linguistics Program Information

The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

For detailed information on the program, including financial aid, please visit the website [http://lin.ufl.edu](http://lin.ufl.edu).

The Certificate in Second Language Acquisition and Teaching is offered to University of Florida graduate degree-seeking students in linguistics and related disciplines.

As part of its service to the University community, Linguistics also offers English as a Second Language training for international applicants and admitted students. These programs, the English Language Institute (ELI), Academic Written English (AWE), and Academic Spoken English (ASE), are described in the Student Services section of this catalog. This information, along with links to the application form, are available at [http://lin.ufl.edu](http://lin.ufl.edu).

Applicants who lack a background in linguistics should develop basic competency in the core areas before commencing graduate work. These deficiencies can be met by taking LIN 3010, LIN 3201, and LIN 3460 or the equivalent.

Degrees

Doctor of Philosophy

Master of Arts

Linguistics Departmental Courses
Mathematics Department

Chair: D. Cenzer
Graduate Coordinator: J. A. Larson

Complete faculty listing: Follow this link.

The Department of Mathematics offers the degrees of Doctor of Philosophy, Master of Science and Master of Arts, and the Master of Arts in Teaching and Master of Science in Teaching, each with a major in mathematics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

Interdisciplinary Programs — The Department offers a co-major program in conjunction with the Statistics Department leading to the Doctor of Philosophy degree in mathematics and statistics. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Statistics, Industrial and Systems Engineering, and Finance, Insurance, and Real Estate Departments.

Combined Program — The Department has an accelerated bachelor’s/master’s program designed for superior undergraduate students who have the ability to pursue such a plan of study leading to the Master of Science or Master of Arts degree. The main feature of the programs is that up to 12 semester hours of approved graduate level mathematics courses may be used as dual credit for both the undergraduate and the graduate degree. All other requirements for both the bachelor’s degree and the master’s degree must be met. For admission requirements for this program, see the undergraduate coordinator.

There are opportunities for concentrated study in a number of specific areas of pure and applied mathematics at both the master’s and doctoral levels. The faculty directs studies and research in mathematics, including a full year of calculus and three semesters of appropriate work beyond the calculus. The most appropriate courses for this purpose are advanced calculus, linear algebra and abstract algebra. Students lacking part of the requirements will be required to make up the deficiency early in their graduate work. Prerequisites to individual courses should be determined before registration by consultation with the instructor concerned. Some of the courses listed are offered only as needed. Since times of offering courses are estimated a year in advance, certain changes may be made if needs are known by the Department. The courses MAA 5228, MAA 5229, MAS 5311, and MAS 5312 are required for all advanced degree programs in mathematics. The requirements for the master’s degree nonthesis option include a minimum of 32 semester hours of course work. Students pursuing the master’s degree in mathematics must pass two comprehensive written examinations, one in algebra and one in analysis. Students pursuing the master’s degree with a specialization in applied mathematics have two options: the examination option requires passage of the algebra and analysis examinations; the thesis option requires instead the preparation and oral defense of a thesis on original research conducted under the supervision of a faculty advisor. Students pursuing the Master of Arts in Teaching or the Master of Science in Teaching degree must prepare a teaching portfolio.

Other
Mathematics

College

College of Liberal Arts and Sciences

Department/School

Mathematics Department

Degrees

Doctor of Philosophy

without a concentration

concentration in Imaging Science and Technology

concentration in Quantitative Finance

Master of Arts in Teaching

Master of Science

Master of Science in Teaching

Courses

- MAA 5104: Advanced Calculus for Engineers and Physical Scientists I
- MAA 5105: Advanced Calculus for Engineers and Physical Scientists II
- MAA 5228: Modern Analysis I
- MAA 5229: Modern Analysis II
- MAA 5404: Introduction to Complex Variables for Engineers and Physical Scientists
- MAA 6236: Mathematical Analysis for Statisticians
- MAA 6406: Complex Analysis I
- MAA 6407: Complex Analysis II
- MAA 6616: Analysis I
- MAA 6617: Analysis II
- MAA 7526: Advanced Topics in Functional Analysis I
- MAA 7527: Advanced Topics in Functional Analysis II
- MAD 6206: Combinatorial Theory I
- MAD 6207: Combinatorial Theory II
- MAD 6406: Numerical Linear Algebra
- MAD 6407: Numerical Analysis
- MAD 7396: Topics in Combinatorial Theory I
- MAD 7397: Topics in Combinatorial Theory II
- MAE 6940: Supervised Teaching
- MAE 6943: Internship in College Teaching
- MAP 5304: Intermediate Differential Equations for Engineers and Physical Scientists
- MAP 5345: Introduction to Partial Differential Equations
- MAP 5489: Modeling in Mathematical Biology
The Department offers the Master of Arts and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog.

Admission to the program requires a bachelor’s degree in philosophy or sufficient course work in philosophy, as determined by the department. Applicants are evaluated on the basis of academic achievement, GRE scores, three letters of recommendation, a statement of purpose, and a sample essay in philosophy. Students may be admitted for a terminal M.A. degree or for the Ph.D. Program.

The M.A. degree requires two years (36 hours) of course work. All graduate students take foundational courses in their first four semesters: the graduate Proseminar (PHI 5935), Graduate Logic (PHI 5135), a course in Ancient Philosophy (PHP 5005 or PHP 5015), a course in Modern Philosophy (PHI 5405 or PHI 5406), and other Foundations of Analytic Philosophy (PHP 5785) or Epistemology (PHI 5365).

The Ph.D. requires 90 credit hours, which may include 36 used as credit for the M.A. In addition to the foundational courses required for the M.A., the Ph.D. requires Ethical Theory (PHI 5465) and both of PHP 5785 and PHI 5365. It also requires six courses at the advanced 6000-level, 3 proposal research hours and 12 doctoral research hours, and of course the successful completion and defense of a dissertation.

Further information about the department's programs and admissions can be obtained on the department's website web.phil.ufl.edu or by contacting the Graduate Coordinator, 330 Griffin-Floyd Hall, (352)392-2084 or gradcoord@phil.ufl.edu.

Philosophy Department

Chair: G. Wütmer.
Graduate Coordinator: C. Liu.

Complete faculty listing by department: Follow this link.

Other

Philosophy

College

College of Liberal Arts and Sciences
Department/School

Philosophy Department

Degrees

Doctor of Philosophy

Master of Arts

Master of Arts in Teaching

Courses

- PHH 5405: Modern Philosophy I
- PHH 5406: Modern Philosophy II
- PHH 5605: Studies in Continental Philosophy
- PHH 6105: Seminar in Ancient Philosophy
- PHH 6425: Seminar in Modern Philosophy
- PHI 5135: Graduate Logic
- PHI 5225: Philosophy of Language
- PHI 5325: Philosophy of Mind
- PHI 5365: Epistemology
- PHI 5405: Philosophy of Science
- PHI 5425: Philosophy of Social Science
- PHI 5505: Metaphysics
- PHI 5665: Ethical Theory
- PHI 5905: Individual Work
- PHI 5994: Topics in Philosophy
- PHI 5995: Proseminar
- PHI 6105: Seminar in Logic
- PHI 6226: Seminar in Philosophy of Language
- PHI 6306: Seminar in Epistemology
- PHI 6326: Seminar in Philosophy of Mind
- PHI 6406: Seminar in Philosophy of Science
- PHI 6506: Seminar in Metaphysics
- PHI 6667: Seminar in Ethics
- PHI 6787: Seminar in Continental Philosophy
- PHI 6905: Individual Work
- PHI 6910: Supervised Research
- PHI 6934: Special Topics
- PHI 6940: Supervised Teaching
- PHI 6971: Research for Master's Thesis
- PHI 7979: Advanced Research
- PHI 7980: Research for Doctoral Dissertation
- PHP 5005: Ancient Philosophy I
- PHP 5015: Ancient Philosophy II
- PHP 5785: Foundations of Analytic Philosophy
- PHP 6415: Seminar in Kant
- PHP 6795: Seminar in Analytic Philosophy
- PHP 6930: Seminar in a School or Thinker

Physics Department

College of Liberal Arts and Sciences

Chair: Kevin Ingersent
Graduate Coordinator: Guido Mueller

Complete faculty listings: Follow this link.

The Department of Physics offers the Master of Science (thesis or nonthesis) and the Doctor of Philosophy degrees. The nonthesis Master of Science in Teaching is also offered. Requirements for these degrees are described in the Graduate Degrees section of this catalog.

Areas of specialization for graduate research include astrophysics and cosmology, atomic and molecular physics, biological physics, chemical physics, condensed matter physics (theory and experiment), nuclear physics, particle physics (theory and experiment), statistical physics, and low temperature physics.

Special interdisciplinary research programs include the Institute for Fundamental Theory (carried out jointly with the Department of Mathematics), the Institute for Theoretical and Computational Studies in Molecular and Materials Science (carried out jointly with the Department of Chemistry), the Institute of High Energy and Particle Astrophysics, and Microfabritech (jointly with the College of Engineering). A curriculum is offered by the Center for Chemical Physics for students interested in research related to chemistry or chemical engineering. The Center for Condensed Matter Sciences provides opportunities for investigations in a diverse range of subjects and fields, including the Microkelvin Research Laboratory. The University of Florida operates the National High Magnetic Field Laboratory jointly with Florida State University and Los Alamos National Laboratory.

The core curriculum is designed to provide a thorough foundation for all physics graduate students. It consists of PHY 6246, PHY 6346, PHY 6347, PHY 6536, PHY 6645, and PHY 6646. Doctoral students must achieve a 3.30 GPA in the core curriculum. All students must pass a preliminary examination at the undergraduate level. All degree candidates are required, as part of their graduate education, to participate continuously in the research and/or teaching programs of the Department.

For more information, please see the program page below, and visit our website: http://www.phys.ufl.edu.

Other

Physics

College

College of Liberal Arts and Sciences

Department/School

Physics Department

Physics Program Information

The Department of Physics is dedicated to advancing the frontiers of knowledge in both pure and applied physics, thus providing an exciting intellectual climate for our graduate students. Our research activities include astrophysics (particle astrophysics, cosmology and gravitation), condensed matter and materials physics (experimental, theoretical and computational), low temperature physics, elementary particle physics (experimental and theoretical) and biological physics. With such diversity in research offerings you will have an opportunity to pursue research in most areas of contemporary physics. In spite of the size of our Department, we are committed to designing a program of graduate study that is tailored to your experience and interests. Our Graduate Coordinator sees that each of our graduate students receives personal attention and advice as they progress toward their advanced degree.

Graduate Program Overview

Preliminary Examination:
- Covers undergraduate subject matter
- Given twice a year; two years to complete

Graduate Core Courses
- Two semesters of quantum mechanics
- Two semesters of electromagnetism
- One semester of classical mechanics
- One semester of statistical mechanics
- Waivers given for equivalent work at other institutions
- Completed in first or second year

Distribution Requirement
- Advanced course work in three subfields
- Usually completed by the end of the second year

Highlights
- Involvement in research in first summer (or sooner)!
- Diversity of research interdisciplinary options!
- Individualized program designed to meet the unique background of each student!

For more information, please see our website: http://www.physics.ufl.edu.

Degrees
Doctor of Philosophy

without a concentration

concentration in Imaging Science and Technology

Master of Science

Master of Science in Teaching

Courses

- AST 6416: Physical Cosmology
- PHY 5277: Physics of Accident Reconstruction and Biomechanics
- PHY 5905: Individual Work
- PHY 6246: Classical Mechanics
- PHY 6346: Electromagnetic Theory I
- PHY 6347: Electromagnetic Theory II
- PHY 6536: Statistical Mechanics I
- PHY 6555C: Cryogenics
- PHY 6645: Quantum Mechanics I
- PHY 6646: Quantum Mechanics II
- PHY 6648: Quantum Field Theory I
- PHY 6905: Individual Work
- PHY 6910: Supervised Research
- PHY 6920: Departmental Colloquium
- PHY 6932: Seminar in Molecular and Computational Physics
- PHY 6943: Internship in College Teaching
- PHY 6971: Research for Master's Thesis
- PHY 7097: Advanced Topics in Theoretical Physics
- PHY 7669: Quantum Field Theory II
- PHY 7939: Special Topics
- PHY 7979: Advanced Research
- PHY 7980: Research for Doctoral Dissertation
- PHZ 5155C: Physical Modeling and Simulation
- PHZ 5245: Introduction to Magnetic Resonance
- PHZ 5354: Introduction to Particle Physics
- PHZ 5405: Introduction to Solid-State Physics
- PHZ 6156: Computer Methods in Physics
- PHZ 6166: Qualitative Methods of Theoretical Physics
- PHZ 6355: Elementary Particle Physics I
- PHZ 6358: Standard Model of Elementary Particles I
- PHZ 6391: Seminar in Astrophysics
- PHZ 6392: Seminar in Particle Physics
- PHZ 6426: Solid State I
- PHZ 6493: Seminar in Condensed Matter Physics
- PHZ 6607: Special and General Relativity
- PHZ 7357: Elementary Particle Physics II
- PHZ 7359: Standard Model of Elementary Particles II
- PHZ 7427: Solid State II
- PHZ 7428: Modern Condensed Matter Physics
- PHZ 7429: Phases of Condensed Matter
- PHZ 7698: Special and General Relativity II

Plant Molecular and Cellular Biology Department

College of Agricultural and Life Sciences
College of Liberal Arts and Sciences
College of Medicine

Plant Molecular and Cellular Biology (PMCB) currently has 40 faculty members in the program. They are based in the departments of Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology within the colleges of Agriculture and Life Sciences, Medicine and Liberal Arts and Sciences.

Other

Plant Molecular and Cellular Biology

College

College of Liberal Arts and Sciences

Department/School

Plant Molecular and Cellular Biology Department

Plant Molecular and Cellular Biology Program Information

Director: Gloria A. Moore
Graduate Coordinator: Matias Kirst

Plant Molecular and Cellular Biology (PCMB) is an interdisciplinary and interdepartmental graduate degree program that emphasizes understanding the molecular and cellular mechanisms that mediate plant development, adaptation, and evolution. Students can pursue an M.S. or a Ph.D. degree through the PMCB program. All students complete core courses in Advanced Genetics, Plant Molecular Biology and Genomics, Plant Cellular and Developmental Biology, and Plant Biochemistry. In addition to the core classes, students can select from a variety of courses in biochemistry, molecular biology, physiology, breeding, genetics, evolution, microbiology, and plant pathology.

New students are exposed to a variety of faculty and experimental systems while they rotate through several laboratories during their first two semesters before selecting an adviser and dissertation research area. Both M.S. and Ph.D. students take four required courses: PCB 5065 Advanced Genetics, PCB 5530 Plant Molecular Biology and Genomics, PCB 6528 Plant Cell and Developmental Biology and BOT 6935 Plant Biochemistry, as well as journal colloquium classes (PCB 7922 Journal Colloquium). Additional elective courses are taken after approval by the student's supervisory committee. For additional information see http://pmcb.ifas.ufl.edu.

Successful candidates should have a strong interest in plant molecular and cellular mechanisms controlling development, metabolism, adaptation, and evolution. Applicants typically have a B.S. or M.S. in the agricultural, forestry, biological or chemical sciences with advanced undergraduate coursework in genetics, molecular and cellular biology, and biochemistry. However, outstanding students from a broad range of science disciplines are actively considered.

Degrees

Doctor of Philosophy

without a concentration

concentration in Toxicology

Master of Science
Plant Molecular and Cellular Biology Courses

- BOT 6935: Special Topics
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6910: Supervised Research
- PCB 6937: Special Topics in Plant Molecular and Cellular Biology
- PCB 6971: Research for Master's Thesis
- PCB 7922: Journal Colloquy in Plant Molecular and Cellular Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation

Political Science Department

Chair: Ido Oren
Graduate Coordinator: Daniel Smith

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science--international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information, please contact the Political Science Department or follow the hyperlinks below to more information about the specific programs offered.

Other

Political Science

College

College of Liberal Arts and Sciences

Department/School

Political Science Department

Political Science Program Information

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science--international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information about international relations, please contact the Political Science Department or visit their departmental page in this catalog.

Admission to graduate study in the Department of Political Science normally requires the completion of an undergraduate major in political science or its equivalent. Students without this preparation may be required to make up deficiencies early in their graduate work. The core sequence begins in the fall term, providing basic knowledge that students need in later semesters. In evaluating candidates for admission, the Department considers

- Prior academic achievement
- GRE scores
- Letters of recommendation from three faculty members or others familiar with the academic potential or work habits of the applicant
- A statement of purpose that conveys intellectual ambitions, indicates how the program of study satisfies the student's interests and goals, and tells how the student would contribute to the program.

Fields of specialization offered by the Department include American government and politics, comparative politics, international relations, public policy, political theory, political behavior, and political methodology.

Master of Arts: The M.A. curricula are designed to serve students who want to pursue goals of an advanced general education, to gain skills and knowledge suitable for various types of public or private employment, or to prepare for further work at the doctoral level. M.A. students are required to complete POS 6736: The Conduct of Inquiry and either POS 6737: Political Data Analysis or STA 6126: Statistical Methods in Social Research I. Students may complete their M.A. degrees with or without writing a thesis. Students pursuing the thesis option must complete 30 hours of graduate course work. The thesis is expected to be of length and quality comparable to papers presented at professional academic conferences or published in academic journals. Students pursuing the nonthesis option must complete 36 semester hours of graduate course work and defend two qualifying papers. For both M.A. options, course work in political science, exclusive of core courses, must include a minimum of two graduate-level courses in one field of political science.

The M.A. degree may be taken in conjunction with the following certificate programs:

- Political campaigning
- Public affairs

Students in these certificate programs pursue the nonthesis option.

Public affairs: This program trains students for leadership positions in state, local, and national governments as well as for careers in nonprofit organizations by providing students with knowledge and skills in the areas of organization behavior, public budgeting and finances, public management, policy analysis, program evaluation, and computer applications. The curriculum consists of seminars in political science, public administration, public policy, process, state and local politics, and research methods. Supervised internships in selected agencies in Florida are
arranged by the Department of Political Science as an integral part of the training program. This specialization requires 39 hours of course work plus satisfactory completion of a 3-hour internship at the discretion of the Department. Students must also defend a final management-policy paper that incorporates analytical and substantive expertise. Graduates of the program serve in a variety of professional positions, including city managers, heads of municipal departments, directors of nonprofit organizations, analysts for the state legislature, and budget analysts for the federal government. In addition to the M.A. degree in political science, students receive the Certificate in Public Affairs.

**Political campaigning:** The program is designed to provide students with the basic political skills, insights, and experience that are critical for success in the rapidly changing profession of politics and political consulting. The program combines an awareness of the academic literature on mass and elite behavior with exposure to the increasingly sophisticated techniques used by campaigns. Students take a total of 39 hours from four major areas:

- Courses required of all M.A. students
- Courses oriented to practical aspects of political campaigning and governmental affairs (lobbying), including a 3-credit campaign-related internship
- Courses placing campaigns and elections in a broader context of American politics
- Related courses offered by the College of Journalism and Communications

Entry-level jobs have included such positions as legislative aide, campaign (or deputy campaign) manager, polling analyst, state party political coordinator, general campaign consultant, and media relations. With additional experience, some former students have gone on to become state legislators (and later, member of the U.S. House of Representatives), deputy chief of staff to the governor of Florida, partner in a major Washington area polling firm, assistant to the Minister of Justice and Attorney General of Canada, and head lobbyist for a nationwide restaurant chain. In addition to the M.A. degree in political science, students receive the Certificate in Political Campaigning.

**Law/Public Affairs joint degree program:** This program culminates in the Master of Arts in political science and Juris Doctor degrees. A joint degree program culminating in the Master of Arts in political science international relations and Juris Doctor degrees is also available. The joint program enables students to earn both the J.D. and the M.A. in less time than would be required to earn both degrees consecutively. Full-time students who make satisfactory progress can usually earn both degrees in 4 years. Candidates for the joint degree program must meet the entrance requirements for, and be admitted to, both the College of Law and the Department of Political Science. These requirements include both the LSAT and the GRE. Students are encouraged to announce their intent of seeking a joint degree as soon as possible. The Department of Political Science will allow 12 hours of appropriate law school courses to be credited toward the M.A. degree. The 12 credits selected from the law curriculum must be approved by the Political Science graduate coordinator on the recommendation of the student's supervisory committee. The College of Law will permit 12 hours of credit earned in political science graduate courses to be credited toward the J.D. degree. Students in the joint degree program are permitted, but not required, to pursue a companion certificate program in public affairs, political campaigning, or international development policy and administration.

**Combined bachelor's/master's degree program:** This combined program is designed for superior students who have the ability to pursue an accelerated program leading to the Bachelor of Arts and the Master of Arts degrees in political science or political science international relations.

Up to 12 semester hours of approved graduate-level political science courses may be used as credit for both the undergraduate and graduate degree. Applicants to the program must present:

- Acceptable scores on the verbal, quantitative, and analytical writing portions of the GRE
- Completion of at least 24 semester hours at the University of Florida (including at least 12 semester hours of political science) with a GPA of 3.7 or higher
- Letters of recommendation from two faculty members in the Department of Political Science

The combined program is not recommended for students considering a Ph.D. program in political science at UF but is appropriate for those considering one of the M.A. degree plus certificate programs described above. Further information concerning this program is available from the departmental undergraduate and graduate coordinators.

**Doctor of Philosophy:** The Ph.D. program emphasizes preparation for academic careers through seminars, independent work with faculty, and professional development experiences including graduate paper readings, placement workshops, and a distinguished lecture series. The Ph.D. prepares students for teaching and research in either an academic or governmental environment and opens doors to other career opportunities in both the private and public sectors. The Ph.D. program emphasizes the development of strong analytic skills and sophisticated research methods. As resources permit, the Department provides students with funding for travel expenses to scholarly meetings and professional (methodological) training support. As part of the preparation for careers in academia, doctoral students are also generally expected to contribute to the teaching mission of the Department. All Ph.D. students must complete the following:

- POS 6756: The Conduct of Inquiry
- POS 6761: Seminars and Ethnomethods of Political Science
- POS 6757: Political Data Analysis
- POT 6505: Politics and Theory
- Course work in a major and two minor fields of study
- Qualifying examinations in a major field and one minor field
- A dissertation

Fields of study open to Ph.D. students include comparative politics, American politics, public policy, international relations, political behavior, political theory, and political methodology. Applications are particularly welcome from students whose intellectual interests traverse these fields, including those with interests in religion and politics, state political institutions and policy, environmental politics, international relations, and minority and ethnic politics.

University of Florida Ph.D. students benefit from associations with faculty in numerous other departments and centers. The Centers for Latin American Studies, African Studies, and European Studies, and the Asian Studies Program complement department faculty strengths in comparative politics and international relations. Students in the public policy concentration benefit from substantive expertise of faculty in the Institute for Child Health Policy, the Shimberg Center for Affordable Housing, and the Center for Gerontological Studies. Several faculty in the College of Journalism and Communications have interests in media and politics.

For more information, please see our website: [http://polisci.ufl.edu](http://polisci.ufl.edu).

**Degrees Offered with a Major in Political Science**

**Doctor of Philosophy**

without a concentration

**concentration in Educational Policy**
concentration in Tropical Conservation and Development

Master of Arts

without a concentration

concentration in International Development Policy and Administration

concentration in Public Affairs

concentration in Political Campaigning

concentration in Tropical Conservation and Development

Political Science Departmental Courses

- CPO 5935: Advanced Topics in Comparative Politics
- CPO 6046: Politics in Advanced Industrial Societies
- CPO 6059: Democracy and Its Competitors
- CPO 6077: Social Movements in Comparative Perspective
- CPO 6091: Introduction to Comparative Political Analysis
- CPO 6208: Seminar in African Politics
- CPO 6307: Latin American Politics I
- CPO 6732: Democratization and Regime Transition
- CPO 6736: Post-Communist politics
- CPO 6756: Comparative Elections and Party Systems
- CPO 6757: The European Union In Comparative Perspective
- CPO 6756: Peasant Politics and Society
- CPO 6795: Environmental Politics
- CPO 6796: Water Politics
- INR 5935: Advanced Topics in International Relations
- INR 6036: Globalization, Regionalism, and Governance
- INR 6039: International Political Economy
- INR 6208: Advanced International Relations Theory
- INR 6213: Seminar: Politics of the European Union
- INR 6249: Inter-American Relations
- INR 6305: Politics of American Foreign Policy Making
- INR 6337: Survey of International Security
- INR 6352: International Environmental Relations
- INR 6507: International Organization
- INR 6607: International Relations Theory
- INR 6938: Seminar in Transnational and Global Studies
- INR 6938: Seminar in Culture and World Politics
- PAD 5935: Advanced Topics in Public Administration
- PAD 6108: Public Administration Theory
- PAD 6227: Public Budgeting and Finance
- PAD 6434: Leadership and Ethics in Public Agencies
- POS 6458: Politics of Campaign Finance
- PAD 6946: Internship in Government
- POS 5935: Advanced Topics in Political Science
- POS 6045: Seminar in American Politics
- POS 6068: American Political Development
- POS 6127: State Government and Politics
- POS 6146: Urban Politics
- POS 6157: Community Analysis
- POS 6196: Patrons, Clients, Corruption, and Accountability
- POS 6207: Political Behavior
- POS 6208: Empirical Political Research
- POS 6272: Political Participation
- POS 6274: Political Campaigning
- POS 6278: Advanced Campaign Strategy
- POS 6279: The Politics of Direct Democracy
- POS 6292: Religion and Politics
- POS 6427: Legislative Process
A statement of purpose that conveys intellectual ambitions, indicates how the program of study satisfies the student’s interests and goals, and tells how the student would contribute to the program.

Political science—international relations: The M.A. degree in political science—international relations is designed to provide professional education to those whose primary interest is a career in foreign relations. In this program, students must complete course work in the core of international relations theory and in two or more of the four major subfields of international relations, international political economy, international security, foreign policy, and international organization. The M.A. is a 36-hour degree, requiring successful completion of a 6-credit political science core sequence, 15 credits of departmental or extra-department electives, and a 15-credit international relations major. Students may pursue either a thesis option or take a comprehensive examination at the end of the program.

Law/Public Affairs joint degree program: This program culminates in the Master of Arts in political science and Juris Doctor degrees. A joint degree program culminating in the Master of Arts in political science international relations and Juris Doctor degrees is also available. The joint program enables students to earn both the J.D. and the M.A. in less time than would be required to earn both degrees consecutively. Full-time students who make satisfactory progress can usually earn both degrees in 4 years. Candidates for the joint degree program must meet the entrance requirements for, and be admitted to, both the College of Law and the Department of Political Science. These requirements include both the LSAT and the GRE. Students are encouraged to announce their intent of seeking a joint degree as soon as possible. The Department of Political Science will allow 12 hours of approved graduate-level political science courses to be credited toward the J.D. degree. Students in the joint degree program are permitted, but not required, to pursue a companion certificate program in public affairs, political campaigning, or international development policy and administration.

Combined bachelor’s/master’s degree program: This combined program is designed for superior students who have the ability to pursue an accelerated program leading to the Bachelor of Arts and the Master of Arts degrees in political science or political science international relations.

Up to 12 semester hours of approved graduate-level political science courses may be used as credit for both the undergraduate and graduate degree. Applicants to the program must present
Acceptable scores on the verbal, quantitative, and analytical writing portions of the GRE
Completion of at least 24 semester hours at the University of Florida (including at least 12 semester hours of political science) with a GPA of 3.7 or higher
Letters of recommendation from two faculty members in the Department of Political Science

The combined program is not recommended for students considering a Ph.D. program in political science at UF but is appropriate for those considering one of the M.A. degree plus certificate programs described above. Further information concerning this program is available from the departmental undergraduate and graduate coordinators.

Degrees

Master of Arts

Master of Arts in Teaching

Political Science Departmental Courses

- CPO 5935: Advanced Topics in Comparative Politics
- CPO 6046: Politics in Advanced Industrial Societies
- CPO 6059: Democracy and Its Competitors
- CPO 6077: Social Movements in Comparative Perspective
- CPO 6091: Introduction to Comparative Political Analysis
- CPO 6206: Seminar in African Politics
- CPO 6307: Latin American Politics I
- CPO 6732: Democratization and Regime Transition
- CPO 6736: Post-Communist politics
- CPO 6756: Comparative Elections and Party Systems
- CPO 6757: The European Union In Comparative Perspective
- CPO 6766: Peasant Politics and Society
- CPO 6769: Environmental Politics
- CPO 6776: Water Politics
- INR 5935: Advanced Topics in International Relations
- INR 6015: Globalization, Regionalism, and Governance
- INR 6039: International Political Economy
- INR 6208: Advanced International Relations Theory
- INR 6213: Seminar: Politics of the European Union
- INR 6249: Seminar in International Relations Theory
- INR 6337: Survey of International Security
- INR 6352: International Environmental Relations
- INR 6607: International Relations Theory
- INR 6936: Seminar in Transnational and Global Studies
- INR 6938: Seminar in Culture and World Politics
- PAD 5935: Advanced Topics in Public Administration
- PAD 6108: Public Administration Theory
- PAD 6227: Public Budgeting and Finance
- PAD 6434: Leadership and Ethics in Public Agencies
- POS 6458: Politics of Campaign Finance
- POS 6946: Internship in Government
- POS 6935: Advanced Topics in Political Science
- POS 6455: Seminar in American Politics
- POS 6048: American Political Development
- POS 6127: State Government and Politics
- POS 6146: Urban Politics
- POS 6157: Community Analysis
- POS 6196: Patrons, Clients, Corruption, and Accountability
- POS 6207: Political Behavior
- POS 6208: Empirical Political Research
- POS 6272: Political Participation
- POS 6274: Political Campaigning
- POS 6278: Advanced Campaign Strategy
- POS 6279: The Politics of Direct Democracy
- POS 6292: Religion and Politics
- POS 6427: Legislative Process
- POS 6453: Political Parties and Interest Groups
- POS 6476: Bureaucratic Politics in the U.S.
- POS 6707: Qualitative Research Methods for Political Science
- POS 6712: Empirical Theories of Politics
Psychology Department

College of Liberal Arts and Sciences

Chair: Lise Abrams
Graduate Coordinator: Julia A. Graber

Complete faculty listing by department: Follow this link.

The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees section of this catalog. Students are not accepted for a terminal master's degree.

For more information, please see the program page below and our website: http://www.psych.ufl.edu.

Other

Counseling Psychology

College

Degree

Psychology Department

Degrees offered with a major in Counseling Psychology

Doctor of Philosophy

Psychology Departmental Courses

- CBH 6056: Comparative Psychology
- CLP 6169: Seminar: Psychology and Deviant Behavior
- CLP 7525: Best Methods for Studying Psychological Change
- DEP 6057: Advanced Developmental Psychology I
- DEP 6058: Advanced Developmental Psychology II
Psychology (Psychology - CLAS)

College

College of Liberal Arts and Sciences

Department/School

Psychology Department
Psychology Program Information

The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees section of this catalog. Students are not accepted for a terminal master's degree.

Doctoral areas of specialization include the research areas of developmental, behavior analysis, behavioral and cognitive neuroscience, social psychology, and counseling psychology. The training program in counseling psychology is accredited by the American Psychological Association. A predoctoral internship of one year is required for the counseling psychology program.

Undergraduate preparation should include at least one course in experimental methods and one course in statistics. Other courses in psychology should include at least three or four of the following: cognition, developmental, learning, personality, physiological, sensory, and social. Applicants should have competitive GRE scores and GPA (3.5 or higher).

Co-major: The Department offers a co-major program in conjunction with the College of Education leading to the Doctor of Philosophy degree in psychology and research and evaluation methodology.

Degrees

Doctor of Philosophy

without a concentration

concentration in Women's/Gender Studies

Master of Arts

Master of Science

without a concentration

Psychology Departmental Courses

- CBH 6056: Comparative Psychology
- CLP 6169: Seminar: Psychology and Deviant Behavior
- CLP 7525: Best Methods for Studying Psychological Change
- DEP 6057: Advanced Developmental Psychology I
- DEP 6058: Advanced Developmental Psychology II
- DEP 6059: Seminar: Special Topics in Developmental Psychology
- DEP 6099: Survey of Developmental Psychology
- DEP 6216: Psychological Disturbances of Children
- DEP 6408: Advanced Adulthood and Aging
- DEP 6409: Seminar: Adult Development and Aging
- DEP 6799: Current Research Methods in Developmental Psychology
- DEP 6936: Current Research in Developmental Psychology
- DEP 7608: Theories of Developmental Psychology
- EAB 5436: Behavioral Pharmacology
- EAB 6099: Survey of Behavior Analysis
- EAB 6118: Theoretical Foundations of Behavior Analysis
- EAB 6707: Applied Behavior I
- EAB 6712: Experimental Psychopathology
- EAB 6716: Behavior Analysis in Developmental Disabilities
- EAB 6719: Seminar: Strategies and Tactics of Human Behavioral Research
Religion Department

Chair: Manuel A. Vasquez.
Graduate Coordinator: David G. Hackett

Complete faculty listing by department: Follow this link.

The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asia
- Religion and nature.

Minimum requirements for these degrees are given in the General Information section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religions and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at http://religion.ufl.edu/graduate-studies/ under "Graduate Program." In special instances, and with the agreement of the supervisory committee and two sponsoring faculty members, master's degree students may choose an area outside the three specialty fields.

In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest:

- Three references from persons competent to evaluate the applicant's potential for graduate work
- An essay of 3 to 5 double-spaced, typewritten pages identifying the applicant's goals and particular interests pertinent to the three available specialty fields (this essay is extremely important and applicants should attend to it carefully)
- A writing sample.

Beyond these requirements, applicants need to show clear evidence of solid preparation before admission. This usually includes formal study of the primary language in the specialty field. Acceptable scores on the GRE General Test are required. In addition to evidence of preparation and academic promise, the Department gives careful consideration to the fit between an applicant's central scholarly interests and the resources the Department and University have to offer.

Master of Arts: The M.A. degree provides a broad background in the study of religious traditions, theoretical orientations in the discipline, and an initial concentration in one of the three specialty fields. Course work culminates in a thesis and oral examination on the thesis and course work.
The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asia
- Religion and nature.

Minimum requirements for these degrees are given in the [Graduate Degrees](http://www.religion.ufl.edu) section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religions and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at [http://www.religion.ufl.edu](http://www.religion.ufl.edu) under "Graduate Program." In special instances, and with the agreement of the supervisory committee and two sponsoring faculty members, master's degree students may choose an area outside the three specialty fields.
In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest

- Three references from persons competent to evaluate the applicant's potential for graduate work
- An essay of 3 to 5 double-spaced, typewritten pages identifying the applicant's goals and particular interests pertinent to the three available specialty fields (this essay is extremely important and applicants should attend to it carefully)
- A writing sample.

Beyond these requirements, applicants need to show clear evidence of solid preparation before admission. This usually includes formal study of the primary language in the specialty field. Acceptable scores on the GRE General Test are required. In addition to evidence of preparation and academic promise, the Department gives careful consideration to the fit between an applicant's central scholarly interests and the resources the Department and University have to offer.

**Master of Arts:** The M.A. degree provides a broad background in the study of religious traditions, theoretical orientations in the discipline, and an initial concentration in one of the three specialty fields. Course work culminates in a thesis and oral examination on the thesis and course work.

**Total credits:** Thirty credit hours are required. These include Method and Theory I and II, the core course(s) of the major field (or equivalent for those not in one of the three specialty fields), and 6 hours of thesis research credits. The additional hours shall consist of further courses in the specialty field, other graduate seminars, and up to 6 hours of research language study.

**Language study:** All M.A. students are required to demonstrate competency in a scholarly language other than English before beginning the thesis. Most languages are acceptable, though students should consult the individual field requirements. The chosen language must be approved by the student’s mentor and the graduate coordinator.

**Thesis:** Each student, guided by a supervisory committee, will prepare a Master of Arts thesis, acceptable to the Department of Religion and the Graduate School, and undergo an oral examination.

**Promotion to doctoral status:** The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish that status to be changed. A review and decision will be made by the field faculty and the graduate committee.

**Doctor of Philosophy:** The Ph.D. program trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religion master's degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master's degree with additional religion course work. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

**Course requirements:** The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours credited toward the Ph.D. is at the discretion of department faculty. A minimum of 45 hours is devoted to course work at the doctoral level. The specific distribution of course work depends on the specialization but will include intensive work in the major area of specialization, 6 hours of method and theory (if not taken at the M.A. level) and 12 hours devoted to dissertation writing and research.

**Language requirements:** All doctoral students must demonstrate proficiency in at least one and in many cases two languages other than English. The chosen language(s) as well as how and when the student's competence will be judged must be approved by the student's supervisory committee chair. Frequently language competence is documented by 1) taking an appropriate course or courses in the language with a grade of "B" or better, or 2) passing a translation exam (usually administered by a department member or a language department at the University). Basic course work for scholarly languages will not count toward the required 90 credit hours. However, students studying a scholarly language connected to their research needs (above and beyond basic competence) can receive 6 (or more) credit hours for such advanced courses toward the required 90 total credit hours, with approval of the student's supervisory committee chair.

**Qualifying examinations:** Qualifying examinations form a bridge between course work and dissertation research. Normally students will take qualifying examinations during their third year in residence. The precise areas of questioning and the reading list are decided by the supervisory committee in consultation with the student, well in advance of the examinations, but no later than the beginning of the term in which the student intends to take the qualifying examinations.

**Dissertation proposal:** Each doctoral candidate submits a formal dissertation proposal to the candidate's supervisory committee chair at least 3 weeks before the end of the semester after the qualifying examination.

**Admission to candidacy:** On successfully completing the qualifying examination and the dissertation proposal, and all other course and language requirements, and with the approval of the supervisory committee, students make formal application to the Department and Graduate School for admission to Ph.D. candidacy.

**Dissertation and its defense:** The final years of the program are devoted to dissertation research and writing. The student is expected to present the completed dissertation and defend it at a public oral defense conducted by the supervisory committee.

**Mentoring:** Each student is assigned a faculty mentor on admission to the program, based on expressions of faculty interest and the student's intended area of concentration. The mentor and graduate coordinator answer questions and provide support for the student in choosing courses and planning a program. By the end of the second semester, all master's degree students must designate their supervisory committee chair and one additional department committee member. By the end of the second semester, all doctoral students must designate their committee chair. By no later than the fourth semester of study, all doctoral students must designate a four-member supervisory committee including the chair and one member from outside the department. For details about the programs listed above, visit [http://www.religion.ufl.edu](http://www.religion.ufl.edu).

**Degrees Offered with a Major in Religion**

**Doctor of Philosophy**

without a concentration
concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

Master of Arts

without a concentration

concentration in Jewish Studies

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

Courses

- REL 5***
- RLG 5143: Religion and Social Change
  - REL 5187
- RLG 5195: Topics in Religion and Society
  - REL 5199
- RLG 5297: Topics in Biblical Studies
- RLG 5338: Topics in Asian Religions
- RLG 5365: Studies in Islam
- RLG 5396: Religion and Animals
- RLG 5496: Topics in Religious Thought
- RLG 5549: Studies in Christianity
- RLG 5696: Topics in Jewish Thought
- RLG 5906: Individual Work
- RLG 5937: Topics in Religious Studies
  - REL 5xxxA
  - REL 5xxxB
  - REL 5xxxC
  - REL 6***
- RLG 6035: Method and Theory I
- RLG 6036: Method and Theory II
- RLG 6095: Utopias and Dystopias
- RLG 6107: Core Seminar in Religion and Nature
- RLG 6125: Religion and Politics in the Americas
- RLG 6126: Hindu Traditions in America
- RLG 6137: Religion in North America
- RLG 6138: New Religious Movements
- RLG 6126: Religion in the Americas
- RLG 6167: Radical Environmentalism
- RLG 6181: Ethics and the Natural Sciences
- RLG 6183: Religion and Environmental Ethics
- RLG 6187: Nature in Asian Religions
- RLG 6196: Globalizing the Sacred
- RLG 6319: Interpreting Asian Religions
- RLG 6339: Women in the Hindu Tradition
- RLG 6346: Buddhist Traditions
- REL 6347: American Buddhism
Spanish and Portuguese Studies Department

Chair: G. Lord
Graduate Coordinator: L. Alvarez Castro
Complete faculty listing by department: Follow this link:

The Department of Spanish and Portuguese Studies offers a Master of Arts degree (M.A.) in Spanish (thesis and non-thesis options) and a Doctor of Philosophy degree (Ph.D.) in Romance Languages and Literatures, with a concentration in Spanish. Descriptions of the minimum requirements for both degrees are provided in the General Information section of this catalog. For specific information about the program, please visit the graduate section of the departmental webpage:

http://www.spanishandportuguese.ufl.edu/spanishgraduate.html

Candidates for graduate degrees (both M.A. and Ph.D.) in Spanish can choose between two specializations—literature/culture or linguistics. In conjunction with their master’s or doctoral work, students may also earn a Certificate in Latin American Studies. Though a graduate degree is not offered in Portuguese, extensive course offerings at the graduate level permit students to develop a strong specialization in Portuguese language and Luso-Brazilian literature, film and culture.

The main prerequisite for admission to the M.A. program is an undergraduate major in Spanish, ideally including advanced courses in the proposed area of specialization. Applicants for the Ph.D. should hold an M.A. or equivalent degree in Spanish. At the discretion of the Graduate Studies Committee, candidates from related fields of study (History, Sociology…) may be offered a conditional admission into the Ph.D. program pending the passing of the M.A. Comprehensive Examination within the first year of study.

All M.A. and Ph.D. students in Spanish who are appointed as teaching assistants must take Romance Language Teaching Methods (FOL/FOL 6943). Besides, all M.A. and Ph.D. students specializing in literature and culture must take Introduction to Graduate Study and Research (SPW 6806). Other requirements vary with degree and specialization. For details, consult the graduate section of the departmental webpage (see above).

The Department is able to offer most students a teaching assistantship that provides a maintenance stipend and includes a tuition waiver. Contingent on positive performance in teaching and graduate work, M.A. students are guaranteed four semesters of support, and Ph.D. students are guaranteed eight semesters of support beyond the M.A. In addition, there are several fellowships, supplements and stipends for which students may apply, and summer teaching may be available.

Prospective students are encouraged to review the departmental webpage in order to familiarize themselves with the program and the application process. Only those applications including all required materials and submitted by the advertised deadlines will be considered. For any questions about the program or how to apply, please contact the graduate coordinator: lacastro@ufl.edu.

Highly qualified UF undergraduate students majoring in Spanish may apply for a combined B.A./M.A. program in Spanish that allows up to 12 graduate credits to be counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details.

Other

Romance Languages (Spanish and Portuguese Studies)

College

College of Liberal Arts and Sciences

Department/School

Spanish and Portuguese Studies Department

Degrees Offered with a Major in Romance Languages

Doctor of Philosophy
concentration in Spanish

Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW 6930: Special Study in Romance Languages and Literatures
- SPN 6166: Teaching Spanish for the Professions
- SPN 6940: Supervised Teaching
- SPW 6545: Spanish Romanticism
- SPN 6705: Foundations of Hispanic Linguistics
- SPN 6845: History of the Spanish Language
- SPS 6905: Individual Study
- SPS 6910: Supervised Research
- SPS 6940: Supervised Teaching
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation
- SPW 6535: Spanish Romanticism

Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6715: Formal Instruction and Acquisition of Spanish
- SPN 6735: Special Study in Spanish Linguistics
- SPN 6785: Advanced Spanish Phonetics
- SPN 6827: Sociolinguistics of the Spanish-Speaking World
- SPN 6835: Spanish and Spanish-American Dialectology
- SPN 6845: History of the Spanish Language
- SPN 6848: Medieval Spanish Linguistics
- SPN 6855: Structure of Spanish
- SPN 6856: Spanish in Contact: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FOL 6943: Romance Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6236: Spanish-American Narrative from the origins to Criollismo
- SPW 6269: Spanish Novel of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6286: Contemporary Spanish-American Narrative II
- SPW 6306: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPW 6425: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6729: The Generation of 1898
- SPW 6806: Introduction to Graduate Study and Research
- SPW 6902: Special Study in Spanish or Spanish-American Literature
- SPW 6905: Individual Work
- SPW 6910: Supervised Research
- SPW 6934: Seminar in Spanish American Literature and Culture
- SPW 6938: Seminar in Spanish Literature and Culture
- SPW 6971: Research for Master's Thesis
- SPW 7979: Advanced Research
- SPW 7980: Research for Doctoral Dissertation

Portuguese

- POW 6276: Twentieth-Century Brazilian Novel
- POW 6385: Brazilian Lyric
- POW 6386: Brazilian Drama
- POW 6905: Individual Work
- POW 6930: Rotating Topics in Brazilian or Portuguese Literature

Spanish
College

College of Liberal Arts and Sciences

Department/School

Spanish and Portuguese Studies Department

Degrees

Master of Arts

Master of Arts in Teaching

Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW 6930: Special Study in Romance Languages and Literatures
- SPN 6166: Teaching Spanish for the Professions
- SPN 6940: Supervised Teaching
- SPN 6545: Spanish Romanticism
- SPN 6705: Foundations of Hispanic Linguistics
- SPN 6845: History of the Spanish Language
- SPS 6905: Individual Study
- SPS 6910: Supervised Research
- SPS 6940: Supervised Teaching
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation
- SPW 6535: Spanish Romanticism

Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6715: Formal Instruction and Acquisition of Spanish
- SPN 6735: Special Study in Spanish Linguistics
- SPN 6755: Advanced Spanish Phonetics
- SPN 6827: Sociolinguistics of the Spanish-Speaking World
- SPN 6835: Spanish and Spanish-American Dialectology
- SPN 6845: History of the Spanish Language
- SPN 6848: Medieval Spanish Linguistics
- SPN 6855: Structure of Spanish
- SPN 6856: Spanish in Contact: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FOL 6943: Romance Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6236: Spanish-American Narrative from the Origins to Criollismo
- SPW 6280: Spanish Novel of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6286: Contemporary Spanish-American Narrative II
- SPW 6306: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPW 6425: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6729: The Generation of 1898
Statistics Department

Chair: M. J. Daniels
Graduate Coordinator: J. P. Hobert

Complete faculty listing: Follow this link.

Graduate programs are available leading to Master of Science in Statistics, Master of Statistics, and Doctor of Philosophy degrees. Minimum requirements for these degrees are described in the General Information section of this catalog.

Both master's programs usually require 2 years of course work including material covered in STA 6208, STA 6208, STA 6326, STA 6327, STA 6346, and STA 6329. In addition to earning a "Ph.D. pass" on the first-year evaluation, requirements for the Ph.D. degree include STA 6466, 6467, STA 7249, and STA 7346.

Interdisciplinary programs: The Department offers a co-major program in conjunction with the Fisher School of Accounting leading to the Doctor of Philosophy degree in statistics and business administration accounting. The Department is also a partner in the interdisciplinary concentration in quantitative finance, along with the Departments of Mathematics, Industrial and Systems Engineering and Finance, Insurance, and Real Estate. For information on these programs, consult the departmental graduate coordinator.

Combined program: The Department offers a bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Statistics

College

College of Liberal Arts and Sciences

Department/School

Statistics Department

Degrees Offered with a Major in Statistics

Doctor of Philosophy

without a concentration

concentration in Quantitative Finance
Master of Science in Statistics

Master of Statistics

Statistics Departmental Courses

- STA 5106: Computer Programs in Statistical Analysis
- STA 5223: Applied Sample Survey Methods
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 5503: Categorical Data Methods
- STA 5507: Applied Nonparametric Methods
- STA 5701: Applied Multivariate Methods
- STA 5715: Applied Survival Analysis
- STA 5823: Stochastic Process Methods
- STA 5856: Applied Time Series Methods
- STA 6092: Applied Statistical Practice
- STA 6126: Statistical Methods in Social Research I
- STA 6127: Statistical Methods in Social Research II
- STA 6166: Statistical Methods in Research I
- STA 6167: Statistical Methods in Research II
- STA 6177: Applied Survival Analysis
- STA 6178: Genetic Data Analysis
- STA 6207: Regression Analysis
- STA 6208: Basic Design and Analysis of Experiments
- STA 6209: Design and Analysis of Experiments
- STA 6226: Sampling Theory and Application
- STA 6246: Theory of Linear Models
- STA 6326: Introduction to Theoretical Statistics I
- STA 6327: Introduction to Theoretical Statistics II
- STA 6329: Matrix Algebra and Statistical Computing
- STA 6505: Analysis of Categorical Data
- STA 6526: Nonparametric Statistics
- STA 6707: Analysis of Multivariate Data
- STA 6826: Stochastic Processes
- STA 6857: Time Series Analysis
- STA 6866: Monte Carlo Statistical Methods
- STA 6905: Individual Work
- STA 6910: Supervised Research
- STA 6934: Special Topics in Statistics
- STA 6938: Seminar
- STA 6940: Supervised Teaching
- STA 6942: Internship
- STA 6971: Research for Master's Thesis
- STA 7179: Survival Analysis
- STA 7249: Generalized Linear Models
- STA 7334: Limit Theory
- STA 7346: Statistical Inference
- STA 7347: Advanced Inference
- STA 7348: Bayesian Theory
- STA 7466: Probability Theory I
- STA 7467: Probability Theory II
- STA 7527: Theory of Nonparametric Statistics
- STA 7826: Topics in Stochastic Processes
- STA 7934: Special Topics in Statistics
- STA 7979: Advanced Research
- STA 7980: Research for Doctoral Dissertation

Women's Studies Department

Director: Bonnie Moradi
Graduate Coordinator: Kendal Broad

Complete faculty listing by department: Follow this link.

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as a two certificates. These options give students the opportunity to take advantage of scholarship in this dynamic field, and to become acquainted with different research perspectives and methodologies. Students become well grounded in theories of gender in cultural systems and in ways that gender intersects with other categories of difference such as race, ethnicity, religion, class, sexuality, nation, physical and mental ability, age, and economic and civil status. Faculty and students employ feminist and other appropriate theoretical approaches and methodologies.

The Center offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring. The Center in Ustler Hall houses archives, a small library, offices,
and meeting space.

For more information about our program, please see the program page below or our website: [http://web.wst.ufl.edu](http://web.wst.ufl.edu).

**Other**

**Women's Studies**

**College**

[College of Liberal Arts and Sciences](http://web.wst.ufl.edu)

**Department/School**

[Women's Studies Department](http://web.wst.ufl.edu)

**Women's Studies Program Information**

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as a two certificates. The Center also offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring.

**Master of Arts (thesis and non-thesis):** The Center offers the Master of Arts (M.A.) thesis degree option, which requires the completion and defense of a thesis (30 credit hours), and the Master of Arts non-thesis degree option, which requires completion and defense of a project or paper (30 credit hours). All Master's students take a core curriculum of 9 graduate credits (3 courses). For the thesis M.A., the remaining 21 hours consist of 15 credits of approved electives and 6 thesis credits. For the non-thesis M.A., 21 credits of approved electives are required.

Required courses for all MA students (9 credits):

- [WST 5933: Proseminar in Women's Studies](http://web.wst.ufl.edu)
- [WST 6508: Advanced Feminist Theory](http://web.wst.ufl.edu)
- [WST 6935: Special Topics in Women's Studies](http://web.wst.ufl.edu)

**Thesis**

15 approved credits at 5000-level or higher

6 credits of [WST 6971: Research for Master's Thesis](http://web.wst.ufl.edu)

(3 of which must be taken in the final graduating term)

Total for MA thesis: 30 credits

**Non-thesis**

21 approved credits at 5000-level or higher;

at least 6 of these credits must be classes in WST.

Total for MA non-thesis: 30 credits

**BA/MA Program:** UF offers a number of Bachelor's/Master's programs for superior students. The university created combined degree programs to provide academically talented students an opportunity to complete both a bachelor's and a master's degree in a shorter period of time. The program allows you to double-count graduate courses toward both degrees, thus reducing the time it would normally take to graduate by a semester or more. The combined-degree program reduces the cost of both degrees and enhances your marketability for career advancement.

**Concurrent degree - MA in Women's Studies and an MA in Mass Communications (MAMC) with specialization in Journalism:** When appropriate, the Center for Women's Studies and Gender Research will work with individual students to develop a collaborative degree program with the College of Journalism and Communication. At the University of Florida, students may apply to complete master's degrees in two different programs or two Master's degrees in the same program concurrently. Those interested should discuss the proposed study with the office of Graduate Student Records (392-4643, 106 Grinter) before applying. Written approval is needed from each academic unit and the Graduate School Dean. The student must be officially admitted to both programs through regular procedures. No more than 9 credits from the first program may be applied toward the second.

**M.A./J.D. Joint Degree:** The faculties of the Levin College of Law and Women's Studies in the College of Liberal Arts and Sciences have approved a joint degree program culminating in both a J.D. degree, awarded by the College of Law, and an M.A. degree (thesis or non-thesis), awarded by the College of Liberal Arts and Sciences. Under this joint degree program, a student can obtain both degrees in approximately one year less than it would take to obtain both degrees if pursued consecutively. A student must satisfy the curriculum requirements for each degree before either degree is awarded. At least 12 credits must be taken in each program. The graduate program in Women's Studies will accept 12 credits of appropriate professional courses toward the M.A. degree. The 12 credits selected from the professional curriculum must be approved by the Graduate Coordinator upon the recommendation of the student's graduate supervisory committee. Reciprocal, the law school will accept 12 credits from Women's Studies courses toward the satisfaction of the J.D. degree. Admission to the second program is required no later than the end of the third consecutive semester after beginning one degree of the joint degree program. A summer term is counted as a single semester.

**Certificates (M.A. or Ph.D. level):** Two graduate certificates in Women's Studies for master's and doctoral students are offered in conjunction with degree programs in other academic units. The Graduate Certificate in Women's Studies and the Graduate Certificate in Gender and Development require specific sets of course work, designed to give students a thorough grounding in the discipline. The Graduate Certificate in Women's Studies offers students a general overview of the field. The Graduate Certificate in Gender and Development allows students to focus on issues related to gender, economic development, and globalization.

Graduate courses in women's studies are also available from the following academic units or programs:

- Agricultural and Life Sciences
- Anthropology
- Counseling and Psychological Services
- English
- History
- Journalism and Communication
- Languages, Literatures, and Cultures
- Latin American Studies
- Linguistics
- Political Science
- Psychology
- Public Policy
- Social Work
- Sociology
- Urban and Regional Planning

For more information about our program, please see the program page below or our website: [http://web.wst.ufl.edu](http://web.wst.ufl.edu).
Degrees Offered with a Major in Women's Studies

Master of Arts

Courses

- WST 5933: Proseminar in Women's Studies
- WST 6348: Ecofeminism
- WST 6508: Advanced Feminist Theory
- WST 6905: Independent Study
- WST 6935: Special Topics in Women's Studies
- WST 6936: Feminist Challenges to Disciplinary Paradigms
- WST 6946: Internship in Applied Women's Studies and Gender Research
- WST 6957: International Studies in Women's Studies and Gender Research
- WST 6971: Research for Master's Thesis

College of Medicine

Dean: M.L. Good

Complete faculty listings: Follow this link.

The College of Medicine offers training opportunities leading to either the Doctor of Philosophy or Master of Science degree in medical sciences. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog. For more information, please see our website: http://med.ufl.edu.

The interdisciplinary program (IDP) in biomedical sciences is the major focus leading to the Doctor of Philosophy degree. Other graduate courses and programs are listed under departmental headings. For further information, visit http://idp.med.ufl.edu.

Departments and Programs within the College of Medicine

College of Medicine Courses

Other

Genetics and Genomics

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Medicine

Degrees Offered with a Major in Genetics and Genomics

Doctor of Philosophy

Doctor of Philosophy - Clinical and Translational Science

Courses
• AGR 6322: Advanced Plant Breeding
• ANG 6532: Molecular Genetics of Disease
• ANG 7979: Advanced Research
• ANG 7980: Research for Doctoral Dissertation
• BCH 6415: Advanced Molecular and Cell Biology
• BCH 7410: Advanced Gene Regulation
• CAP 5510: Bioinformatics
• CAP 5515: Computational Molecular Biology
• CAP 5805: Computer Simulation Concepts
• CIS 6930: Special Topics in CIS
• COT 5405: Analysis of Algorithms
• FOR 6310: Forest Genetics and Tree Improvement
• FOR 6934: Topics in Forest Resources and Conservation
• FOR 7979: Advanced Research
• FOR 7980: Research for Doctoral Dissertation
• GMS 6011: Mouse Genetics
• GMS 6012: Human Genetics
• GMS 6013: Developmental Genetics
• GMS 6014: Applications of Bioinformatics to Genetics
• GMS 6015: Human Genetics II
• GMS 6059: Gene Therapy from Bench to Bedside
• GMS 6920: Genetics Journal Colloquy
• GMS 7979: Advanced Research
• GMS 7980: Research for Doctoral Dissertation
• HCS 6201: Breeding Perennial Cultivars
• PCB 5065: Advanced Genetics
• PCB 5235L: Experiments in Immunology
• PCB 5615: Molecular Evolution and Systematics
• PCB 6528: Plant Cell and Developmental Biology
• PCB 7979: Advanced Research
• PCB 7980: Research for Doctoral Dissertation
• STA 5325: Fundamentals of Probability
• STA 5328: Fundamentals of Statistical Theory
• STA 6166: Statistical Methods in Research I
• STA 6167: Statistical Methods in Research II
• STA 6178: Genetic Data Analysis
• STA 6208: Basic Design and Analysis of Experiments
• STA 6329: Matrix Algebra and Statistical Computing
• STA 6934: Special Topics in Statistics
• STA 7979: Advanced Research
• STA 7980: Research for Doctoral Dissertation
• ZOO 6927: Special Topics in Zoology
• ZOO 7979: Advanced Research
• ZOO 7980: Research for Doctoral Dissertation

College of Medicine Courses

• ENU 6652: Clinical Rotation in Diagnostic Radiology
• ENU 6657: Diagnostic Radiological Physics
• GEY 5935: Topics in Gerontology
• GEY 6220: Overview of Geriatric Care Management
• GEY 6646: Issues and Concepts in Gerontology
• GEY 6905: Independent Study in Gerontology
• GEY 6936: Professional Development in Gerontology/Geriatrics
• GMS 5905: Special Topics in Biomedical Sciences
• GMS 6001: Fundamentals of Biomedical Sciences I
• GMS 6003: Fundamentals of Graduate Research and Professional Development
• GMS 6004: IDP Practical Laboratory
• GMS 6005: Fundamentals of Developmental Biology
• GMS 6006: Fundamentals of Immunology and Microbiology
• GMS 6007: Fundamentals of Neuroscience
• GMS 6008: Fundamentals of Physiology and Functional Genomics
• GMS 6009: Principles of Drug Action
• GMS 6010: Yeast Genetics
• GMS 6011: Mouse Genetics
• GMS 6012: Human Genetics
• GMS 6013: Developmental Genetics
• GMS 6014: Applications of Bioinformatics to Genetics
• GMS 6015: Human Genetics II
• GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
• GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
• GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
• GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
• GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
• GMS 6029: Brain Journal Club
• GMS 6031: Molecular Immunology
• GMS 6032: Mechanisms of Host Defense
• GMS 6033: Immunity in Health and Disease
• GMS 6034: Advanced Virology I: Genetics and RNA
• GMS 6035: Advanced Virology II: RNA Viruses
• GMS 6036: Molecular Virology III: DNA Viruses
Medical Sciences

College

Interdisciplinary Program in Biomedical Sciences

Dear M. L. Good,
Associate Dean for Graduate Education: P. A. Gulig

Complete faculty listing Follow this link.

The College of Medicine offers training opportunities leading to either the Doctor of Philosophy or Master of Science degree in medical sciences. Minimum requirements for these degrees are given in the General Information section of this catalog. The interdisciplinary program (IDP) in biomedical sciences is the major focus leading to the Doctor of Philosophy degree. Other graduate courses and programs are listed under departmental headings.

Interdisciplinary Program (IDP) in Biomedical Sciences

The goal of the IDP is to prepare students for a diversity of careers in research and teaching in academic and commercial settings, after completion of the Ph.D. in Medical Sciences. The program provides a modern, comprehensive graduate education in biomedical sciences while providing both maximum program flexibility and appropriate specialization for advanced training. The IDP represents a cooperative effort of six interdisciplinary advanced concentrations with participation of over 250 faculty members.

During the first semester of study, students undertake a common, comprehensive interdisciplinary core curriculum of classroom study and a responsible conduct of research course. During the second semester, students begin to focus their coursework in one or two concentrations. Throughout the first two semesters, students participate in at least three laboratory rotations in any of the laboratories of the IDP faculty members. The advanced concentration and the supervisory committee chair are chosen no later than the end of the spring semester to maximize flexibility and facilitate an informed decision. Students entering the advanced concentrations take more specialized courses that strengthen their knowledge of these disciplines. The advanced concentration curricula are flexible enough to allow students to integrate coursework offered in other advanced concentrations. In addition, journal clubs and seminars associated with their research interests allow students to further augment their scientific development.

Prospective students should have strong backgrounds in biology including genetics, chemistry (organic, quantitative, and biochemistry), physics, and calculus. Demonstrated high motivation and a serious intention to pursue research-related careers are also important considerations. This is best accomplished by performing independent study in a research laboratory for at least a semester, with a year or more being preferred. For more information, write IDP, P.O. Box 100229, College of Medicine, Gainesville, FL 32610-0229. For expanded information about the IDP, visit http://idp.med.ufl.edu.

Advanced Concentration in Biochemistry and Molecular Biology
Directors: Robert McKenna and Kevin Brown

The Graduate Faculty of the biochemistry and molecular biology advanced concentration share an interest in the relationships between the structure of a biological macromolecule and the function of that molecule in the cell. The structure (encoded ultimately by the genome) sets the phenotype of the organism. The unifying theme among the Graduate Faculty is their approach to research: Each uses the techniques of biochemistry and molecular biology/genetics to characterize the function of a macromolecule and show how function (and the process it is part of) is determined by the structure of that molecule and its interactions with other macromolecules. Specific research directions range from physical determination of the molecular structure of proteins to regulation of cellular processes to the genetic mapping of disease loci.

For information about other programs and courses in this field, see the Department of Biochemistry and Molecular Biology listing.

Advanced Concentration in Biochemistry and Molecular Biology Courses

- BCH 6040: Research Discussion in Biochemistry and Molecular Biology
- BCH 6107: Biophysical Techniques in Proteomics and Protein Science
- BCH 6206: Advanced Metabolism
- BCH 6207: Advanced Metabolism: Role of Membranes in Signal Transduction and Metabolic Control
- BCH 6208: Advanced Metabolism: Regulation of Key Reactions in Carbohydrate and Lipid Metabolism
- BCH 6209: Advanced Metabolism: Regulation of Key Reactions in Amino Acid and Nucleotide Metabolism
- BCH 6415: Advanced Molecular and Cell Biology
- BCH 6740: Physical Biochemistry/Structural Biology
- BCH 6741C: Magnetic Resonance Imaging and Spectroscopy in Living Systems
- BCH 6744: Molecular Structure Determination by X-ray Crystallography
- BCH 6745: Molecular Structure and Dynamics of NMR Spectroscopy
- BCH 6746: Structural Biology: Macromolecular Structure Determination
- BCH 6747: Structural Biology/Advanced Physical Biochemistry: Spectroscopy and Hydrodynamics
- BCH 6749C: Numerical Methods in Structural Biology
- BCH 6876: Recent Advances in Membrane Biology
- BCH 6877: Recent Advances in Structural Biology
- BCH 6878: Recent Advances in Cytoskeletal Processes
- BCH 6906: Biochemistry Seminar
- BCH 7410: Advanced Gene Regulation
- BCH 7412: Epigenetics of Human Disease and Development
- BCH 7515: Structural Biology/Advanced Physical Biochemistry: Kinetics and Thermodynamics
- GMS 6195: Epigenetics Journal Club

Advanced Concentration in Cancer Biology

Directors: Dietmar Siemann and Maria Zajac-Kaye

The Cancer Biology Concentration (CBC) provides training opportunities in cancer research ranging from basic to translational. The program spans many disciplines, including molecular and cell biology, genetics and epigenetics, biochemistry, microbiology, pharmacology, anatomy, pathology, epidemiology, bioinformatics, immunology and many others involved in the understanding of the development, progression, dissemination, and treatment of cancer.

Students in the will have opportunities to work with outstanding cancer investigators in state of the art facilities. Through combinations of courses, seminars, small group discussions, and an interdisciplinary approach to research, the program allows students to gain a unique understanding of cancer and to build a firm foundation upon which they can build careers in academia, government, and biotech and pharmaceutical industry.

For more information please see our website: http://idp.med.ufl.edu/about/cancer-biology-concentration

Advanced Concentration in Cancer Biology Courses

- BCH 5413: Mammalian Molecular Biology and Genetics
- BCH 7410: Advanced Gene Regulation
- BCH 7412: Epigenetics of Human Disease and Development
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6009: Principles of Drug Action
- GMS 6033: Cancer Biology and Therapeutics
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6090: Research in Medical Sciences
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6338: Recent Advances in Cancer Metastasis
- GMS 6421: Cell Biology
- GMS 6644: Apoptosis
- GMS 6647: Transcriptional and Translational Control of Cell Growth and Proliferation
- GMS 6683: Fundamentals of Vascular Physiology and Pathology
- GMS 6691: Special Topics in Cell Biology and Anatomy
- GMS 6812: Cancer Health Outcomes Assessment
- GMS 6818: Design and Conduct Clinical Trials I
- PHC 6937: Special Topics in Public Health
Advanced Concentration in Genetics

Director: M. R. Wallace

The concentration in genetics offers graduate training in all facets of modern molecular genetics including bacterial, viral, lower eukaryotic, mouse, developmental, and human genetics. The courses listed are taught in a 5-week modular format.

Advanced Concentration in Genetics Courses

- BCH 7410: Advanced Gene Regulation
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA Microarray Data Analysis
- GMS 6181: Special Topics in Microbiology
- GMS 6195: Epigenetics Journal Club
- GMS 6231: Genomics and Bioinformatics
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6290: Genetics/Genomics Program Graduate Seminar
- GMS 6506: Biologic Drug Development
- GMS 6920: Genetics Journal Colloquy
- GMS 7192: Journal Colloquy

Advanced Concentration in Health Outcomes and Policy

The University of Florida's Master of Science in Medical Sciences, with a concentration in Health Outcomes and Policy, is a specialized degree designed to put its graduates at the forefront of innovative research to develop, implement, and evaluate clinical and community-based programs that promote health and health outcomes. Throughout the curriculum, special emphasis is placed on health disparities and vulnerable populations. In addition to traditional graduate students, our program is available to medical students, post-doctoral researchers, fellows, residents, Ph.D. students, and junior faculty.

We also offer a 16-credit graduate certificate designed to complement other concurrent courses of study and to provide continuing education opportunities for faculty. The certificate can be completed in one year on a part-time basis.

Advanced Concentration in Health Outcomes and Policy Courses

- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6802: Examining Health Outcomes for Chronic Diseases in Clinical and Community-based Research
- GMS 6803: Data Management for Clinical Research
- GMS 6804: Medical Informatics
- GMS 6811: Grant Writing Skills for Clinical Research
- GMS 6812: Cancer Health Outcomes Assessment
- GMS 6816: Pediatric Child Health Outcomes Assessment for Clinical and Community-Based Research
- GMS 6821: Measuring and Analyzing Health Outcomes I
- GMS 6822: Measuring and Analyzing Health Outcomes II
- GMS 6826: Advanced Design and Methodology for Case-Control Studies in Clinical Research
- GMS 6829: Longitudinal Research Design
- GMS 6830: Health Outcomes Research and Policy Development
- GMS 6832: Economic Methods for Evaluating Value in Health
- GMS 6833: Health Care Policy and Vulnerable Populations
- GMS 6834: Health Policy and Formulation of Payment Mechanisms for Health Care
- GMS 6835: Health Policy Issues in Children's Health
- GMS 6842: Translational Research Methods
- GMS 6844: Experimental and Quasi-Experimental Research Designs for Community Settings
- GMS 6846: Meta-Analysis in Clinical, Health Services Research and Public Health
- GMS 6851: Health Outcomes Research
- GMS 6852: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
- GMS 6853: Applied Topics in Dissemination and Implementation Science
- GMS 6854: Applied Topics in Clinical Effectiveness Research
- GMS 6881: Special Studies in Epidemiology and Health Policy Research
- GMS 6882: Directed Readings in Epidemiology and Health Policy
- GMS 6883: Practical Experience in Epidemiology and Health Policy
- GMS 6884: Research in Epidemiology and Health Policy
- GMS 6885: Research Designs in Health Outcomes and Policy
- GMS 6893: Clinical and Translational Science Seminar Series
- GMS 6896: Health Outcomes and Policy Seminar
Advanced Concentration in Immunology and Microbiology

Directors: R. C. Condit and C. E. Mathews

The concentration in immunology and microbiology offers graduate training in cellular and molecular immunology (including immunopathology, immunogenetics, and autoimmunity) and in microbiology (including virology, bacteriology, microbial genetics, and microbial pathogenesis). The courses listed are taught in a 5-week modular format.

Advanced Concentration in Immunology and Microbiology Courses

- VME 6505: Autoimmunity
- GMS 6031: Molecular Immunology
- GMS 6032: Mechanisms of Host Defense
- GMS 6033: Immunity in Health and Disease
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6121: Infectious Diseases
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6193: Research Conference in Oral Biology
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
- GMS 6337: B Cell Development in Health and Disease
- GMS 6381: Special Topics in Pathology
- GMS 6382: Special Topics in Immunology
- GMS 6921: Immunology/Microbiology Journal Colloquy
- GMS 7192: Journal Colloquy
- VME 6934: Topics in Veterinary Medical Sciences

Advanced Concentration in Molecular Cell Biology

Director: Alexander Ishov
Co-Director: Maria Zajac-Kaye

The advanced concentration in molecular cell biology (MCB) prepares investigators for careers in biomedical research in academic or industrial settings. This multidisciplinary specialization has more than 50 participating faculty members and offers an extraordinary range of opportunities for advanced study of life at the molecular and cellular levels. The Graduate Faculty share common interests in the molecular interactions that account for functionally integrated subcellular, cellular, and tissue organization found in living organisms. The model systems in use range from yeast and cellular slime molds through Drosophila to birds and mammals. These systems are manipulated and analyzed using a wide range of powerful molecular, genetic, protein chemical, immunological, pharmacological, nuclear magnetic resonance (NMR), and microscopic imaging strategies. Students who select MCB take advanced course work and initiate independent research during the second year. This approach provides broad-based vision early in the program and the appropriate degree of specialization later on.

Advanced Concentration in Molecular Cell Biology Courses

- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6013: Developmental Genetics
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Mechanisms of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6331: Stem Cell Biology
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
- GMS 6381: Special Topics in Pathology
- GMS 6417: Integrative Aging Physiology
- GMS 6421: Cell Biology
- GMS 6622: Mitochondrial Biology in Aging and Disease
- GMS 6635: Organization of Cells and Tissues
- GMS 6644: Apoptosis
- GMS 6647: Transcriptional and Translational Control of Cell Growth and Proliferation
- GMS 6690: Molecular Cell Biology Journal Club
- GMS 6691: Special Topics in Cell Biology and Anatomy
- GMS 6692: Research Conference in Anatomy and Cell Biology

Advanced Concentration in Neuroscience
Directors: W. J. Streit and J. L. Bizon

The Graduate Faculty associated with the neuroscience advanced concentration have expertise in neuroanatomy, molecular and cellular neurobiology, neurodevelopment and aging, neurotransmitter chemistry and pharmacology, neuroendocrinology and neuroimmunology, cellular and molecular neuro-oncology, cellular and membrane neurophysiology, somatosensory and motor systems, transplantation neuroscience, injury and repair of the CNS, and neurobehavioral sciences. Study in marine vertebrate and invertebrate neurobiology is available through Graduate Faculty at the Whitney Laboratory.

Advanced Concentration in Neuroscience Courses

- GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
- GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
- GMS 6023: Principles of Neuroscience III – Molecular Neuropharmacology and its Clinical Application
- GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
- GMS 6029: Brain Journal Club
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6072: Neuroendocrinology and Neuroimmunology
- GMS 6073: Developmental Neurobiology
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6078: Synaptic Function and Plasticity
- GMS 6079: Computers in Biology
- GMS 6080: Basic Magnetic Resonance Imaging
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6705: Functional Human Neuroanatomy
- GMS 6709: Current Topics in Vision
- GMS 6711: Neurobiology of Pain
- GMS 6750: Molecular Pathobiology of Neural Disease
- GMS 6760: Comparative Biology of Cell Signaling
- GMS 6791: Visual Neuroscience Journal Club
- GMS 6792: Neuroscience Graduate Research Seminar
- GMS 7794: Neuroscience Seminar
- GMS 7795: Special Topics in Neuroscience

Advanced Concentration in Oral Biology

Chair: R. A. Burne
Graduate Coordinator: J. Brady

The Department of Oral Biology, a unit of the College of Dentistry, offers graduate study leading to the degree of Doctor of Philosophy as part of the College of Medicine's Interdisciplinary Program (IDP) in Biomedical Sciences. The work is designed to provide the degree candidate with a strong background in basic biological principles relevant to the various subspecialties of oral biology, as well as specialized training in various aspects of the diseases and disorders of the oral cavity.

Areas of emphasis include application of microbiological, immunological, cellular, and molecular biological concepts and technologies to answer questions about host-pathogen interactions in oral disease; vaccine development; oral microbial physiology; oral bacterial biofilm biology; saliva and salivary gland biology; microbial antibiotic resistance; and autoimmune diseases. More information is available at http://dental.ufl.edu/departments/oral-biology/.

Prerequisites for admission in addition to those of the Graduate School include a broad base of courses in mathematics, physics, organic and analytic chemistry, advanced biology, biochemistry, molecular biology, and statistical methods. Specific requirements can be obtained from the Graduate Coordinator or the IDP office.

Oral Biology Departmental Courses

- GMS 6160: Introduction to Oral Biology I
- GMS 6161: Introduction to Oral Biology II
- GMS 6173: Somatic System: Form and Function
- GMS 6176: Biology of Tooth Supporting Structures I
- GMS 6177: Biology of Tooth Supporting Structures II
- DEN 6680: Principles and Craniofacial Biology and Emerging Therapies
- DEN 6681: Craniofacial Pathobiology
- GMS 7179: Journal Colloquy

Advanced Concentration in Physiology and Pharmacology

Directors: J. K. Harrison and H. Kasahara

The Graduate Faculty associated with this advanced concentration have expertise in a variety of disciplines, including molecular and cellular biology, pharmacology, physiology, neuroscience, and biochemistry. These faculty bring together unique strengths to provide the students with diverse training. Students may train in laboratories involved in cardiovascular, neuro, endocrine, and developmental physiology; pharmacology; and toxicology. Students conduct research at the molecular, cellular, and integrative levels. Many of the faculty are involved in multidisciplinary, collaborative research efforts that aim to understand basic physiological mechanisms and pathophysiological processes (e.g., cardiovascular, neurodegenerative, and neoplastic diseases).
Advanced Concentration in Physiology and Pharmacology Courses

- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6400C: Principles of Physiology
- GMS 6405: Fundamentals of Endocrine Physiology
- GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
- GMS 6408: Fundamentals of Renal Physiology
- GMS 6410: Physiology of the Circulation of Blood
- GMS 6411: Fundamentals of Cardiovascular Physiology
- GMS 6415: Fundamentals of Gastrointestinal Physiology
- GMS 6491: Journal Club in Physiology
- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

Core Courses--IDP

- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6090: Research in Medical Sciences
- GMS 6901: Seminar in Biology of Disease
- GMS 7003: Responsible Conduct of Biomedical Research
- GMS 7593: Topics in Pharmacology and Toxicology

General and Advanced Courses

- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6090: Research in Medical Sciences
- GMS 6622: Mitochondrial Biology in Aging and Disease
- GMS 6872: Science and Ethics of in Vitro Fertilization
- GMS 6905: Independent Studies in Medical Sciences
- GMS 6910: Supervised Research
- GMS 6931: Ethical and Policy Issues in Clinical Research
- GMS 6940: Supervised Teaching
- GMS 6971: Research for Master's Thesis
- GMS 7001: Fundamentals of Biomedical Science Education
- GMS 7002: Practicum in Biomedical Science Education
- GMS 7003: Responsible Conduct of Biomedical Research
- GMS 7979: Advanced Research
- GMS 7980: Research for Doctoral Dissertation

Other Interdisciplinary Doctoral Concentrations Offered

The interdisciplinary emphasis on vision sciences is also discussed in the Interdisciplinary Graduate Studies section. The program director is Dr. W. Clay Smith, P.O. Box 100284 College of Medicine, Gainesville, FL 32610 or (352) 392-0476.

Interdisciplinary study in toxicology is coordinated by the Center for Environmental and Human Toxicology and is concerned with the effects of chemicals on human and animal health. Additional information is given in the Interdisciplinary Graduate Studies section of this catalog or may be obtained from the codirector, Dr. Colin Sumners, P.O. Box 100215, College of Medicine, Gainesville, FL 32610 or (352) 392-0740.

Degrees Offered with a Major in Medical Sciences
Doctor of Philosophy

without a concentration

centration in Biochemistry and Molecular Biology

  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

centration in Cancer Biology

centration in Clinical and Translational Science

  optional second concentration in Health Outcomes and Policy

centration in Genetics

  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

centration in Health Outcomes and Policy

  optional second concentration in Clinical and Translational Science

centration in Imaging Science and Technology


centration in Immunology and Microbiology

  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

centration in Molecular Cell Biology

  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

centration in Neuroscience

  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

centration in Physiology and Pharmacology

  optional second concentration in Clinical and Translational Science
  optional second concentration in Health Outcomes and Policy

centration in Toxicology
Master of Science

without a concentration

concentration in Clinical and Translational Science

concentration in Health Outcomes and Policy

concentration in Translational Biotechnology

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
- GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
- GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
- GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
- GMS 6029: Brain Journal Club
- GMS 6031: Molecular Immunology
- GMS 6032: Mechanisms of Host Defense
- GMS 6033: Immunity in Health and Disease
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Mechanisms of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6070: Sensory and Motor Systems
- GMS 6072: Neuroendocrinology and Neuroimmunology
- GMS 6073: Developmental Neuroscience
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
- GMS 6078: Synaptic Function and Plasticity
- GMS 6079: Computers in Biology
- GMS 6080: Basic Magnetic Resonance Imaging
- GMS 6090: Research in Medical Sciences
- GMS 6099: Foundations in Aging and Geriatric Research
- GMS 6121: Infectious Diseases
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA/Microarray Data Analysis
- GMS 6160: Introduction to Oral Biology
- GMS 6161: Introduction to Oral Biology II
- GMS 6169: Antimicrobial Strategies
- GMS 6173: Stomatognathic System: Form and Function
- GMS 6181: Special Topics in Microbiology
- GMS 6190: Seminar
- GMS 6191: HIV Journal Club
- GMS 6193: Research Conference in Oral Biology
- GMS 6195: Epigenetics Journal Club
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
- GMS 6221: Ethics in Genetics
- GMS 6223: Drosophila Neurogenetics: from Development to Function
- GMS 6231: Genomics and Bioinformatics
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
- GMS 6234: Introduction to phylogenomics: A practical approach to molecular phylogenetics of pathogens
- GMS 6290: Genetics/Genomics Program Graduate Seminar
- GMS 6312: Clinical Chemistry and Toxicology
- GMS 6313: Clinical Chemistry and Toxicology: A Rotation
- GMS 6331: Stem Cell Biology
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
- GMS 6337: B Cell Development in Health and Disease
- GMS 6381: Special Topics in Pathology
- GMS 6382: Special Topics in Immunology
- GMS 6400C: Principles of Physiology
- GMS 6405: Fundamentals of Endocrine Physiology
- GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
- GMS 6408: Fundamentals of Renal Physiology
- GMS 6410: Physiology of the Circulation of Blood
- GMS 6411: Fundamentals of Cardiovascular Physiology
- GMS 6412: Human Physiology for Biomedical Engineering
- GMS 6413: Advances in Hypertension Research
- GMS 6414: Advanced Renal Physiology
- GMS 6415: Fundamentals of Gastrointestinal Physiology
- GMS 6416: Human Endocrinology and Anatomy of Reproduction
- GMS 6471: Fundamentals of Physiology and Functional Genomics I
- GMS 6472: Fundamentals of Physiology and Functional Genomics II
- GMS 6473: Fundamentals of Physiology and Functional Genomics III
- GMS 6483: Theories of Aging
- GMS 6485: Population Based Research on Aging
- GMS 6486: Fundamentals of Biological Aging
- GMS 6490C: Research Methods in Physiology
- GMS 6491: Journal Club in Physiology
- GMS 6495: Seminar in Physiology
- GMS 6496: Recent Advances in Physiology
- GMS 6497: Seminar on Vision
- GMS 6506: Biologic Drug Development
- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6609: Advanced Gross Anatomy
- GMS 6621: Vision
- GMS 6622: Mitochondrial Biology in Aging and Disease
- GMS 6635: Organization of Cells and Tissues
- GMS 6642: Morphogenesis: Organ Systems I
- GMS 6643: Morphogenesis: Organ Systems II
- GMS 6644: Apoptosis
- GMS 6650: Molecular Cell Biology Journal Club
- GMS 6671: Lifestyle Interventions in Aging I: Behavioral Aspects & Clinical Outcomes
- GMS 6671: Lifestyle Interventions in Aging II: Physiologic Aspects
- GMS 6671: Clinical Neuroscience of Aging
- GMS 6876: Law & Ethics of Aging
- GMS 6895: Clinical & Translational Research Practicum
- GMS 6895: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
- GMS 6903: Manuscript and Abstract Writing for Clinician/Scientists
- GMS 6970: Individual Study
- GMS 6983: Current Topics in Immunotherapy
- GMS 6683: Fundamentals of Vascular Physiology and Pathology
- GMS 5604: Medical Human Embryology
- GMS 5605: Medical Anatomy
- GMS 5606L: Medical Anatomy Lab
- GMS 5613: Medical Human Anatomy by Diagnostic Imaging
Biochemistry and Molecular Biology Department

Chair: James B. Flanagan.
Graduate Coordinator: Kevin Brown

Complete faculty listing by department: Follow this link.

Biochemistry and Molecular Biology Department faculty mentor Ph.D. students in the College of Medicine interdisciplinary program (IDP) in medical sciences. Students interested in pursuing a doctoral degree can view specific features of the biochemistry and molecular biology concentration at http://biochem.med.ufl.edu/ and http://idp.med.ufl.edu. For admission information, visit the IDP website. Department faculty also mentor Ph.D. students in other college programs and participate actively in the research and teaching functions of various centers such as the Center for Epigenetics and the Center for Structural Biology. The Department offers a wide variety of courses for graduate students studying in the life sciences. The research expertise of the faculty spans the areas from cell biology, metabolism, and molecular biology to physical biochemistry/structural biology. Current research interests include viral protease inhibitors, viral RNA replication, bioenergetics and proton translocation, X-chromosome structure and function, cytoskeletal assembly and dynamics, enzyme mechanism and control, chromatin structure, gene expression and regulation, mitochondrial biogenesis and evolution, the genetics of inherited disease, nutrient membrane transporters, protein site-directed mutagenesis, ribosome structure and function, signal transduction, structural biology and dynamics of macromolecules, protein-nucleic acid interactions, transgenic animal models, and virus crystal structure. Prospective graduate students should have adequate training in chemistry and biology. Minor deficiencies may be made up immediately after entering graduate school. Previous undergraduate experience in a research laboratory is highly recommended. Doctoral students are required to take a core IDP course in fall term of their first year, and beginning in spring term, students take advanced classes in areas of interest. Specific advanced-level courses may be recommended by the student's supervisory chair and committee. The following courses are open to all graduate students and advanced undergraduates. Additional courses are listed in the Advanced Concentration in Biochemistry and Molecular Biology section under Medical Sciences.

Other

Biochemistry and Molecular Biology

College

College of Medicine

Department/School

Biochemistry and Molecular Biology Department

Degrees Offered with a Major in Biochemistry and Molecular Biology

Master of Science

Courses

- BCH 5413: Mammalian Molecular Biology and Genetics
- BCH 6040: Research Discussion in Biochemistry and Molecular Biology
• BCH 6107: Biophysical Techniques in Proteomics and Protein Science
• BCH 6206: Advanced Metabolism
• BCH 6207: Advanced Metabolism: Role of Membranes in Signal Transduction and Metabolic Control
• BCH 6208: Advanced Metabolism: Regulation of Key Reactions in Carbohydrate and Lipid Metabolism
• BCH 6209: Advanced Metabolism: Regulation of Key Reactions in Amino Acid and Nucleotide Metabolism
• BCH 6415: Advanced Molecular and Cell Biology
• BCH 6740: Physical Biochemistry/Structural Biology
• BCH 6741C: Magnetic Resonance Imaging and Spectroscopy in Living Systems
• BCH 6744: Molecular Structure Determination by X-ray Crystallography
• BCH 6744L: Molecular Structure Determination by X-ray Crystallography Laboratory
• BCH 6745: Molecular Structure and Dynamics of NMR Spectroscopy
• BCH 6745L: Molecular Structure and Dynamics by NMR Spectroscopy Laboratory
• BCH 6746: Structural Biology: Micromolecular Structure Determination
• BCH 6747: Structural Biology/Advanced Physical Biochemistry: Spectroscopy and Hydrodynamics
• BCH 6749C: Numerical Methods in Structural Biology
• BCH 6876: Recent Advances in Membrane Biology
• BCH 6875: Crystallography and Cryo-Electron Microscopy
• BCH 6877: Recent Advances in Structural Biology
• BCH 6878: Recent Advances in Cytoskeletal Processes
• BCH 6905: Independent Studies in Biochemistry and Molecular Biology
• BCH 6910: Supervised Research
• BCH 6936: Biochemistry Seminar
• BCH 6971: Research for Master's Thesis
• BCH 7410: Advanced Gene Regulation
• BCH 7412: Epigenetics of Human Disease and Development
• BCH 7414: Advanced Chromatin Structure
• BCH 7515: Structural Biology/Advanced Physical Biochemistry: Kinetics and Thermodynamics
• BCH 7979: Advanced Research
• BCH 7980: BioChem Doctoral Research

College of Medicine Courses

• ENU 6652: Clinical Rotation in Diagnostic Radiology
• ENU 6657: Diagnostic Radiological Physics
• GMS 5935: Topics in Gerontology
• GMS 6220: Overview of Geriatric Care Management
• GMS 6646: Issues and Concepts in Gerontology
• GMS 6656: Professional Development in Gerontology/Geriatrics
• GEY 6905: Special Topics in Biomedical Sciences
• GEY 6001: Fundamentals of Biomedical Sciences I
• GEY 6003: Fundamentals of Graduate Research and Professional Development
• GEY 6013: Developmental Biology
• GEY 6024: Principles of Neuroscience IV: Neural Integration & Control
• GEY 6031: Molecular Immunology
• GEY 6032: Mechanisms of Host Defense
• GEY 6072: Neuroendocrinology and Neuroimmunology
• GEY 6073: Developmental Neurobiology
• GEY 6074: Comparative and Evolutionary Neurobiology
• GEY 6220: Overview of Geriatric Care Management
• GEY 6646: Issues and Concepts in Gerontology
• GEY 6905: Independent Study in Gerontology
• GEY 6936: Professional Development in Gerontology/Geriatrics
• GMS 5905: Special Topics in Biomedical Sciences
• GMS 6001: Fundamentals of Biomedical Sciences I
• GMS 6003: Fundamentals of Graduate Research and Professional Development
• GMS 6004: IDP Practical Laboratory
• GMS 6006: Fundamentals of Developmental Biology
• GMS 6006: Fundamentals of Immunology and Microbiology
• GMS 6007: Fundamentals of Neuroscience
• GMS 6008: Fundamentals of Physiology and Functional Genomics
• GMS 6009: Principles of Drug Action
• GMS 6010: Yeast Genetics
• GMS 6011: Mouse Genetics
• GMS 6012: Human Genetics
• GMS 6013: Developmental Genetics
• GMS 6014: Applications of Bioinformatics to Genetics
• GMS 6015: Human Genetics II
• GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
• GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
• GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
• GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
• GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
• GMS 6025: Brain Journal Club
• GMS 6031: Molecular Immunology
• GMS 6032: Mechanisms of Host Defense
• GMS 6033: Immunity in Health and Disease
• GMS 6034: Advanced Virology I: Genetics and RNA
• GMS 6035: Advanced Virology II: RNA Viruses
• GMS 6036: Molecular Virology III: DNA Viruses
• GMS 6038: Bacterial Genetics and Physiology
• GMS 6039: Bacterial Pathogenesis
• GMS 6040: Host-Pathogen Interactions
• GMS 6051: Signal Transduction
• GMS 6052: Ion Channels of Excitable Membranes
• GMS 6053: Cancer Biology and Therapeutics
• GMS 6059: Gene Therapy from Bench to Bedside
• GMS 6061: Nuclear Structure and Dynamics
• GMS 6062: Protein Trafficking
• GMS 6063: Mechanisms of Aging
• GMS 6064: Tumor Biology
• GMS 6065: Fundamentals of Cancer Biology
• GMS 6070: Sensory and Motor Systems
• GMS 6072: Neuroendocrinology and Neuroimmunology
• GMS 6073: Developmental Neurobiology
• GMS 6074: Comparative and Evolutionary Neurobiology
The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health care settings and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

**Doctor of Philosophy**

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to:

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/](http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/).

**Master of Science**

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/](http://biostat.ufl.edu/education/ms-in-biostatistics/ms-curriculum-overview/).

**Other**

**Biostatistics (Medicine)**

**College**

[College of Public Health and Health Professions](http://biostat.ufl.edu/education/)

[College of Medicine](http://biostat.ufl.edu/education/)

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Department

Biostatistics Department

Degrees

Doctor of Philosophy

Master of Science

Biostatistics Departmental Courses

- GMS 6818: Design and Conduct Clinical Trials I
- GMS 6819: Design and Conduct Clinical Trials II
- GMS 6827: Advanced Clinical Trial Methods
- GMS 6841: Design and Analysis of Translational Research in Biomedical Sciences
- GMS 6861: Applied Biostatistics I
- GMS 6862: Applied Biostatistics II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6020: Clinical Trial Methods
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6050C: Biostatistical Methods I
- PHC 6051: Biostatistical Methods II
- PHC 6052: Introduction to Biostatistical Methods
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6055: Biostatistical Computing Using R
- PHC 6063: Biostatistical Consulting
- PHC 6080: SAS for Public Health - Data
- PHC 6081: SAS for Public Health - Analysis
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6937: Special Topics in Public Health
- PHC 6946: Public Health Internship
- PHC 7013: Bias in Observational Research
- PHC 7056: Analysis of Longitudinal Data
- PHC 7066: Large Sample Theory
- PHC 7925: Biostatistics Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- STA 5223: Applied Sample Survey Methods
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 5503: Categorical Data Methods
- STA 5701: Applied Multivariate Methods
- STA 5715: Applied Survival Analysis
- STA 6002: Applied Statistical Practice
- STA 6166: Statistical Methods in Research I
- STA 7249: Generalized Linear Models
- STA 7346: Statistical Inference

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- **GMS 6007**: Fundamentals of Neuroscience
- **GMS 6008**: Fundamentals of Physiology and Functional Genomics
- **GMS 6009**: Principles of Drug Action
- **GMS 6010**: Yeast Genetics
- **GMS 6011**: Mouse Genetics
- **GMS 6012**: Human Genetics
- **GMS 6013**: Developmental Genetics
- **GMS 6014**: Applications of Bioinformatics to Genetics
- **GMS 6015**: Human Genetics II
- **GMS 6017C**: In-Vitro Fertilization Laboratory Practicum A
- **GMS 6018L**: Advanced In-Vitro Fertilization Laboratory Practicum
- **GMS 6021**: Principles of Neuroscience I: Organization and Development of the Nervous System
- **GMS 6022**: Principles of Neuroscience II: Cellular and Molecular Neuroscience
- **GMS 6024**: Principles of Neuroscience IV: Neural Integration & Control
- **GMS 6029**: Brain Journal Club
- **GMS 6031**: Molecular Immunology
- **GMS 6032**: Mechanisms of Host Defense
- **GMS 6033**: Immunity in Health and Disease
- **GMS 6034**: Advanced Virology I: Genetics and RNA
- **GMS 6035**: Advanced Virology II: RNA Viruses
- **GMS 6036**: Molecular Virology III: DNA Viruses
- **GMS 6038**: Bacterial Genetics and Physiology
- **GMS 6039**: Bacterial Pathogenesis
- **GMS 6040**: Host-Pathogen Interactions
- **GMS 6051**: Signal Transduction
- **GMS 6052**: Ion Channels of Excitable Membranes
- **GMS 6053**: Cancer Biology and Therapeutics
- **GMS 6059**: Gene Therapy from Bench to Bedside
- **GMS 6061**: Nuclear Structure and Dynamics
- **GMS 6062**: Protein Trafficking
- **GMS 6063**: Mechanisms of Aging
- **GMS 6064**: Tumor Biology
- **GMS 6065**: Fundamentals of Cancer Biology
- **GMS 6070**: Sensory and Motor Systems
- **GMS 6072**: Neuroendocrinology and Neuroimmunology
- **GMS 6073**: Developmental Neurobiology
- **GMS 6074**: Comparative and Evolutionary Neurobiology
- **GMS 6077**: Neural Degeneration and Regeneration
- **GMS 6078**: Synaptic Function and Plasticity
- **GMS 6079**: Computers in Biology
- **GMS 6080**: Basic Magnetic Resonance Imaging
- **GMS 6090**: Research in Medical Sciences
- **GMS 6096**: Introduction to NIH Grant Writing for Biomedical Sciences
- **GMS 6099**: Foundations in Aging and Geriatric Research
- **GMS 6121**: Infectious Diseases
- **GMS 6140**: Principles of Immunology
- **GMS 6145**: Immunology of Gene Transfer
- **GMS 6151**: Genetic Analysis Using Model Systems
- **GMS 6153**: Advanced Bacterial Genetics
- **GMS 6155**: DNA/Microarray Data Analysis
- **GMS 6160**: Introduction to Oral Biology I
- **GMS 6161**: Introduction to Oral Biology II
- **GMS 6169**: Antimicrobial Strategies
- **GMS 6173**: Stomatognathic System: Form and Function
- **GMS 6181**: Special Topics in Microbiology
- **GMS 6190**: Seminar
- **GMS 6191**: HIV Journal Club
- **GMS 6193**: Research Conference in Oral Biology
- **GMS 6195**: Epigenetics Journal Club
- **GMS 6196**: Virology Journal Club
- **GMS 6198**: Bacterial Pathogenesis Journal Club
- **GMS 6221**: Ethics in Genetics
- **GMS 6223**: Drosophila Neurogenetics: from Development to Function
- **GMS 6231**: Genomics and Bioinformatics
- **GMS 6232**: Advanced Applications of Bioinformatics in Genetics
- **GMS 6233**: Quantitative Models of Protein Evolution and Phylogenetics
- **GMS 6234**: Introduction to phylogenomics: A practical approach to molecular phylogenetics of pathogens
- **GMS 6230**: Genetics/Genomics Program Graduate Seminar
- **GMS 6312**: Clinical Chemistry and Toxicology
- **GMS 6313**: Clinical Chemistry and Toxicology: A Rotation
- **GMS 6331**: Stem Cell Biology
- **GMS 6335**: Advanced Stem Cell Biology: Tissue Engineering
- **GMS 6336**: Advanced Stem Cell Biology: Regenerative Medicine
- **GMS 6337**: B Cell Development in Health and Disease
- **GMS 6381**: Special Topics in Pathology
- **GMS 6382**: Special Topics in Immunology
- **GMS 6400C**: Principles of Physiology
- **GMS 6405**: Fundamentals of Endocrine Physiology
- **GMS 6406**: Fundamentals of Pulmonary/Respiratory Physiology
- **GMS 6408**: Fundamentals of Renal Physiology
- **GMS 6410**: Physiology of the Circulation of Blood
- **GMS 6411**: Fundamentals of Cardiovascular Physiology
- **GMS 6412**: Human Physiology for Biomedical Engineering
- **GMS 6413**: Advances in Hypertension Research
- **GMS 6414**: Advanced Renal Physiology
The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described [here](http://epidemiology.phhp.ufl.edu)). Minimum requirements for these degrees are described in the [Graduate Degrees](#) section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: [http://epidemiology.phhp.ufl.edu](http://epidemiology.phhp.ufl.edu).

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**Epidemiology Department**

[College of Public Health and Health Professions](#)

[College of Medicine](#)

Chair: Linda Cottler

Ph.D. Program Director: Cindy Prins

M.S. Program Director: Catherine Woodstock Striley

Complete faculty listing by department: [Follow this link](#)

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**Other**

[http://epidemiology.phhp.ufl.edu](http://epidemiology.phhp.ufl.edu)
Epidemiology (Medicine)

College

College of Medicine

Department

Epidemiology Department

Epidemiology Program Information

The Ph.D. in Epidemiology program is in the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The program requires a minimum of 90 semester credits beyond the bachelor's degree. All students must complete a minimum of 9 credits in Epidemiology foundation course work, at least 36 credits of epidemiology core courses, 6 credits of statistics electives, 18 credits of epidemiology electives, 15 credits of general electives, and 12 credits of dissertation research. Students must also complete at least two mentored teaching experiences. All entering students who do not hold MPH or equivalent degrees are also required by the College of Public Health and Health Professions to complete an Introduction to Public Health course.

Students in the Ph.D. program in Epidemiology are admitted to work with a research mentor on that mentor's project, and that research mentor funds the student. Other funding sources are available such as the Graduate School and the Department.

The core course work is designed to incorporate competencies recommended in the report of the 2002 workshop on doctoral education in epidemiology from the American College of Epidemiology and the Association of Schools and Programs of Public Health, and criteria for applied epidemiology competencies. The overall outcomes expected of all graduates are as follows:

1. Apply epidemiological methods to address critical and/or emerging public health issues through the use of:
   - Appropriate epidemiological research designs
   - Advanced statistical analysis methods for health studies
   - Data structures and measurement methods for health research
   - Biological, behavioral and social theory applied to the understanding and prevention of contemporary threats to health and well-being
   - Depth of knowledge in an area of specialization

2. Assimilate the history, philosophy, and ethical principles of epidemiology into current research

3. Develop grant proposals and manage research projects

4. Write scientific papers for publication in peer-reviewed journals, and communicate research results to scientists, policy makers, and the public

5. Compete successfully for research and teaching positions in academic institutions, federal or state agencies, or private institutions.

Details of the Ph.D. in Epidemiology program and application information are available at our website: [http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2](http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2).

The Master of Science in Epidemiology degree is offered by the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The 36 credit program prepares students for careers in the public health arena that are focused on the surveillance and prevention of illnesses among diverse populations around the world. Students are trained in the foundational aspects of epidemiology including person, place and time, risk and protective factors, and the social determinants of health. Areas of focus include: chronic disease, infectious disease, geriatric, environmental, psychiatric, social, cancer and maternal and child health epidemiology.

Graduates of the M.S. in Epidemiology program are trained to:

- Apply surveillance, assessment, evaluation, and other foundational epidemiological research designs to areas of interest,
- Choose appropriate measurement and analytic methods to study health and disease in a population,
- Utilize biological, behavioral and social theory to understand how to prevent and intervene to promote the public health.

The program consists of required coursework and the successful completion of a thesis. The thesis is required to demonstrate skill in independent inquiry and investigation, under the tutelage of a mentor. Students may complete the course in three semesters with 36 credits.

More program information, including specific course requirements and elective options, is described at the program website: [http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2](http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2).

Degrees Offered with a Major in Epidemiology

Doctor of Philosophy

without a concentration
Master of Science

Epidemiology (PHHP/COM) Departmental Courses

- GMS 6820: Advanced Epidemiology Methods
- PHC 6008: Cardiovascular Epidemiology
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
- PHC 6034: Epidemiologic Investigation
- PHC 6070: Epidemiology of Aging
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6711: Measurement in Epidemiology and Outcomes Research
- PHC 6937: Special Topics in Public Health
- PHC 6938: Oral and Craniofacial Epidemiology
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7007: Cancer Epidemiology
- PHC 7038: Psychiatric Epidemiology
- PHC 7065: Critical Skills in Epidemiological Data Management
- PHC 7427: Ethics in Population Science
- PHC 7727: Grant Writing for Population Health Research
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7902: Epidemiology Supervised Research Writing Circle
- PHC 7910: International Field Epidemiology
- PHC 7916: National Field Epidemiology
- PHC 7934: Seminar I: Epidemiology Past, Present, and Future
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
- GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
- GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
- GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
- GMS 6029: Brain Journal Club
- GMS 6031: Molecular Immunology
- GMS 6032: Mechanisms of Host Defense
- GMS 6033: Immunity in Health and Disease
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
Health Outcomes and Policy Department

College of Medicine

Chair: Betsy Shankman
Graduate Coordinator: Jill Hemdon
Complete faculty listing by department: Follow this link.

Students can pursue either a Master of Science degree or a Graduate Certificate.

There is increasing emphasis on assessing health outcomes throughout the lifespan in a variety of health care and community settings. Nationally, the National Institute of Health and other federal and state agencies focus on the development of evidence-based programs to promote health, improve health care delivery, and enhance health outcomes.

Outcomes research generates evidence that informs health care program design in clinical and community settings, the promotion of effective clinical and community interventions, quality of care, cost-effective and clinically appropriate choices for patients in allocation of health care resources (clinical effectiveness), and incorporation of best practice models into health-related programs and policies. Outcomes research also provides mechanisms to understand how to translate research into practice and policy, how to improve the quality and efficiency of health programs, and how to achieve equitable and appropriate delivery of health programs and clinical care, particularly for underserved and vulnerable populations.

Our graduate programs are designed to train professionals in the health care and health research fields about the science that supports the development and evaluation of evidence-based clinical and community-based programs focused on improving health outcomes. Further, our programs emphasize methods for translating research into practice and policy. The unique combination of outcomes research, clinical, and community-based programs focuses on improving health outcomes and policies for a variety of settings across different age spans and to examine the individual, social, health system, and health policy factors that influence health outcomes.

In addition to traditional graduate students, both programs are available to medical students, post-doctoral students, fellows, residents, Ph.D. students, and junior faculty.

Molecular Genetics and Microbiology Department

Chair: H. V. Baker.
Graduate Coordinator: A. S. Lewin.
Complete faculty listing by department: Follow this link.

The Graduate Faculty of the Department of Molecular Genetics and Microbiology participate in the interdisciplinary program (IDP) in medical sciences, leading to the Doctor of Philosophy degree, with specialization in one of the six advanced concentration areas of the IDP (see Medical Sciences). Departmental areas of research associated with the IDP focus on the study of molecular genetics, viral genetics, and viral and bacterial pathogenesis. Faculty in the Department of Molecular Genetics and Microbiology also participate in the M.S. programs (see Medical Sciences). In addition to courses associated with the IDP, the Department of Molecular Genetics and Microbiology maintains the courses listed below.

Biotechnology: This Master of Science program is for students seeking careers in the biomedical industry as research or managerial associates; students seeking careers as teachers or educators at any level, but primarily high school or junior college; or students seeking an in-depth understanding of modern biology and scientific research as an end in itself or in preparation for further graduate study. The foundation of the M.S. program is a basic understanding of molecular and cell biology and the performance of a high-quality research project, culminating in a thesis, under the direction of a skilled mentor, with supervision by a committee composed of members of the Graduate Faculty. Specialization may be in any of the fields of research being pursued at the College of Medicine, but not limited to molecular genetics, gene therapy, viral and bacterial pathogenesis, protein structure, toxicology, mammalian genetics, wound healing, and congenital eye diseases.

For more information contact the Master's Program Coordinator, Molecular Genetics and Microbiology, P.O. Box 100266, College of Medicine, Gainesville, FL 32610, Telephone (352)392-3314.

Other
Molecular Genetics and Microbiology

College

College of Medicine

Department/School

Molecular Genetics and Microbiology Department

Courses

- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA Microarray Data Analysis
- GMS 6169: Antimicrobial Strategies
- GMS 6181: Special Topics in Microbiology
- GMS 6190: Seminar
- GMS 6195: Epigenetics Journal Club
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
- GMS 6221: Ethics in Genetics
- GMS 6231: Genomics and Bioinformatics
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6251: Molecular Therapy I – Vectors and Molecular Mechanisms
- GMS 6252: Molecular Therapy II – Disease Targets and Applications
- GMS 6253: Molecular Therapy III – Immunology of Gene Transfer
- GMS 6290: Genetics/Genomics Program Graduate Seminar
- GMS 6338: Recent Advances in Cancer Metastasis
- GMS 6906: Biologic Drug Development
- GMS 6920: Genetics Journal Colloquy
- GMS 6921: Immunology/Microbiology Journal Colloquy
- GMS 6943: Mester's Translational Biotechnology Internship
- GMS 7093: Introduction to Clinical and Translational Research
- GMS 7191: Research Conference
- GMS 7192: Journal Colloquy
- GMS 7194: Biotechnology Seminar
- PCB 5235L: Experiments in Immunology

Degrees

Doctor of Philosophy - Mammalian Genetics

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
• GEY 6646: Issues and Concepts in Gerontology
• GEY 6905: Independent Study in Gerontology
• GMS 6003: Fundamentals of Graduate Research and Professional Development
• GMS 6004: IDP Practical Laboratory
• GMS 6005: Fundamentals of Developmental Biology
• GMS 6006: Fundamentals of Immunology and Microbiology
• GMS 6007: Fundamentals of Neuroscience
• GMS 6008: Fundamentals of Physiology and Functional Genomics
• GMS 6009: Principles of Drug Action
• GMS 6010: Yeast Genetics
• GMS 6011: Mouse Genetics
• GMS 6012: Human Genetics
• GMS 6013: Developmental Genetics
• GMS 6014: Applications of Bioinformatics to Genetics
• GMS 6015: Human Genetics II
• GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
• GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
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• GMS 6033: Immunity in Health and Disease
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• GMS 6035: Advanced Virology II: RNA Viruses
• GMS 6036: Molecular Virology III: DNA Viruses
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• GMS 6039: Bacterial Pathogenesis
• GMS 6040: Host-Pathogen Interactions
• GMS 6051: Signal Transduction
• GMS 6052: Ion Channels of Excitable Membranes
• GMS 6053: Cancer Biology and Therapeutics
• GMS 6054: Gene Therapy from Bench to Bedside
• GMS 6061: Nuclear Structure and Dynamics
• GMS 6062: Protein Trafficking
• GMS 6063: Mechanisms of Aging
• GMS 6064: Tumor Biology
• GMS 6065: Fundamentals of Cancer Biology
• GMS 6070: Sensory and Motor Systems
• GMS 6072: Neuroendocrinology and Neuroimmunology
• GMS 6073: Developmental Neurobiology
• GMS 6074: Comparative and Evolutionary Neurobiology
• GMS 6077: Neural Degeneration and Regeneration
• GMS 6078: Synaptic Function and Plasticity
• GMS 6079: Computers in Biology
• GMS 6080: Basic Magnetic Resonance Imaging
• GMS 6090: Research in Medical Sciences
• GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
• GMS 6099: Foundations in Aging and Geriatric Research
• GMS 6121: Infectious Diseases
• GMS 6140: Principles of Immunology
• GMS 6145: Immunology of Gene Transfer
• GMS 6151: Genetic Analysis Using Model Systems
• GMS 6153: Advanced Bacterial Genetics
• GMS 6155: DNA Microarray Data Analysis
• GMS 6160: Introduction to Oral Biology I
• GMS 6161: Introduction to Oral Biology II
• GMS 6169: Antimicrobial Strategies
• GMS 6173: Stomatognathic System: Form and Function
• GMS 6181: Special Topics in Microbiology
• GMS 6190: Seminar
• GMS 6191: HIV Journal Club
• GMS 6193: Research Conference in Oral Biology
• GMS 6195: Epigenetics Journal Club
• GMS 6196: Virology Journal Club
• GMS 6198: Bacterial Pathogenesis Journal Club
• GMS 6211: Ethics in Genetics
• GMS 6223: Drosophila Neurogenetics: from Development to Function
• GMS 6231: Genomics and Bioinformatics
• GMS 6232: Advanced Applications of Bioinformatics in Genetics
• GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
• GMS 6234: Introduction to phylogenetics: A practical approach to molecular phylogenetics of pathogens
• GMS 6290: Genetics/Genomics Program Graduate Seminar
• GMS 6312: Clinical Chemistry and Toxicology
• GMS 6313: Clinical Chemistry and Toxicology: A Rotation
• GMS 6331: Stem Cell Biology
• GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
• GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
• GMS 6337: B Cell Development in Health and Disease
• GMS 6381: Special Topics in Pathology
• GMS 6382: Special Topics in Immunology
College of Nursing

Dean: A.M. McDaniel

Complete faculty listings: Follow this link.

The nationally ranked College of Nursing offers the graduate degrees of Master of Science in Nursing, Doctor of Nursing Practice, and Doctor of Philosophy in nursing sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog. Students may request special review by the College of Nursing Admissions Committee if they believe they are strong candidates for graduate study but do not fully meet all criteria.

The College offers the master’s degree and post-master’s certification for nurse midwifery and the following nurse practitioner roles: adult acute care, adult, family, pediatric, and neonatal. Additional offerings include

- Psychiatric/mental clinical nurse specialists/nurse practitioners
- Clinical Nurse Leader
For additional information about the Nursing programs, visit [http://www.nursing.ufl.edu](http://www.nursing.ufl.edu) or call (352) 273-6331.

**College of Nursing Courses**

**Other**

**Nursing**

**College**

**College of Nursing**

**Master of Science in Nursing (MSN)**

The master’s degree prepares nurses for advanced practice, clinical nurse specialist, or to be a clinical nurse leader. The graduate nursing core includes nursing theory, research, statistics, health policy, ethics, finance, and health promotion. The advanced practice core includes specific theory and clinical courses with relevant clinical experiences.

The College offers the master’s degree and post-master’s certification for nurse midwifery and the following nurse practitioner roles: adult acute care, adult, family, pediatric, and neonatal.

Additional offerings include:
- Psychiatric/mental clinical nurse specialists/nurse practitioners
- Clinical Nurse Leader
- Graduates are eligible for Florida licensure and national certification.

To be considered for the M.S.N. program, students must meet the following minimum requirements:
- Bachelor of Science in Nursing degree with an upper-division grade point average of 3.0 or higher from a CCNE or NLN AC accredited program
- A score of 500 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination (GRE) General Test. In the new version of the GRE a minimum score of 153 in the verbal section and 144 in the quantitative section. Analytical writing section is optional.
- Eligibility for licensure to practice as a registered nurse in the state of Florida

For application materials: [http://www.nursing.ufl.edu/prospective/prospective_msn_application_process.shtml](http://www.nursing.ufl.edu/prospective/prospective_msn_application_process.shtml)

**Degrees**

**Master of Science in Nursing**

without a concentration

**College of Nursing Courses**

- NGR 5934: Cultural Influences on Health Care
- NGR 6002C: Advanced Health Assessment
- NGR 6006: Principles of Clinical Outcomes Management
- NGR 6054C: Advanced Neonatal Health Assessment and Diagnostic Reasoning
- NGR 6052C: Adult Nursing: Diagnostics and Procedures
- NGR 6101: Theory and Research for Nursing
- NGR 6140: Physiology and Pathophysiology for Advanced Nursing Practice
- NGR 6172: Pharmacotherapeutics for Advanced Practice Nursing
- NGR 6172: Health Care Policy and Organizational Delivery
- NGR 6230C: Acute Care Nurse Practitioner: Diagnostics and Procedures for the Critically Ill
- NGR 6240: Primary Care for Adults
- NGR 6241: Adult Nursing: Common Health Problems
- NGR 6241L: Adult Nurse Practitioner: Common Health Problems Laboratory
- NGR 6243: Acute Care Nurse Practitioner: Critically Ill Adult
- NGR 6243L: Acute Care Nurse Practitioner: Critically Ill Adult Laboratory
- NGR 6244: Adult Nursing: Chronic Health Problems
- NGR 6244L: Adult Nurse Practitioner: Chronic Health Problems Laboratory
- NGR 6247: Complex High Prevalence Illnesses Of Adults
- NGR 6247L: Complex High Prevalence Illnesses Of Adults
Nursing Sciences

College

College of Nursing

Nursing Sciences Program

Chairs: S. Schaffer, M.J. Snider, and J. Stechmiller
Graduate Coordinator: J. Ballantyne

Complete faculty listing by department: Follow this link.

For more information about the Master of Science in Nursing and the Doctor of Nursing Practice, please visit Graduate Degrees or http://www.nursing.ufl.edu.

The College's Ph.D. program prepares scientists, scholars, advanced practitioners, and leaders in nursing. Comprehensive research and practice preparation is achieved by pairing students with faculty. Students have access to an array of faculty members for interdisciplinary study, clinical practice, and research. Individually directed dissertation research is a major aspect of the Ph.D. program. Research in the College includes aging and health, women's health, bio-behavioral interventions, and health policy.
Progression in the program depends on the student's ability to meet academic standards and clinical competencies as defined by College policy.

To be considered for admission to the Ph.D. program, students must meet the following minimum requirements:

- A BSN or master's degree in nursing from a CCNE/NLN AC accredited program.

- A master's program GPA of 3.5 on a 4.0 scale and a score of 500 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination (GRE) General Test. In the current version of the GRE a minimum score of 153 in the verbal section and 144 in the quantitative section.

OR

- A master's program GPA of 3.2 on a 4.0 scale and a score of 600 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination General Test. In the current version of the GRE a score a minimum score of 160 in the verbal section and 148 in the quantitative section.

- Completion of the GRE analytical section

- Eligibility for licensure to practice as a registered nurse in the state of Florida

A personal interview is preferred to establish a Graduate Faculty mentor who will work with the student to individualize the academic program and to structure the student's research or practice focus.

You may also call 352-273-6331 for more information.

Degrees

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

College of Nursing Courses

- NGR 5934: Cultural Influences on Health Care
- NGR 6002C: Advanced Health Assessment
- NGR 6006: Principles of Clinical Outcomes Management
- NGR 6054C: Advanced Neonatal Health Assessment and Diagnostic Reasoning
- NGR 6052C: Adult Nursing: Diagnostics and Procedures
- NGR 6101: Theory and Research for Nursing
- NGR 6140: Physiology and Pathophysiology for Advanced Nursing Practice
- NGR 6172: Pharmacotherapeutics for Advanced Practice Nursing
- NGR 6002: Health Care Policy and Organizational Delivery
- NGR 6230C: Acute Care Nurse Practitioner: Diagnostics and Procedures for the Critically Ill
- NGR 6240: Primary Care for Adults
- NGR 6241: Adult Nursing: Common Health Problems
- NGR 6241L: Adult Acute Care Nurse Practitioner: Common Health Problems Laboratory
- NGR 6243: Acute Care Nurse Practitioner: Critically Ill Adult
- NGR 6243L: Acute Care Nurse Practitioner: Critically Ill Adult Laboratory
- NGR 6244: Adult Nursing: Chronic Health Problems
- NGR 6244L: Adult Nurse Practitioner: Chronic Health Problems Laboratory
- NGR 6247: Complex High Prevalence Illnesses Of Adults
- NGR 6247L: Complex High Prevalence Illnesses Of Adults Laboratory
- NGR 6248: Adult Acute Care Nurse Practitioner 3
- NGR 6248L: Adult Acute Care Nurse Practitioner 3 Laboratory
- NGR 6255: Advanced Nursing Care of Older Adult
- NGR 6301: Advanced Child Health Nursing I
- NGR 6301L: Advanced Child Health Nursing I Laboratory
- NGR 6302: Advanced Child Health Nursing II
- NGR 6302L: Advanced Child Health Nursing II Laboratory
- NGR 6307: Advanced Child Health Nursing III
- NGR 6307L: Advanced Child Health Nursing III Laboratory
- NGR 6320C: Neonatal Care I
- NGR 6321C: Neonatal Care I Laboratory
- NGR 6323C: Neonatal Care III
- NGR 6350: Family Nurse Practitioner: Women, Adolescents, And Children
- NGR 6350L: Family Nurse Practitioner: Women, Adolescents, And Children Laboratory
The College of Pharmacy offers the Doctor of Philosophy and the Master of Science in Pharmacy degrees in the pharmaceutical sciences, with concentrations in medicinal chemistry, pharmacodynamics, pharmaceutical outcomes and policy, and pharmacy which includes pharmaceutics. There are two additional concentrations in the Master of Science in Pharmacy program in pharmaceutical sciences: forensic drug chemistry, and forensic serology and DNA. Both offered in a distance-learning, nonthesis format. Complete descriptions of the minimum requirements for the M.S.P. and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

The Graduate Faculty and courses offered are listed under department headings in this catalog. The courses listed below consist of seminar, supervised teaching and research, and research for thesis or doctoral dissertation. These courses are offered in each of the departments.

Students who wish to pursue graduate studies in the College of Pharmacy must have an undergraduate degree in pharmacy, chemistry, biology, or related sciences.

Satisfactory completion of a thesis or dissertation based on research is a requirement for a graduate degree in the pharmaceutical sciences.

Inquiries regarding applications and general information about the graduate programs are processed through the Office of Research and Graduate Studies, College of Pharmacy, P.O. Box 100484, Health Science Center.

For more information, please see our website: [http://pharmacy.ufl.edu](http://pharmacy.ufl.edu).

Departments and Programs within the College of Pharmacy

College of Pharmacy Courses

**Medicinal Chemistry Department**

**College of Pharmacy**

Chair: M. O. James.

Graduate Coordinator: H. Luesch
The College of Pharmacy offers the Doctor of Philosophy degree in pharmaceutical sciences with a concentration in medicinal chemistry. Medicinal chemistry is a unique blend of the physical and biological sciences. The scope of the field is sufficiently broad to give students with many different science backgrounds a rewarding and challenging program of study. Areas of active research include organic synthesis of medicinal agents, metal chelate design, prodrugs and topical drug delivery, drug metabolism, molecular toxicology, molecular biology, combinatorial chemistry, neurochemistry, analytical chemistry, molecular modeling, natural products, and drug discovery.

The applicant should have an undergraduate degree in pharmacy, chemistry, biology, or premedical sciences. A background in calculus and physical and organic chemistry is required. In addition to graduate medicinal chemistry courses in the College of Pharmacy, graduate courses in chemistry and biochemistry are required for the program.

The College also offers the Master of Science in Pharmacy degree in pharmaceutical sciences (nonthesis option) with concentrations in both forensic drug chemistry and forensic serology and DNA in a distance learning format. Minimum requirements for the M.S.P. and Ph.D. degrees are described in the General Information section of this catalog.

The Department participates in the interdisciplinary concentration in toxicology. For more information, see the Interdisciplinary Graduate Studies section of this catalog.

**Other**

**Pharmaceutical Sciences (Medicinal Chemistry)**

**College**

College of Pharmacy

**Department/School**

Medicinal Chemistry Department

**Degrees Offered With a Major in Pharmaceutical Sciences**

**Doctor of Philosophy**

concentration in Medicinal Chemistry

optional second concentration in Clinical and Translational Science

concentration in Toxicology

**Master of Science in Pharmacy**

concentration in Pharmaceutical Chemistry

concentration in Medicinal Chemistry

concentration in Forensic Serology and DNA
concentration in Forensic Science

concentration in Forensic Drug Chemistry

concentration in Clinical Toxicology

Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6544:Natural Medicinal Products
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6813: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6290: Pharmaceutical Fraud and Abuse
- PHA 6291: Pharmaceutical Health Care Systems
- PHA 6717: Measurement in Pharmacy Administration Research
- PHA 6793: Evidentiary Basis of Pharmaceutical Use
- PHA 6796: Study/Design in Pharmaceutical Outcomes & Policy Research
- PHA 6798: The Use and Abuse of Statistics in Drug Regulation
- PHA 6799: Patient Safety Program Evaluation
- PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA 6806: Prevention of Pharmaceutical Crimes
- PHA 6892: Practices and Procedures of the IRB
- PHA 6893: Research Ethics
- PHA 6899: Advanced OB/GYN and Pediatric Pharmacoeconomics
- PHA 6900: Topics in Pharmaceutical Administration
- PHA 6906: Introduction to Pharmaceutical Microeconomics
- PHA 6922: Pharmaceutical Policy Process
- PHA 6923: Commercial Applications of Pharmacoeconomics

Pharmaceutics Departmental Courses

- PHA 6116: In Vivo and In Vitro Stability of Drugs
- PHA 6118: Molecular Diversity
- PHA 6125: Pharmacokinetics and Biopharmaceutics
- PHA 6170C: Pharmaceutical Product Formulation
- PHA 6183: Pharmaceutical Gene Delivery
- PHA 6185: Pharmaceutical Drug Development
- PHA 6416: Pharmaceutical Analysis I
- PHA 6427: Pharmacogenetics of Drug Metabolism
- PHA 6440: Seminar in Drug Discovery
- PHA 6449: Pharmacogenomics
- PHA 6630: Medication Therapy Management: A Hematologic Focus
- PHA 6631: Foundations of Medication Therapy Management I
- PHA 6632: Foundations of Medication Therapy Management II
- PHA 6633: Medication Therapy Management: A Cardiovascular Focus
- PHA 6634: Medication Therapy Management: An Endocrine Focus
- PHA 6635: Medication Therapy Management: A Renal Focus
- PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA 6637: Medication Therapy Management: A Psychiatric Focus
- PHA 6638: Medication Therapy Management: A Neurologic Focus
- PHA 6639: Medication Therapy Management: A Respiratory Focus
- PHA 6654: Introduction to Graduate Studies
- PHA 6656: Preclinical Drug Evaluation

Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA 5171: Pharmaceutical Biotechnology
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6606: Pharmaceutical Modeling
- PHA 6910: Supervised Research
- PHA 6935: Selected Topics in Pharmacy
- PHA 6936: Advanced Topics in Pharmaceutical Sciences
- PHA 6938: Research Seminar
- PHA 6940: Supervised Teaching
The Department of Pharmaceutics offers the Doctor of Philosophy in pharmaceutical sciences. Pharmaceutics is the scientific endeavor concerned with the design, formulation, evaluation, and use of drug delivery systems. A foundation in physical chemistry, chemistry, mathematics, and in the life sciences, is necessary. Its domain extends from studies of the physiochemical properties of drugs and related molecules to investigations of the mechanisms of physiological processes affecting drug delivery and therapeutic effectiveness. The Department's general focus involves studying the design and evaluation of traditional and novel dosage forms for delivering drug molecules and macromolecules. The design involves physical chemical studies and development of analytical techniques involving spectroscopy and chromatography. Evaluation includes development of sensitive analytical techniques for the drug in biological fluids and subsequent biopharmaceutical and clinical pharmacokinetic studies.

Other

Pharmaceutical Sciences (Pharmaceutics)

College

College of Pharmacy

Department/School

Pharmaceutics Department

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

concentration in Pharmacy

optional second concentration in Clinical and Translational Science

Master of Science in Pharmacy

without a concentration

concentration in Pharmacy
Pharmaceutics Departmental Courses

- PHA 6116: In Vivo and In Vitro Stability of Drugs
- PHA 6118: Molecular Diversity
- PHA 6125: Pharmacokinetics and Biopharmaceutics
- PHA 6170C: Pharmaceutical Product Formulation
- PHA 6183: Pharmaceutical Gene Delivery
- PHA 6185: Pharmaceutical Drug Development
- PHA 6416: Pharmaceutical Analysis I
- PHA 6427: Pharmacogenetics of Drug Metabolism
- PHA 6440: Seminar in Drug Discovery
- PHA 6449: Pharmacogenomics
- PHA 6630: Medication Therapy Management: A Hematologic Focus
- PHA 6631: Foundations of Medication Therapy Management I
- PHA 6632: Foundations of Medication Therapy Management II
- PHA 6633: Medication Therapy Management: A Cardiovascular Focus
- PHA 6634: Medication Therapy Management: An Endocrine Focus
- PHA 6635: Medication Therapy Management: A Renal Focus
- PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA 6637: Medication Therapy Management: A Psychiatric Focus
- PHA 6638: Medication Therapy Management: A Neurologic Focus
- PHA 6639: Medication Therapy Management: A Respiratory Focus
- PHA 6894: Introduction to Graduate Studies
- PHA 6896: Preclinical Drug Evaluation

Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6852: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6769: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy
Pharmacodynamics Courses

- PHA5531: Neurotoxicology
- PHA6508: Systems Physiology and Pathophysiology I
- PHA6509: Systems Physiology and Pathophysiology II
- PHA6512L: Experiential Research Training in Pharmacodynamics
- PHA6521C: Research Techniques in Pharmacodynamics
- PHA6522L: ICSR Molecular Techniques Laboratory
- PHA6540: Neurochemical Foundation of Pharmacodynamics
- PHA7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA5171: Pharmaceutical Biotechnology
- PHA6521C: Research Techniques in Pharmacodynamics
- PHA6806: Pharmacoeconomic Modeling
- PHA6910: Supervised Research
- PHA6935: Selected Topics in Pharmacy
- PHA6936: Advanced Topics in Pharmaceutical Sciences
- PHA6938: Research Seminar
- PHA6940: Supervised Teaching
- PHA6971: Research for Master's Thesis
- PHA7979: Advanced Research
- PHA7980: Research for Doctoral Dissertation

Pharmacodynamics Department

Chair: M. Keller-Wood.
Interim Graduate Coordinator: Joanna Peris

Complete faculty listing by department: Follow this link.

The Department of Pharmacodynamics offers the Doctor of Philosophy in the pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the
An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.

## Other

### Pharmaceutical Sciences (Pharmacodynamics)

**College**

College of Pharmacy

**Department/School**

Pharmacodynamics Department

### Pharmacodynamics Programs

The Department of Pharmacodynamics offers the Doctor of Philosophy in the pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the interdisciplinary toxicology concentration (see Interdisciplinary Graduate Studies in this catalog). Pharmacodynamics is an integrated field of study involving pharmacology, physiology, and toxicology in a holistic approach to drug action in living systems. The Department focuses on neuroendocrinology, cardiovascular pharmacology, and neuropharmacology with diverse research interests in aging, hypertension, reproduction, glaucoma, neurotoxicity, and environmental physiology.

An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.

### Degrees Offered With a Major in Pharmaceutical Sciences

**Doctor of Philosophy**

**concentration in Pharmacodynamics**

**optional second concentration in Clinical and Translational Science**

**Master of Science in Pharmacy**

**concentration in Pharmacodynamics**

### Pharmacodynamics Courses

- PHA5531: Neurotoxicology
- PHA6508: Systems Physiology and Pathophysiology I
- PHA6509: Systems Physiology and Pathophysiology II
- PHA6512L: Experiential Research Training in Pharmacodynamics
- PHA6521C: Research Techniques in Pharmacodynamics
- PHA6522L: ICBR Molecular Techniques Laboratory
- PHA6540: Neurochemical Foundation of Pharmacodynamics
- PHA7939: Journal Colloquy in Pharmacodynamics
Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6426: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6584: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6950C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6852: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6786: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6290: Pharmaceutical Fraud and Abuse
- PHA 6291: Pharmaceutical Health Care Systems
- PHA 6717: Measurement in Pharmacy Administration Research
- PHA 6793: Evidentiary Basis of Pharmaceutical Use
- PHA 6796: Study/Design in Pharmaceutical Outcomes & Policy Research
- PHA 6798: The Use and Abuse of Statistics in Drug Regulation
- PHA 6799: Patient Safety Program Evaluation
- PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA 6809: Prevention of Pharmaceutical Crimes
- PHA 6809: Introduction to Pharmacoepidemiology
- PHA 6892: Practices and Procedures of the IRB
- PHA 6893: Research Ethics
- PHA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
- PHA 6937: Topics in Pharmaceutical Administration
- PHA 6938: Introduction to Pharmaceutical Microeconomics
- PHA 6938: Pharmaceutical Policy Process
• PHA6283: Commercial Applications of Pharmacoeconomics

Pharmaceutics Departmental Courses

• PHA6116: In Vivo and In Vitro Stability of Drugs
• PHA6118: Molecular Diversity
• PHA6125: Pharmacokinetics and Biopharmaceutics
• PHA6170C: Pharmaceutical Product Formulation
• PHA6183: Pharmaceutical Gene Delivery
• PHA6185: Pharmaceutical Drug Development
• PHA6416: Pharmaceutical Analysis I
• PHA6427: Pharmacogenetics of Drug Metabolism
• PHA6440: Seminar in Drug Discovery
• PHA6449: Pharmacogenomics
• PHA6630: Medication Therapy Management: A Hematologic Focus
• PHA6631: Foundations of Medication Therapy Management I
• PHA6632: Foundations of Medication Therapy Management II
• PHA6633: Medication Therapy Management: A Cardiovascular Focus
• PHA6634: Medication Therapy Management: An Endocrine Focus
• PHA6635: Medication Therapy Management: A Renal Focus
• PHA6636: Medication Therapy Management: A Gastrointestinal Focus
• PHA6637: Medication Therapy Management: A Psychiatric Focus
• PHA6638: Medication Therapy Management: A Neurologic Focus
• PHA6639: Medication Therapy Management: A Respiratory Focus
• PHA6894: Introduction to Graduate Studies
• PHA6896: Preclinical Drug Evaluation

Pharmacology Courses

• GMS 6563: Molecular Pharmacology
• GMS 6590: Seminar in Pharmacology
• GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
• GMS 6735: Neuropharmacology
• GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

• PHA5171: Pharmaceutical Biotechnology
• PHA6521C: Research Techniques in Pharmacodynamics
• PHA6806: Pharmacoeconomic Modeling
• PHA6910: Supervised Research
• PHA6935: Selected Topics in Pharmacy
• PHA6936: Advanced Topics in Pharmaceutical Sciences
• PHA6938: Research Seminar
• PHA6940: Supervised Teaching
• PHA6971: Research for Master's Thesis
• PHA7979: Advanced Research
• PHA7980: Research for Doctoral Dissertation

Pharmaceutical Outcomes and Policy Department

Chair: R. Segal
Graduate Coordinator: A. Winterstein

Complete faculty listing by department: Follow this link.

The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree. Complete descriptions of the requirements for these degrees are provided in the Graduate Degrees section of this catalog.

Other

Pharmaceutical Sciences (Pharmaceutical Outcomes and Policy)

College

College of Pharmacy
Pharmaceutical Outcomes and Policy Department

Pharmaceutical Outcomes and Policy Program Information

The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree.

Research in the Department emphasizes the epidemiological, socio-behavioral, administrative, regulatory, and economic aspects of drug therapy and pharmaceutical services, including assessment of safety, effectiveness, efficiency and quality aspects of patient-oriented pharmaceutical services and medication use.

The department offers both a research-oriented residential M.S.P. and Ph.D. degree programs as well as an online M.S.P. program. For the research oriented degree programs, graduate studies include core curricula and four specializations in patient safety and program evaluation, pharmacoconomics, pharmacoepidemiology and social-behavioral research in medication use. Electives and required courses draw from the resources of the entire University. Graduates are prepared for leadership positions in academia, public service, pharmaceutical industry, and health service industry with a focus on the evaluation of drugs and related services.

The online non-thesis M.S.P. program is designed for working professionals, and focuses on pharmaceutical regulation and outcomes. Prior pharmacy experience/knowledge is not required and the program is available to persons located in the United States only. Coursework is delivered in both asynchronous and live, synchronous sessions. Students may choose among six specialty tracks including Pharmacy Regulation & Policy, Applied Pharmacoconomics, Drug Regulatory Affairs, Clinical Research Regulation in Pharmacy, Patient Safety & Medication Risk Management, and Institutional Pharmacy Leadership.

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Pharmaceutical Outcomes and Policy

optional second concentration in Clinical and Translational Science

Master of Science in Pharmacy

concentration in Medication Therapy Management

concentration in Pharmaceutical Outcomes and Policy

Pharmaceutical Outcomes and Policy Courses

- PHA5270: Health Care and Patient Safety
- PHA5271: Health Care Risk Management
- PHA5272: Risk Management, Liability and Compliance
- PHA6227: Institutional Pharmacy Leadership I
- PHA6228: Institutional Pharmacy Leadership II
- PHA6235: Advanced Pharmacochemical Law
- PHA6236: Health Sciences Liability Law
- PHA6250: Patient Responsibility in Health Care
- PHA6264: Pharmacoconomics and Health Technology Assessment
- PHA6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA6268: Pharmacoepidemiology and Patient Safety
- PHA6269: Pharmaceutical Products and Public Policy
• PHA 6273: Structure, Process, and Outcomes of Regulation
• PHA 6274: Federal Regulations of Drugs and Pharmacy
• PHA 6275: Federal Regulations of Controlled Substances
• PHA 6276: Regulating Pharmaceutical Access and Costs
• PHA 6277: Ethics in Drug Development Production and Use
• PHA 6278: State Regulation of Drugs and Pharmacy
• PHA 6279: Pharmaceutical Outcomes and Policy Seminar
• PHA 6280: Medicare and Medicaid
• PHA 6281: Practices and Procedures of Administrative Agencies
• PHA 6286: Pharmaceutical Microeconomics
• PHA 6287: Pharmaceutical Health Economics
• PHA 6288: Critical Review of Research Methods
• PHA 6289: Regulating Clinical Research
• PHA 6290: Pharmaceutical Fraud and Abuse
• PHA 6291: Pharmaceutical Health Care Systems
• PHA 6292: Practices and Procedures of the IRB
• PHA 6293: Research Ethics
• PHA 6294: Pharmacoeconomics
• PHA 6295: Synthesis of Prodrugs
• PHA 6296: Equilibria, Complexations, and Interactions of Drugs
• PHA 6297: Natural Medicinal Products
• PHA 6298: Structure Determination of Complex Natural Products
• PHA 6299: Herbal & Dietary Supplements
• PHA 6300: Drug Biotrans and Molecular Mechanisms of Toxicity
• PHA 6301: Fundamentals of Pharmaceutical Chemistry
• PHA 6302: Pharmaceutical Chemistry I
• PHA 6303: Pharmaceutical Chemistry II
• PHA 6304: Pharmaceutical Analysis I
• PHA 6305: Pharmaceutical Analysis II
• PHA 6306: Pharmaceutical Analysis III
• PHA 6307: Pharmaceutical Analysis IV
• PHA 6308: Pharmaceutical Analysis V
• PHA 6309: Pharmaceutical Analysis VI
• PHA 6310: Pharmaceutical Analysis VII
• PHA 6311: Pharmaceutical Analysis VIII
• PHA 6312: Pharmaceutical Analysis IX
• PHA 6313: Pharmaceutical Analysis X
• PHA 6314: Pharmaceutical Analysis XI
• PHA 6315: Pharmaceutical Analysis XII
• PHA 6316: Pharmaceutical Analysis XIII
• PHA 6317: Pharmaceutical Analysis XIV
• PHA 6318: Pharmaceutical Analysis XV
• PHA 6319: Pharmaceutical Analysis XVI
• PHA 6320: Pharmaceutical Analysis XVII
• PHA 6321: Pharmaceutical Analysis XVIII
• PHA 6322: Pharmaceutical Analysis XIX
• PHA 6323: Pharmaceutical Analysis XX
• PHA 6324: Pharmaceutical Analysis XXI
• PHA 6325: Pharmaceutical Analysis XXII
• PHA 6326: Pharmaceutical Analysis XXIII
• PHA 6327: Pharmaceutical Analysis XXIV
• PHA 6328: Pharmaceutical Analysis XXV
• PHA 6329: Pharmaceutical Analysis XXVI
• PHA 6330: Pharmaceutical Analysis XXVII
• PHA 6331: Pharmaceutical Analysis XXVIII
• PHA 6332: Pharmaceutical Analysis XXIX
• PHA 6333: Pharmaceutical Analysis XXX
• PHA 6334: Pharmaceutical Analysis XXXI
• PHA 6335: Pharmaceutical Analysis XXXII
• PHA 6336: Pharmaceutical Analysis XXXIII
• PHA 6337: Pharmaceutical Analysis XXXIV
• PHA 6338: Pharmaceutical Analysis XXXV
• PHA 6339: Pharmaceutical Analysis XXXVI
• PHA 6340: Pharmaceutical Analysis XXXVII
• PHA 6341: Pharmaceutical Analysis XXXVIII
• PHA 6342: Pharmaceutical Analysis XXXIX
• PHA 6343: Pharmaceutical Analysis XL
• PHA 6344: Pharmaceutical Analysis XLI
• PHA 6345: Pharmaceutical Analysis XLII
• PHA 6346: Pharmaceutical Analysis XLIII
• PHA 6347: Pharmaceutical Analysis XLIV
• PHA 6348: Pharmaceutical Analysis XLV
• PHA 6349: Pharmaceutical Analysis XLVI
• PHA 6350: Pharmaceutical Analysis XLVII
• PHA 6351: Pharmaceutical Analysis XLVIII
• PHA 6352: Pharmaceutical Analysis XLIX
• PHA 6353: Pharmaceutical Analysis L
• PHA 6492: Medicinal Chemistry Courses
• PHA 6493: Medicinal Chemistry Departmental Courses

Medicinal Chemistry Courses

• PHA 5475: Synthesis of Prodrugs
• PHA 6115: Equilibria, Complexations, and Interactions of Drugs
• PHA 6354: Natural Medicinal Products
• PHA 6356: Structure Determination of Complex Natural Products
• PHA 6357: Herbal & Dietary Supplements
• PHA 6417: Pharmaceutical Analysis II
• PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
• PHA 6432: Fundamentals of Pharmaceutical Chemistry
• PHA 6444: Pharmaceutical Chemistry I
• PHA 6447: Drug Design
• PHA 6448: High Throughput Drug Discovery
• PHA 6471: Synthetic Medicinal Chemistry
• PHA 6534: Toxicology of Chemical Weapons
• PHA 6535: Principles of Nucleotide Activity
• PHA 6543: Pharmaceutical Chemistry II
• PHA 6556: Introduction to Clinical Toxicology
• PHA 6557: Clinical Toxicology I
• PHA 6580: Medicinal Chemistry of Drugs of Abuse
• PHA 6585: Principles of Forensic Science
• PHA 6585: Forensic Analysis of DNA
• PHA 6585: Biological Evidence and Serology
• PHA 6585: Forensic Immunology
• PHA 6585: Forensic Genetics
• PHA 6586: Blood Spatter and Distribution
• PHA 6905C: Research Procedures in Medicinal Chemistry
• PHA 6934: Seminar in Medicinal Chemistry
• PHA 6952: Mammalian Molecular Biology
• VME 6602: General Toxicology
• VME 6605: Toxic Substances
• VME 6613: Forensic Toxicology I
• VME 6614: Forensic Toxicology II
• VME 6648: Principles of Mammalian Pharmacology
• VME 6766: Laboratory Quality Assurance/Quality Control

Pharmaceutics Departmental Courses

• PHA 6116: In Vivo and In Vitro Stability of Drugs
• PHA 6118: Molecular Diversity
• PHA 6125: Pharmacokinetics and Biopharmaceutics
• PHA 6170C: Pharmaceutical Product Formulation
• PHA 6183: Pharmaceutical Gene Delivery
• PHA 6185: Pharmaceutical Drug Development
• PHA 6416: Pharmaceutical Analysis I
• PHA 6427: Pharmacogenetics of Drug Metabolism
• PHA 6440: Seminar in Drug Discovery
• PHA 6449: Pharmacogenomics
Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA 5171: Pharmaceutical Biotechnology
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6590: Pharmacoeconomic Modeling
- PHA 6910: Supervised Research
- PHA 6935: Selected Topics in Pharmacy
- PHA 6936: Advanced Topics in Pharmaceutical Sciences
- PHA 6938: Research Seminar
- PHA 6940: Supervised Teaching
- PHA 6971: Research for Master's Thesis
- PHA 7979: Advanced Research
- PHA 7980: Research for Doctoral Dissertation

Pharmacotherapy and Translational Research Department

For a full list of faculty, please [follow this link](https://www.pharmacy.ufl.edu/departments/pharmacology) for the Pharmacology Department.

Other

Pharmaceutical Sciences (Pharmacotherapy and Translational Research)

Description to be added

College

College of Pharmacy

Department/School

Pharmacology and Translational Research Department
Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Clinical Pharmaceutical Sciences

Master of Science in Pharmacy

concentration in Clinical Pharmacy

Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Metabolism and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6652: Drug Design
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6480: Pharmaceutical Analysis II
- PHA 6602: Toxicology of Chemical Weapons
- PHA 6653: Principles of Nucleotide Activity
- PHA 6654: Pharmaceutical Chemistry II
- PHA 6655: Introduction to Clinical Toxicology
- PHA 6656: Clinical Toxicology I
- PHA 6657: Clinical Toxicology II
- PHA 6660: Medicinal Chemistry of Drugs of Abuse
- PHA 6650: Principles of Forensic Science
- PHA 6651: Forensic Analysis of DNA
- PHA 6653: Biological Evidence and Serology
- PHA 6654: Forensic Immunology
- PHA 6655: Forensic Genetics
- PHA 6656: Blood Stutter and Distribution
- PHA 6690: Research Procedures in Medicinal Chemistry
- PHA 6693: Seminar in Medicinal Chemistry
- VME 602: General Toxicology
- VME 605: Toxic Substances
- VME 613: Forensic Toxicology I
- VME 614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6290: Pharmacoepidemiological Analysis
- PHA 6291: Pharmaceutical Health Care Systems
- PHA 6717: Measurement in Pharmacy Administration Research
- PHA 6738: Evidence-Based Pharmaceutical Use
- PHA 6796: Study Design in Pharmacoepidemiology & Policy Research
- PHA 6798: The Use and Abuse of Statistics in Drug Regulation
- PHA 6799: Patient Safety Program Evaluation
- PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA 6860: Prevention of Pharmaceutical Crimes
- PHA 6891: Introduction to Pharmacoepidemiology
- PHA 6892: Practices and Procedures of the IRB
- PHA 6893: Research Ethics
- PHA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
- PHA 6937: Topics in Pharmaceutical Administration
- PHA 6938: Introduction to Pharmaceutical Microeconomics
- PHA 6952: Pharmaceutical Policy Process
- PHA 6953: Commercial Applications of Pharmacoeconomics

Pharmaceutics Departmental Courses

- PHA 6116: In Vivo and In Vitro Stability of Drugs
- PHA 6118: Molecular Diversity
- PHA 6125: Pharmacokinetics and Biopharmaceutics
- PHA 6170C: Pharmaceutical Product Formulation
- PHA 6183: Pharmaceutical Gene Delivery
- PHA 6185: Pharmaceutical Drug Development
- PHA 6416: Pharmaceutical Analysis I
- PHA 6427: Pharmacogenetics of Drug Metabolism
- PHA 6440: Seminar in Drug Discovery
- PHA 6449: Pharmacogenomics
- PHA 6630: Medication Therapy Management: A Hematologic Focus
- PHA 6631: Foundations of Medication Therapy Management I
- PHA 6632: Foundations of Medication Therapy Management II
- PHA 6633: Medication Therapy Management: A Cardiovascular Focus
- PHA 6634: Medication Therapy Management: An Endocrine Focus
- PHA 6635: Medication Therapy Management: A Renal Focus
- PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA 6637: Medication Therapy Management: A Psychiatric Focus
- PHA 6638: Medication Therapy Management: A Neurologic Focus
- PHA 6639: Medication Therapy Management: A Respiratory Focus
- PHA 6694: Introduction to Graduate Studies
- PHA 6696: Preclinical Drug Evaluation

Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
College of Pharmacy Courses

- GMS 7593: Topics in Pharmacology and Toxicology
- PHA 5171: Pharmaceutical Biotechnology
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6806: Pharmacoeconomic Modeling
- PHA 6910: Supervised Research
- PHA 6935: Selected Topics in Pharmacy
- PHA 6936: Advanced Topics in Pharmaceutical Sciences
- PHA 6938: Research Seminar
- PHA 6940: Supervised Teaching
- PHA 6971: Research for Master's Thesis
- PHA 6979: Advanced Research
- PHA 6980: Research for Doctoral Dissertation
- PHA 6990: Directed Teaching
- PHA 7979: Advanced Research
- PHA 7980: Research for Doctoral Dissertation

College of Public Health and Health Professions

Dean: Michael G. Perri
Executive Associate Dean: Stephanie L. Hanson

Complete faculty listings: Follow this link.

The University of Florida College of Public Health and Health Professions has established a new educational model that focuses on the integration of public health problem-solving and individual patient care. The college's mission is to preserve, promote and improve the health and well-being of populations, communities and individuals. To fulfill this mission, we foster collaborations among public health and the health professions in education, research and service.

For more information, please see our website: http://phhp.ufl.edu

Departments and Programs within the College of Public Health and Health Professions

College of Public Health and Health Professions Courses

Other

Public Health (M.P.H.)

College

College of Public Health and Health Professions

Master of Public Health Program Information

Director and Graduate Coordinator: Sarah L. McKune

Complete faculty listing: Follow this link.

The College of Public Health and Health Professions offers the Master of Public Health degree program through five departments in the college: Behavioral Science and Community Health, Biostatistics, Epidemiology, Environmental and Global Health, and Health Services Research, Management, and Policy Department. This non-thesis program is designed to prepare students to become effective public health practitioners, scientists, and educators.

Students select one of six concentration areas:

- Biostatistics
- Environmental health
- Epidemiology
- Public health management and policy
- Public health practice
- Social and behavioral sciences

Both a 48-credit program for students without terminal health science degrees and a 42-credit program for students with terminal degrees are offered. A combined bachelor's/master of public health program is available, as well as a 15-credit college certificate program. Students interested in collaborative programs may pursue joint M.P.H. and D.V.M., M.D., J.D., Pharm.D., D.P.T., or DMD degrees, or concurrent master's and Ph.D programs. The MPH degree program and the Public Health certificate are available on campus and online. For program descriptions and information on applying, visit the website: www.mph.ufl.edu.

48-credit Master of Public Health: Students who do not hold a terminal degree in a health science discipline are eligible to apply for the 48-credit program. The program provides comprehensive coverage of core public health content and allows selection of a concentration. Students must complete 16 credits of core public health course work, 15-21 credits of concentration core courses, up to 12 credits of elective courses, and 5-8 credits of internship. The course work representing these requirements is described below.

42-credit accelerated Master of Public Health: Students who hold a terminal degree (usually a doctoral degree) in a health science discipline may be eligible for the 42-credit accelerated program. This program requires completion of 16 credits of core public health course work, 21 credits of concentration and elective course work, and a 5-credit internship.

Combined degree program: The College offers a combined degree program to allow qualified undergraduates to earn both a bachelor's degree and the Master of Public Health degree efficiently. Seniors with any undergraduate major are eligible for the combined degree program as long as they have an undergraduate GPA of at least 3.2 and competitive scores on the verbal and quantitative portions of the GRE, and their career interests match the M.P.H. program. Students accepted into the combined degree program complete 15 credits of public health course work, 15 credits of undergraduate course work, and 24 credits of public health course work.
work while still undergraduates, leaving only 33 credits after admission to graduate school. Students must achieve a B or better in public health courses taken as an undergraduate and be accepted to graduate school to complete the program.

**Core Courses:** All M.P.H. students take five public health core courses. The core courses in environmental health, epidemiology, public health management and policy, and social and behavioral sciences are taken by all students. The core biostatistics course varies across concentration areas. Students in the biostatistics, environmental health, and epidemiology concentrations must take PHC 6052: Introduction to Biostatistical Methods. All other M.P.H. students must take PHC 6050: Statistical Methods for Health Sciences Research I. In addition, all students must take a 1-credit seminar in contemporary public health issues and 5 to 8 credits of PHC 6946: Public Health Internship.

**Internship, major paper, and oral presentation:** Each student completes an internship, which provides an opportunity to apply knowledge acquired in the classroom to a real public health problem in a practice setting. The internship is usually completed in the student's final term in the program. Students may engage in many activities during an internship, but each student must have one special project which serves as the basis for a major paper and an oral presentation. The written and oral presentations represent the culmination of the academic experience in the M.P.H. program. Presentations, which are scheduled on Public Health Day near the end of each semester, provide each student with an opportunity to organize and present the details of the special project to faculty, students, and invited guests. Students are expected to display their understanding of their projects in the larger context of public health as a cross-disciplinary field, and in relation to the competencies expected of all M.P.H. graduates. Three faculty members, including the supervisory committee chair, attend each presentation and are responsible for assessing whether the student has successfully demonstrated a broad knowledge of the field of public health and depth in his or her concentration area.

**Degrees Offered with a Major of Public Health**

- Master of Public Health
- Master of Public Health - Biostatistics
- Master of Public Health - Environmental Health
- Master of Public Health - Epidemiology
- Master of Public Health - Health Management and Policy
- Master of Public Health - Public Health Practice
- Master of Public Health - Social and Behavioral Sciences

**Public Health Courses**

- HMG 6747: Marketing in Hospitality/Tourism
- HSA 6114: U.S. Health Care System
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6010: Data Management and Statistical Computing for Epidemiology
- PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6052: Introduction to Biostatistical Methods
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6055: Biostatistical Computing Using R
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6313: Environmental Health Concepts in Public Health
**Statistics Courses**

**Master of Public Health with a Concentration in Biostatistics**

The contribution of biostatisticians is far reaching and includes both core public health research and consultation with other health professionals. The biostatistics concentration is designed primarily for students with a previous graduate degree (particularly in the health sciences) who want to obtain a solid background in quantitative and analytical methods for public health research. The course work exposes students to methodology typically used to analyze different types of public health data and gives them opportunities to apply these methodologies themselves.

Graduates of the M.P.H. program with a concentration in biostatistics return to their careers with an improved understanding of quantitative methods for public health research. This increased knowledge will facilitate their own research programs and will enable them to critically read the literature in their field. The biostatistics concentration requires completion of 6 concentration core courses: PHC 6053 Regression Methods for the Health and Life Sciences, PHC 6000 Epidemiology Research Methods I, PHC 6055 Biostatistical Computing Using R. Remaining courses include the public health internship (PHC 6946) and electives in statistics and public health. Visit the biostatistics concentration website for the most up-to-date information about course options: [http://mph.ufl.edu/programs/master-of-public-health/biostatistics](http://mph.ufl.edu/programs/master-of-public-health/biostatistics).

See the department Biostatistics website for information about other programs offered by the department: [http://biostat.ufl.edu/](http://biostat.ufl.edu/).

**Master of Public Health with a Concentration in Environmental Health**

Professionals trained in environmental health study the impact of our surroundings on our health. They understand how environmental risk factors can cause diseases like asthma, cancer, and food poisoning. Environmental health professionals make up approximately half of public health personnel and the field accounts for about half of public health expenditures. Students interested in environmental health typically have a background in biological or physical sciences, engineering, nursing, medicine, and veterinary medicine. Prior experience in chemistry, biology, statistics, and Microsoft Excel software is desirable. Please note the prerequisites for Environmental Health courses and speak with the instructor if you have not successfully completed the prerequisites. The following courses are required for all students pursuing the environmental health concentration: VME 6602, VME 6607, PHC 6702, and PHC 6316. Students may also choose from elective course work listed on the department website below. Environmental health students complete their programs with an internship (PHC 6946) and electives on a wide variety of environmental health and public health topics.

Visit the environmental health concentration website for the most up-to-date information about course options: [http://mph.ufl.edu/programs/master-of-public-health/environmental-health](http://mph.ufl.edu/programs/master-of-public-health/environmental-health). And visit the Website of the Department of Environmental and Global Health for information about other academic programs and activities in the department: [http://egh.phhp.ufl.edu](http://egh.phhp.ufl.edu).

**Environmental Health Courses**

- EES 5245: Water Quality Analysis
- ENV 5105: Foundations of Air Pollution
- FOS 5205: Current Issues in Food Safety and Sanitation
- PHC 6702: Exposure Measurement and Assessment
- SWS 5551: Soils, Water, and Public Health
- VME 6602: General Toxicology
- VME 6603: Advanced Toxicology
- VME 6605: Toxic Substances
- VME 6607: Human Health Risk Assessment

**Master of Public Health with a Concentration in Epidemiology**

Epidemiology focuses on the study of the distribution and determinants of health in populations and communities. It is the scientific foundation of public health research that seeks to reduce risk factors and improve health. The discipline also contributes to public health practice and policy, and research in other health-related fields such as medicine and pharmacy. This concentration area is designed to train professionals to apply the principles and methods of epidemiological investigation in a broad range of settings. The required concentration core courses in epidemiology are PHC 6000, PHC 6002, PHC 6003, PHC 6011, and PHC 6053. Epidemiology concentration students complete their programs with an internship (PHC 6946) and electives in epidemiology and public health.
Additional detail and options for epidemiology elective course work is at the website: [http://mph.ufl.edu/programs/master-of-public-health/epidemiology](http://mph.ufl.edu/programs/master-of-public-health/epidemiology). Please also visit the website of the Department of Epidemiology for up-to-date information about other epidemiology programs and activities: [http://epidemiology.phhp.ufl.edu](http://epidemiology.phhp.ufl.edu).

### Epidemiology Courses

- PHC 6000: Epidemiology Methods I
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6011: Epidemiology Methods II
- PHC 6033: Regression Methods for the Health and Life Sciences
- PHC 6405: Theoretical Foundations of Public Health
- PHC 6912: Special Project: Independent Research
- PHC 6938: Oral and Craniofacial Epidemiology
- PHC 6946: Public Health Internship

### Master of Public Health with a Concentration in Public Health Management and Policy (PHMP)

This concentration focuses on the structure and administration of health organizations and the policies that impact health programs and reimbursement of health services. The concentration encompasses two of the major roles of leaders in public health. Essential skills for managing a health agency or organization include accounting, financial management, human resource management, strategic and program planning, operations research, economics, and monitoring outcome measures. Development, analysis, interpretation, and evaluation of government policies require analytical skills and social skills, as well as a deep understanding of politics.

The PHMP concentration requires six core courses: HSA 5174, HSA 6115, HSA 6152, PHC 6104, PHC 6421, and PHC 6103. In addition, students take two elective courses in one of three areas of specialization:
- Public health management
- Public policy
- Pharmaceutical use and policy.

The PHMP students complete their programs with an internship (PHC 6946) and public health elective courses.


The website of the Department of Health Services Research, Management, and Policy provides additional information about activities and other academic programs in the department: [http://hsrmp.phhp.ufl.edu](http://hsrmp.phhp.ufl.edu).

### Public Health Management and Policy Courses

- HSA 5174: Fundamentals of Health Care Finance
- HSA 6115: Introduction to Management of Health Services Organizations
- HSA 6152: Overview of U.S. Health Policy
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6421: Public Health Law and Ethics

### Master of Public Health with a Concentration in Public Health Practice

This concentration provides the opportunity to develop breadth in public health by taking coursework in two, three, or four of the core public health concentrations. Such breadth is often required of professionals who assume positions of leadership in public health. It is available to students in joint and concurrent degree programs, medical and other health scientists, and working professionals. Public Health Practice is the only M.P.H. concentration available online.

The campus curriculum for this concentration follows the same model as the other concentrations. Students pursuing public health practice begin their programs with the 5 core courses required of all MPH students. Instead of a specified set of concentration core courses, however, these students may choose 2 or more courses from advanced course options in two to four of the other concentrations. Students complete their degree with a 5 to 8 credit internship. All students in this concentration must hold a prior health professional degree or be enrolled in a joint or concurrent graduate program. To be eligible for the accelerated option, applicants must hold a terminal degree in a health or health-related field.

The online Public Health Practice curriculum begins with the 5 core courses and then offers two or more courses in epidemiology, environmental health, public health management and policy and social and behavioral sciences. Students complete their degree with a 5 to 8 credit internship. Online students are not available to pursue the MPH on campus in Gainesville, either due to employment or geographic distance.

### Master of Public Health with a Concentration in Social and Behavioral Sciences

The social and behavioral sciences concentration is based on the assumption that health and health behavior are influenced by multiple psychological, behavioral, social, and cultural factors. Central to addressing health problems and eliminating health disparities and inequalities, these factors must be understood and addressed using a framework that explores multiple levels (individual, interpersonal, organizational, community, and population) and the interactions among them. Through classroom instruction, research, and field practice, MPH students who concentrate in social and behavioral sciences explore the unique issues faced by diverse groups and populations and acquire skills to achieve social and behavioral change. Students in the social and behavioral sciences concentration are required to take five courses: PHC 6251 (Assessment and Surveillance in Public Health), PHC 6146 (Public Health Program Planning and Evaluation), etc.
PHC 6700 (Social and Behavioral Research Methods), PHC 6195 (Public Health Information for Diverse Populations), and PHC 6405 (Theoretical Foundations of Public Health). In addition, they may choose two courses from ten concentration electives (e.g., PHC 6762, PHC 6441). Social and behavioral science students complete their programs with an internship (PHC 6946) and elective courses in public health or related fields.

Visit the social and behavioral science concentration website for the most up-to-date information about course options: http://mph.ufl.edu/programs/master-of-public-health/socialbehavioralsciences.

The website of Department of Behavioral Science and Community Health provides additional information about activities and other academic programs in the department: http://bsch.phhp.ufl.edu.

Social and Behavioral Sciences Courses

- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6441: Health Disparities in the United States
- PHC 6700: Social and Behavioral Research Methods
- PHC 6762: International Public Health
- PHC 6937: Special Topics in Public Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6004: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risks, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6601: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7929: Advanced Research
- PHC 7930: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neurophysiology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuroplasticity: A Foundation for Neurehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6940: Supervised Teaching
- RSD 7929: Advanced Research
- RSD 7930: Research for Doctoral Dissertation
- RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
- RCS 6045: Rehabilitation Issues in Human Growth and Development
- RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
- RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
- RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
- RCS 6412: Rehabilitation Counseling Theory and Practice
- RCS 6470: Human Sexuality and Disability
- RCS 6601: Forensic Rehabilitation Consultation I
- RCS 6602: Forensic Rehabilitation Consultation II
- RCS 6625: Community Counseling and Case Management
- RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
- RCS 6740: Rehabilitation Research
- RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
- RCS 6801: Rehabilitation Counseling Practicum
- RCS 6825: Internship in Rehabilitation Counseling
- RCS 6905: Individual Work
- RCS 6910: Supervised Research
- RCS 6931: Special Topics
- RCS 6940: Supervised Teaching
- RCS 6945: Advanced Rehabilitation Counseling Practicum
- RCS 6971: Research for Master's Degree

Public Health (Ph.D.)

College

College of Public Health and Health Professions

Degrees Offered with a Major in Public Health

Doctor of Philosophy

College of Public Health and Health Professions Courses
- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6148: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6300: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6440: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6565: Health Promotion and Disease Prevention
- PHC 6566: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6901: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7909: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHR 5156: Exercise Physiology
- PHR 6125C: Concepts in Clinical Biomechanics
- PHR 6127C: Control of Gait and Posture
- PHR 6167C: Applied Neurophysiology for Physical Therapy
- PHR 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHR 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHR 6615L: Research Instrumentation in Physical Therapy
- PHR 6718: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
Rehabilitation Science

College

College of Public Health and Health Professions

Rehabilitation Science Program Information

Director: David D. Fuller
Graduate Coordinator: Ellen Esparolini
Admissions Coordinator: Amy Ladendorf
Complete faculty listing by department: Follow this link

The interdisciplinary Ph.D. program in rehabilitation science is offered through the College of Public Health and Health Professions. It is designed to prepare rehabilitation scholars. Students are given the opportunity to develop skills in teaching, research, service leadership, and interdisciplinary teamwork. Students work closely with their faculty mentor within the broad categories of Movement Science, Disability Science, and Communication and Swallowing Science. On successful completion of the program, graduates typically take positions in research universities and research centers. Requirements for the Ph.D. degree are provided elsewhere in this catalog.

Admissions decisions are determined by an interdisciplinary admissions committee. The program is a minimum of 90 credit hours of study beyond the Bachelor's degree. The curriculum includes 25 graduate credits in core rehabilitation courses (rehabilitation science theory, research, and teaching) required of all students; 50 credits in specialty areas; and 15 credits of dissertation research. The 50 credits of specialty courses includes 18 credits from one (or a combination) of the three major emphases in rehabilitation mentioned above. The remaining 32 credit hours may be electives, or 30 credits may be transferred in from a master's degree program (with the approval of the supervisory committee). Specialty course work must be chosen by the student with supervisory committee input and approval.

For more information, please see our website: http://rehabsci.phhp.ufl.edu

Degrees Offered with a Major in Rehabilitation Science

Doctor of Philosophy

without a concentration
concentration in Clinical and Translational Science

Rehabilitation Sciences Courses

- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neuropsychology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6940: Supervised Teaching
- RSD 7979: Advanced Research
- RSD 7980: Research for Doctoral Dissertation
- SPA 5401: Speech Pathology Language Disorder
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6117: Science of Singing
- SPA 6217: Vocal Health and Habilitation
- SPA 6311: Medical Audiology
- SPA 6312: Advanced Audiology and Neuro-Otology
- SPA 6340: Amplification I
- SPA 6341: Amplification II
- SPA 6342: Amplification III
- SPA 6436: Issues in Autism Spectrum Disorders
- SPA 6568: Clinical Evaluation in Medical Speech-Language Pathology
- SPA 6568: Special Clinical
- SPA 6830: Communication Disorders in Medically Complex Pediatric Populations
- SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
- SPA 7306: Audiologic Assessment in a Medical Setting
- SPA 7391: Business and Professional Issues in Audiology
- SPA 7415: Neurolinguistics of Adult Language Disorders
- SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
- SPA 7633: Audiology Research Project
- SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
- SPA 7945: Graduate Practicum in Audiology
- SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology
- SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology
- SPA 7958: Clinical Externship

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6906: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6006: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
Behavioral Science and Community Health Department

Chair: B. Curbow
Complete faculty listing by department: Follow this link.

The Department of Behavioral Science & Community Health (BSCH) is one of nine academic departments housed in the School of Public Health and Health Professions at the University of Florida. This department offers a Doctor of Philosophy (PhD) degree (SBS track). For more information about the program, please visit the link below.

Other

Public Health (Ph.D. - Social and Behavioral Sciences)

College

College of Public Health and Health Professions

Department/School

Behavioral Science and Community Health Department

Behavioral Science and Community Health Program Information

Social & Behavioral Sciences

The PhD in Public Health - Social and Behavioral Sciences (SBS) Track is targeted to individuals who wish to develop advanced knowledge and skills in the social and behavioral sciences theories and methods used in public health. Training is designed for those who desire public health careers in research, academics, government, or related health organizations. A prior graduate degree in public health or a related field is strongly preferred.

The program is focused upon the assumption that health and health behavior are impacted by multiple psychological, behavioral, social, and cultural factors. Central to addressing health problems and eliminating health disparities and inequalities, these factors must be understood and addressed at multiple social-ecological levels (individual, interpersonal, organizational, community, and population).

PhD students who concentrate in social and behavioral sciences explore the unique issues faced by diverse groups and populations and acquire skills to achieve social and behavioral change.

Contact

Dr. Giselle Carnaby (nee Mann), Program Director
gmann@phhp.ufl.edu
Phone: 352-273-6745 ext. 36497; ext. 36164 (lab)
Office: HPNP 4172; DG-140 (lab)

For more information, please visit http://sbs.phhp.ufl.edu/

Degrees Offered with a Major in Public Health

Doctor of Philosophy

concentration in Social and Behavioral Sciences
College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- HSC 6960: Epidemiology Methods I
- HSC 6961: Epidemiology of Infectious Diseases
- HSC 6962: Epidemiology of Chronic Diseases and Disability
- HSC 6964: Biology and Epidemiology of HIV/AIDS
- HSC 6966: Epidemiology Methods II
- HSC 6967: Social Epidemiology in Public Health
- HSC 6968: Evidence-Based Management of Public Health Programs
- HSC 6969: Public Health Program Planning and Evaluation
- HSC 6970: Policy and Aging
- HSC 6971: Disaster Preparedness and Emergency Response
- HSC 6974: Spatial Epidemiology
- HSC 6980: Health information for Diverse Populations: Theory & Methods
- HSC 6982: Overview of Long-Term Care
- HSC 6983: Assessment and Surveillance in Public Health
- HSC 6984: Aquatic Systems and Environmental Health
- HSC 6985: Environmental Justice Issues in Public Health
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6031: Epidemiology of Infectious Diseases: A Molecular Approach
- PHC 6035: Statistical Methods for Health Sciences Research I
- PHC 6039: Introduction to Public Health Administrative Systems
- PHC 6040: Systems Thinking for Public Health
- PHC 6041: Health, Risk, and Crisis Communication
- PHC 6042: Risk Communication for Public Health Practice
- PHC 6043: Occupational and Environmental Health Among Agriculture Workers
- PHC 6044: Public Health Biology
- PHC 6045: Adolescence, Risk Taking and Health
- PHC 6046: Gender, Sexuality, and Health
- PHC 6047: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6048: Critical Incidents and Violence in Communities
- PHC 6049: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6050: Biomedical and Psychological Aspects of Very Late Life
- PHC 6051: Public Health Law and Ethics
- PHC 6052: Health Disparities in the United States
- PHC 6053: Global Public Health and Development II
- PHC 6054: Ecology of HIV/AIDS in the Rural South
- PHC 6055: Environmental Management of Vector-Borne Diseases
- PHC 6056: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6057: Zoonotic Diseases in Humans and Animals
- PHC 6058: Foodborne Diseases
- PHC 6059: Public Health Issues of Mothers and Children
- PHC 6060: Community Practice of Behavioral Health Risk Prevention
- PHC 6061: Health Behavior Interventions in Practice
- PHC 6062: Public Health Laboratory Techniques
- PHC 6063: Health Promotion and Disease Prevention
- PHC 6064: Interventions for Public Health
- PHC 6065: Critical Issues in Public Health
- PHC 6066: Social and Behavioral Research Methods
- PHC 6067: Exposure Measurement and Assessment
- PHC 6068: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6069: International Public Health
- PHC 6070: Independent Study
- PHC 6071: Supervised Research Project
- PHC 6072: Seminar in Contemporary Public Health Issues
- PHC 6073: Seminars in Public Health
- PHC 6074: Special Topics in Public Health
- PHC 6075: Public Health Practicum
- PHC 6076: Public Health Internship
- PHC 6077: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 6078: Psychiatric Epidemiology
- PHC 6079: Theory Development and Testing in Behavioral & Community Public Health
- PHC 6080: Grant Writing for Population Health Research
- PHC 6081: Seminar in Instrument Development for Public Health
- PHC 6082: Epidemiology Literature Review and Critique (Journal Club)
- PHC 6083: Social and Behavioral Science Journal Club
- PHC 6084: Advanced Research
- PHC 6085: Research for Doctoral Dissertation
- PHC 6086: Exercise Physiology
- PHC 6087: Concepts in Clinical Biomechanics
- PHC 6088: Control of Gait and Posture
- PHC 6089: Applied Neurophysiology for Physical Therapy
- PHC 6090: Neurological Dysfunction as Applied to Physical Therapy
- PHC 6091: Neurological Aspects of Orthopedic Rehabilitation
The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics, the Master of Science degree in biostatistics, and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultations, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e. Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/](http://biostat.ufl.edu/education/phd-in-biostatistics/).

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/](http://biostat.ufl.edu/education/ms-in-biostatistics/).

Other
Biostatistics (PHHP)

College

College of Public Health and Health Professions
College of Medicine

Department

Biostatistics Department

Biostatistics Program

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e., Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/](http://biostat.ufl.edu/education/phd-in-biostatistics/).

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/](http://biostat.ufl.edu/education/ms-in-biostatistics/).

Degrees

Doctor of Philosophy

Master of Science

Biostatistics Departmental Courses

- GMS 6818: Design and Conduct Clinical Trials I
- GMS 6819: Design and Conduct Clinical Trials II
- GMS 6827: Advanced Clinical Trial Methods
- GMS 6841: Design and Analysis of Translational Research in Biomedical Sciences
- GMS 6861: Applied Biostatistics I
- GMS 6862: Applied Biostatistics II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6020: Clinical Trial Methods
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6050C: Biostatistical Methods I
- PHC 6051: Biostatistical Methods II
- PHC 6052: Introduction to Biostatistical Methods
- PHC 6053: Regression Methods for the Health and Life Sciences
PHC 6055: Biostatistical Computing Using R
PHC 6063: Biostatistical Consulting
PHC 6080: SAS for Public Health - Data
PHC 6081: SAS for Public Health - Analysis
PHC 6517: Public Health Concepts in Infectious Diseases
PHC 6937: Special Topics in Public Health
PHC 6946: Public Health Internship
PHC 7013: Bias in Observational Research
PHC 7056: Analysis of Longitudinal Data
PHC 7066: Large Sample Theory
PHC 7925: Biostatistics Journal Club
PHC 7979: Advanced Research
PHC 7980: Research for Doctoral Dissertation
STA 5223: Applied Sample Survey Methods
STA 5325: Fundamentals of Probability
STA 5328: Fundamentals of Statistical Theory
STA 5503: Categorical Data Methods
STA 5701: Applied Multivariate Methods
STA 5715: Applied Survival Analysis
STA 6092: Applied Statistical Practice
STA 6166: Statistical Methods in Research I
STA 7249: Generalized Linear Models
STA 7346: Statistical Inference

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
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- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
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- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6565: Health Promotion and Disease Prevention
- PHC 6566: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
Clinical and Health Psychology Department

College of Public Health and Health Professions

Department Chair: William W. Latimer.
Graduate Coordinator: S.R. Boggs.

Complete faculty listing: Follow this link.

The Department of Clinical and Health Psychology is a unit of the College of Public Health and Health Professions. The department's programs are its doctoral clinical psychology studies leading to the Ph.D. degree in psychology; an American Psychological Association accredited doctoral internship program; and postdoctoral studies and research. Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

The clinical psychology doctoral curriculum adheres to the scientist-practitioner model of education and training. Program strengths include research, education, and professional training in health care psychology, with organized areas of concentration in clinical health psychology, clinical child/pediatric psychology, neuropsychology, neuropsychological evaluation, and health psychology, and emotion neuroscience/psychopathology. Education and training experiences are also available in rural psychology. Interested students can apply for acceptance into the Public Health Program and obtain dual M.P.H./Ph.D. degrees.

Progress in the program is determined by departmental policies which are consistent with American Psychological Association accreditation standards. The curriculum has been continuously accredited by the American Psychological Association since 1953.

Admission to the Department is through appropriate application to the Department's admission committee. A bachelor's degree is generally adequate preparation for graduate admission. It should include undergraduate courses in both experimental psychology and statistics, along with at least three courses from the following psychology areas: developmental, learning, perception, personality, physiological, and social.
For more information, please see the program page below and our website: http://chp.phhp.ufl.edu.

Other

Psychology (Clinical and Health Psychology - PHHP)

College

College of Public Health and Health Professions

Department/School

Clinical and Health Psychology Department

Psychology (Clinical and Health Psychology) Program Information

The department of Clinical and Health Psychology is an academic and professional unit in the College of Public Health and Health Professions at the Health Science Center on the University of Florida campus in Gainesville. The doctoral program in clinical psychology has been accredited by the American Psychological Association since 1953 and adheres to the Scientist-Practitioner Model of education and training. The Clinical Psychology Doctoral program is unique in the country in that it is housed in an independent department of Clinical and Health Psychology in a major academic health science setting along with an APA accredited internship. These features foster program strengths in research, teaching and professional training in health care psychology.

To accommodate the broad range of career trajectories possible within Scientist-Practitioner education and training, the program offers a Scientist-Practitioner Emphasis and a Clinical Researcher Emphasis.

The **Scientist-Practitioner Emphasis** allows the student to obtain broad clinical, academic, and research training that readies them for careers anywhere along the science-practice continuum. The student obtains focused research mentorship in a faculty member's laboratory and obtains broad training in clinical assessment and intervention both in and outside of their designated area of concentration.

The **Clinical Researcher Emphasis** is designed to provide the interested student with more intensive mentor-based training for purposes of preparing for a research career. The Clinical Researcher Emphasis is designed for students who are clearly focused on a research career and therefore want an increased opportunity to perform mentored empirical work. This emphasis focuses on the acquisition of research skills, training in scientific methods and technologies to better understand behavior problems, psychopathology and psychological adjustment to illness and wellness, and to develop empirically validated assessment and treatment procedures. The primary goal of the Clinical Researcher emphasis is to train psychologists for academic settings and other employment venues in which research productivity and innovation is a major job expectancy. In comparison to the scientist-practitioner emphasis, more time is dedicated to research (less time is spent in supervised practicum with the general faculty), and advanced clinical training is focused on patient populations and methods in the student's area of research interest. The Clinical Researcher emphasis follows a "mentorship" model in which the faculty mentor is the student's overall guide and supervisor, and the student's primary research training is accomplished in his/her laboratory.

Students can elect the Clinical Researcher emphasis in the first or second year of study, based on their commitment to a clinical research career and the agreement of a faculty mentor. Students can apply for admission consideration to the Scientist-Practitioner emphasis, the Clinical Researcher emphasis, or both (see Application Procedures).

The Doctoral Program provides the student with training in the concepts, tools, roles, and functions of the clinical psychologist. The overall goals of the graduate program are to prepare the student to:

1. investigate meaningful, empirically testable questions in the quest for understanding a behavioral process, a patient's problem, or a professional issue;
2. function as a professional psychologist;
3. practice competently in the applied areas of psychological assessment/diagnosis, intervention/therapy, and consultation; and
4. contribute to the advancement of psychological knowledge through research or other creative scholarly activity.

Through a combination of general and specialized experiences in the classroom, laboratory, and clinic students develop knowledge and skills as scientist-practitioners. Attitudes are developed toward the practice of psychology and toward related professions which enable effective personal interaction and participation in the interdisciplinary approach to problems of research and practice. As students progress in the program, they develop professional identity through acceptance of increased responsibility for professional decisions, through the execution of significant research projects, and through their contributions to the understanding of psychological problems and processes.

For more information please see our website: http://chp.phhp.ufl.edu

Degrees

Doctor of Philosophy

concentration in Clinical and Health Psychology

optional second concentration in Clinical and Translational Science
concentration in Clinical and Translational Science

Master of Arts

Master of Science

Clinical and Health Psychology Departmental Courses

- CLP 5316: Health Psychology
- CLP 5426: Introduction to Neuropsychology
- CLP 6304: Psychological Foundations of Clinical Psychology I
- CLP 6307: Human Higher Cortical Functioning
- CLP 6308: Psychological Foundations of Clinical Psychology II
- CLP 6309: Psychological Foundations of Clinical Psychology III
- CLP 6344C: Lifespan Foundations of Behavioral Health and Illness I
- CLP 6345: Lifespan Foundations of Behavioral Health and Illness II
- CLP 6375: Introduction to Clinical Psychology
- CLP 6407: Psychological Treatment I
- CLP 6417: Psychological Treatment II
- CLP 6426: Seminar in Clinical Neuropsychology
- CLP 6430: Clinical Psychological Assessment
- CLP 6434C: Clinical Psychology Assessment I
- CLP 6435C: Clinical Psychology Assessment II
- CLP 6446C: Psychological Assessment of Children
- CLP 6447C: Psychological Assessment of Adults
- CLP 6476: Lifespan Psychopathology
- CLP 6497: Psychopathological Disturbances
- CLP 6528C: Measurement, Research Design, and Statistical Analysis in Clinical Psychology II
- CLP 6529: Applied Multivariate Methods in Psychology
- CLP 6905: Individual Work
- CLP 6910: Supervised Research
- CLP 6940: Supervised Teaching
- CLP 6943: Core Practicum in Clinical Psychology
- CLP 6945: Advanced Practicum in Neuropsychology
- CLP 6946: Advanced Practicum in Applied Medical Psychology
- CLP 6947: Practicum in Intervention
- CLP 6948: Advanced Practicum in Clinical Child Psychology
- CLP 6971: Research for Master's Thesis
- CLP 7317: Advanced Health Psychology and Behavior Medicine
- CLP 7404C: Special Issues, Methods, and Techniques in Psychological Treatment
- CLP 7427C: Neuropsychological Assessment of Children
- CLP 7428C: Neuropsychological Assessment of Adults
- CLP 7934: Special Topics in Clinical Psychology
- CLP 7949: Internship
- CLP 7979: Advanced Research
- CLP 7980: Research for Doctoral Dissertation
- DEP 6216: Psychological Disturbances of Children
- GEY 6306: Interpersonal Communication Within the Aging Network
- GEY 7408: Psychotherapy with Older Adults

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
• PHC 6104: Evidence-Based Management of Public Health Programs
• PHC 6146: Public Health Program Planning and Evaluation
• PHC 6153: Public Policy and Aging
• PHC 6195: Health Information for Diverse Populations: Theory & Methods
• PHC 6203: Overview of Long-Term Care
• PHC 6251: Assessment and Surveillance in Public Health
• PHC 6301: Aquatic Systems and Environmental Health
• PHC 6309: Environmental Justice Issues in Public Health
• PHC 6312: Water Quality and Human Health
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• PHC 6317: Risk Communication for Public Health Practice
• PHC 6346: Occupational and Environmental Health Among Agriculture Workers
• PHC 6370: Public Health Biology
• PHC 6403: Adolescence, Risk Taking and Health
• PHC 6404: Gender, Sexuality, and Health
• PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
• PHC 6413: Critical Incidents and Violence in Communities
• PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
• PHC 6419: Biomedical and Psychological Aspects of Very Late Life
• PHC 6421: Public Health Law and Ethics
• PHC 6441: Health Disparities in the United States
• PHC 6445: Global Public Health and Development II
• PHC 6447: Ecology of HIV/AIDS in the Rural South
• PHC 6512: Environmental Management of Vector-Borne Diseases
• PHC 6515: Introduction to Entomology/Zoonotic Diseases and Food Safety
• PHC 6519: Zoonotic Diseases in Humans and Animals
• PHC 6520: Foodborne Diseases
• PHC 6530: Public Health Issues of Mothers and Children
• PHC 6543: Community Practice of Behavioral Health Risk Prevention
• PHC 6544: Health Behavior Interventions in Practice
• PHC 6561: Public Health Laboratory Techniques
• PHC 6585: Health Promotion and Disease Prevention
• PHC 6586: Interventions for Public Health
• PHC 6607: Critical Issues in Public Health
• PHC 6700: Social and Behavioral Research Methods
• PHC 6702: Exposure Measurement and Assessment
• PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
• PHC 6762: International Public Health
• PHC 6905: Independent Study
• PHC 6917: Supervised Research Project
• PHC 6931: Seminars in Contemporary Public Health Issues
• PHC 6937: Special Topics in Public Health
• PHC 6945: Public Health Practicum
• PHC 6946: Public Health Internship
• PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
• PHC 7038: Psychiatric Epidemiology
• PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
• PHC 7727: Grant Writing for Population Health Research
• PHC 7752: Seminar in Instrument Development for Public Health
• PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
• PHC 7907: Social and Behavioral Science Journal Club
• PHC 7979: Advanced Research
• PHC 7980: Research for Doctoral Dissertation
• PHT 5156: Exercise Physiology
• PHT 6125C: Concepts in Clinical Biomechanics
• PHT 6127C: Control of Gait and Posture
• PHT 6167C: Applied Neurophysiology for Physical Therapy
• PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
• PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
• PHT 6610L: Research Instrumentation in Physical Therapy
• PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
• RSD 6110: Rehabilitation Science Theory and Application I
• RSD 6112: Rehabilitation Science Theory and Application II
• RSD 6114: Rehabilitation in the United Kingdom
• RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
• RSD 6700: Rasch Measurement: Introduction and Application
• RSD 6705: Research Methods in Rehabilitation
• RSD 6706: Scientific Writing for the Rehabilitation Professional
• RSD 6900: College Classroom: Teaching Process and Practice
• RSD 6905: Individual Work
• RSD 6910: Supervised Research
• RSD 6930: Special Topics in Rehabilitation Science
• RSD 6940: Supervised Teaching
• RSD 7979: Advanced Research
• RSD 7980: Research for Doctoral Dissertation
• RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
• RCS 6066: Rehabilitation Issues in Human Growth and Development
• RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
• RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
• RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
• RCS 6412: Rehabilitation Counseling Theory and Practice
Environmental and Global Health Department

Chair: G. C. Gray
Graduate Studies Program Assistant: N. Burke

Faculty listing: Follow this link

The Department of Environmental and Global Health focuses upon environmental factors that impact human health. Department faculty, scientists, and students employ numerous disciplines in studying these environmental factors: virology, bacteriology, parasitology, entomology, toxicology, epidemiology, water sciences, veterinary health, environmental engineering, aerosol biology, wildlife health, etc. Research work often involves international travel and collaboration. A central theme for the department is the interdisciplinary thinking called One Health which reflects the collaborations necessary to tackle public health's most difficult problems. Faculty, students and staff often perform research in the laboratories in the Emerging Pathogens Institute, the Center for Environmental and Human Toxicology, or the Aquatic Pathobiology Laboratory.

The Department of Environmental and Global Health offers graduate work leading to the degrees of Doctor of Philosophy, Master of Health Science, and Master of Public Health.

Other

Environmental and Global Health (M.H.S. - One Health)

College

College of Public Health and Health Professions

Department

Environmental and Global Health Department

Degrees Offered With a Major in Environmental and Global Health

Master of Health Science

concentration in One Health

Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HSC 6940</td>
<td>Supervised Teaching</td>
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<tr>
<td>PHC 6000</td>
<td>Epidemiology Methods I</td>
</tr>
<tr>
<td>PHC 6001</td>
<td>Principles of Epidemiology in Public Health</td>
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<tr>
<td>PHC 6002</td>
<td>Epidemiology of Infectious Diseases</td>
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<td>PHC 6003</td>
<td>Epidemiology of Chronic Diseases and Disability</td>
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<td>PHC 6006</td>
<td>Biology and Epidemiology of HIV/AIDS</td>
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<td>PHC 6011</td>
<td>Epidemiology Methods II</td>
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<td>PHC 6016</td>
<td>Social Epidemiology in Public Health</td>
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<td>PHC 6036</td>
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<td>Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods</td>
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<td>PHC 7038</td>
<td>Psychiatric Epidemiology</td>
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<td>PHC 7587</td>
<td>Theory Development and Testing in Behavioral &amp; Community Public Health</td>
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<td>PHC 7727</td>
<td>Grant Writing for Population Health Research</td>
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<td>PHC 7752</td>
<td>Seminar in Instrument Development for Public Health</td>
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<td>PHC 7901</td>
<td>Epidemiology Literature Review and Critique (Journal Club)</td>
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<td>PHC 7919</td>
<td>Advanced Research</td>
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<td>PHC 7980</td>
<td>Research for Doctoral Dissertation</td>
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<td>PHC 7981</td>
<td>Research in the United Kingdom</td>
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<td>Research in the United Kingdom</td>
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<td>Rehabilitation Science Theory and Application I</td>
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<td>Scientific Writing for the Rehabilitation Professional</td>
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<td>RSD 6900</td>
<td>College Classroom: Teaching Process and Practice</td>
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</table>
Public Health (Ph.D. - Environmental and Global Health)

College

Department/School

Environmental and Global Health

Degrees Offered With a Major in Public Health

Doctor of Philosophy

concentration in Environmental Health

Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching  
- PHC 6000: Epidemiology Methods I  
- PHC 6001: Principles of Epidemiology in Public Health  
- PHC 6002: Epidemiology of Infectious Diseases  
- PHC 6003: Epidemiology of Chronic Diseases and Disability  
- PHC 6006: Biology and Epidemiology of HIV/AIDS  
- PHC 6011: Epidemiology Methods II  
- PHC 6016: Social Epidemiology in Public Health  
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach  
- PHC 6050: Statistical Methods for Health Sciences Research I  
- PHC 6102: Introduction to Public Health Administrative Systems  
- PHC 6103: Systems Thinking for Public Health  
- PHC 6104: Evidence-Based Management of Public Health Programs  
- PHC 6146: Public Health Program Planning and Evaluation  
- PHC 6153: Public Policy and Aging  
- PHC 6183: Disaster Preparedness and Emergency Response  
- PHC 6195: Health information for Diverse Populations: Theory & Methods  
- PHC 6220: Overview of Long-Term Care  
- PHC 6251: Assessment and Surveillance in Public Health  
- PHC 6301: Aquatic Systems and Environmental Health  
- PHC 6309: Environmental Justice Issues in Public Health  
- PHC 6312: Water Quality and Human Health  
- PHC 6313: Environmental Health Concepts in Public Health  
- PHC 6316: Health, Risk, and Crisis Communication  
- PHC 6317: Risk Communication for Public Health Practice  
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers  
- PHC 6370: Public Health Biology  
- PHC 6403: Adolescence, Risk Taking and Health  
- PHC 6404: Gender, Sexuality, and Health  
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health  
- PHC 6413: Critical Incidents and Violence in Communities  
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology  
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life  
- PHC 6421: Public Health Law and Ethics  
- PHC 6441: Health Disparities in the United States  
- PHC 6445: Global Public Health and Development II  
- PHC 6447: Ecology of HIV/AIDS in the Rural South  
- PHC 6512: Environmental Management of Vector-Borne Diseases  
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety  
- PHC 6519: Zoonotic Diseases in Humans and Animals  
- PHC 6520: Foodborne Diseases  
- PHC 6530: Public Health Issues of Mothers and Children  
- PHC 6534: Community Practice of Behavioral Health Risk Prevention  
- PHC 6544: Health Behavior Interventions in Practice  
- PHC 6561: Public Health Laboratory Techniques  
- PHC 6585: Health Promotion and Disease Prevention  
- PHC 6586: Interventions for Public Health  
- PHC 6607: Critical Issues in Public Health  
- PHC 6700: Social and Behavioral Research Methods  
- PHC 6702: Exposure Measurement and Assessment  
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective  
- PHC 6762: International Public Health  
- PHC 6905: Independent Study  
- PHC 6917: Supervised Research Project  
- PHC 6901: Seminar in Contemporary Public Health Issues  
- PHC 6931: Seminars in Public Health  
- PHC 6937: Special Topics in Public Health  
- PHC 6945: Public Health Practicum  
- PHC 6946: Public Health Internship  
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods  
- PHC 7038: Psychiatric Epidemiology  
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health  
- PHC 7727: Grant Writing for Population Health Research  
- PHC 7752: Seminar in Instrument Development for Public Health  
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)  
- PHC 7907: Social and Behavioral Science Journal Club  
- PHC 7979: Advanced Research  
- PHC 7980: Research for Doctoral Dissertation  
- RFT 5156: Exercise Physiology  
- RFT 6125C: Concepts in Clinical Biomechanics  
- RFT 6127C: Control of Gait and Posture  
- RFT 6167C: Applied Neurophysiology for Physical Therapy  
- RFT 6236C: Neurological Dysfunction as Applied to Physical Therapy  
- RFT 6318: Neurological Aspects of Orthopedic Rehabilitation  
- RFT 6615L: Research Instrumentation in Physical Therapy  
- RFT 6718: Neuroplasticity: A Foundation for Neurorehabilitation  
- RSD 6110: Rehabilitation Science Theory and Application I  
- RSD 6112: Rehabilitation Science Theory and Application II  
- RSD 6114: Rehabilitation in the United Kingdom  
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science  
- RSD 6700: Rasch Measurement: Introduction and Application  
- RSD 6705: Research Methods in Rehabilitation  
- RSD 6706: Scientific Writing for the Rehabilitation Professional  
- RSD 6900: College Classroom: Teaching Process and Practice
Public Health (Ph.D. - One Health)

College

College of Public Health and Health Professions

Environmental and Global Health Department

Degrees Offered With a Major in Public Health

Doctor of Philosophy

concentration in One Health

Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6006: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6921: Seminar in Contemporary Public Health Issues
- PHC 6923: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory, Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- RSD 5156: Exercise Physiology
- RSD 6125C: Concepts in Clinical Biomechanics
- RSD 6127C: Control of Gait and Posture
- RSD 6167C: Applied Neurophysiology for Physical Therapy
- RSD 6236C: Neurological Dysfunction as Applied to Physical Therapy
- RSD 6318: Neurological Aspects of Orthopedic Rehabilitation
- RSD 6615L: Research Instrumentation in Physical Therapy
- RSD 6718: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 6101: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
Epidemiology Department

College of Public Health and Health Professions
College of Medicine

Chair: Linda Cottler
Ph.D. Program Director: Cindy Prins
M.S. Program Director: Catherine Woodstock Striley

Complete faculty listing by department: Follow this link.

The Department of Epidemiology – jointly governed by both the College of Public Health and Health Professions and the College of Medicine – offers the Doctor of Philosophy degree in epidemiology, Masters of Science in epidemiology, as well as the Master of Public Health degree with a concentration in epidemiology (described here). Minimum requirements for these degrees are described in the Graduate Degrees section of this catalog. The programs in the Department are designed to prepare students for careers in academic research environments, careers in public health agencies and health-related institutions, and for consultation, especially in the biomedical fields.

More information on these programs is available at the program page below and at the department website: http://epidemiology.phhp.ufl.edu

Other

Epidemiology (PHHP)

College

College of Public Health and Health Professions

Department

Epidemiology Department

Epidemiology Program Information

The Ph.D. in Epidemiology program is in the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The program requires a minimum of 90 semester credits beyond the bachelor's degree. All students must complete a minimum of 9 credits in Epidemiology foundation course work, at least 36 credits of epidemiology core courses, 6 credits of statistics electives, 18 credits of epidemiology electives, 15 credits of general electives, and 12 credits of dissertation research. Students must also complete at least two mentored teaching experiences. All entering students who do not hold MPH or equivalent degrees are also required by the College of Public Health and Health Professions to complete an Introduction to Public Health course.

Students in the Ph.D. program in Epidemiology are admitted to work with a research mentor on that mentor's project, and that research mentor funds the student. Other funding sources are available such as the Graduate School and the Department.

The core course work is designed to incorporate competencies recommended in the report of the 2002 workshop on doctoral education in epidemiology, from the American College of Epidemiology and the Association of Schools and Programs of Public Health, and criteria for applied epidemiology competencies. The overall outcomes expected of all graduates are as follows:

1. Apply epidemiological methods to address critical and/or emerging public health issues through the use of:
• Appropriate epidemiological research designs
• Advanced statistical analysis methods for health studies
• Data structures and measurement methods for health research
• Biological, behavioral and social theory applied to the understanding and prevention of contemporary threats to health and well-being
• Depth of knowledge in an area of specialization

2. Assimilate the history, philosophy, and ethical principles of epidemiology into current research

3. Develop grant proposals and manage research projects

4. Write scientific papers for publication in peer-reviewed journals, and communicate research results to scientists, policy makers, and the public

5. Compete successfully for research and teaching positions in academic institutions, federal or state agencies, or private institutions.

Details of the Ph.D. in Epidemiology program and application information are available at our website: http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2.

The Master of Science in Epidemiology degree is offered by the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The 36 credit program prepares students for careers in the public health arena that are focused on the surveillance and prevention of illnesses among diverse populations around the world. Students are trained in the foundational aspects of epidemiology including person, place and time, risk and protective factors, and the social determinants of health. Areas of focus include: chronic disease, infectious disease, geriatric, environmental, psychiatric, social, cancer and maternal and child health epidemiology.

Graduates of the M.S. in Epidemiology program are trained to:
• Apply surveillance, assessment, evaluation, and other foundational epidemiological research designs to areas of interest,
• Choose appropriate measurement and analytic methods to study health and disease in a population,
• Utilize biological, behavioral and social theory to understand how to prevent and intervene to promote the public health.

The program consists of required coursework and the successful completion of a thesis. The thesis is required to demonstrate skill in independent inquiry and investigation, under the tutelage of a mentor. Students may complete the course in three semesters with 36 credits.

More program information, including specific course requirements and elective options, is described at the program website: http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2.

Degrees Offered with a Major in Epidemiology

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Master of Science

Epidemiology (PHHP/COM) Departmental Courses

- GMS 6820: Advanced Epidemiology Methods
- PHC 6008: Cardiovascular Epidemiology
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
- PHC 6034: Epidemic Investigation
- PHC 6070: Epidemiology of Aging
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6711: Measurement in Epidemiology and Outcomes Research
- PHC 6937: Special Topics in Public Health
- PHC 6938: Oral and Craniofacial Epidemiology
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7007: Cancer Epidemiology
- PHC 7008: Psychiatric Epidemiology
- PHC 7065: Critical Skills in Epidemiological Data Management
- PHC 7427: Ethics in Population Science
- PHC 7727: Grant Writing for Population Health Research
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7902: Epidemiology Supervised Research Writing Circle
College of Public Health and Health Professions Courses

- PHC 7910: International Field Epidemiology
- PHC 7916: National Field Epidemiology
- PHC 7934: Seminar I: Epidemiology Past, Present, and Future
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6900: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology: Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6601: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
Health Services Research, Management, and Policy Department

Chair: Arch G. Mainous, III
Graduate Coordinator: Patricia Van Wert

Complete faculty listing: Follow this link.

The Department of Health Services Research, Management, and Policy offers degree programs at both the master's and doctoral level. The Master of Health Administration (M.H.A.) prepares individuals for management positions in the health care field. The Department also participates in the Master of Public Health (M.P.H.) degree by offering a concentration in Public Health Management and Policy (more information available here).

At the doctoral level, the Department offers the Ph.D. degree in Health Services Research. This full-time program prepares graduates to investigate and evaluate the complexities of health care systems in the U.S. and elsewhere. Health services research is a multidisciplinary field that examines the delivery, organization, financing, and outcomes of health care services.

Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

For more information, please see the program pages below and our website: http://hsrmp.phhp.ufl.edu.

Other

Health Administration

College

College of Public Health and Health Professions

Department/School

Health Services Research, Management, and Policy Department

Health Administration Program Information
The Master of Health Administration (M.H.A.) is a two-year, lock-step program with a summer internship between the first and second years. Small class size permits individual attention and guidance from faculty members. The program prepares qualified individuals motivated by a social mission and responsibility to the community for various management positions in the health services industry. Organizations seek individuals who have the ability to solve business problems and build strategic relationships in a climate of continuous change.

The UF M.H.A. program develops engaged early health care careerists to use evidence-based strategies to improve healthcare quality, affordability, and access. We provide students with fundamental knowledge using a cohort model in a campus-based setting that emphasizes experiential learning and data-driven problem solving both in the classroom and in the practice environment. Students will develop proficiency to detect, analyze, manage and respond to critical administrative issues in both provider and non-provider healthcare organizations. Our program embraces ethical conduct and professionalism, diversity and inclusion, practitioner involvement and team-based learning. Faculty inform practice with research and service to the community.

Applicants from any undergraduate major are considered. For more information about our program and details about the MBA/MHA dual degree, please see our website: http://hsrmp.phhp.ufl.edu/academic-programs/master-of-health-administration

Degrees

Master of Health Administration

Health Administration Program Courses

- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6177: Advanced Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6196: Health Services Operations Management
- HSA6198: Information Management in Health Administration
- HSA6342: Human Resource Management for Health Services Managers
- HSA6385: Performance Management for Health Care Managers
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6438: Health Economics
- HSA6855: Internship in Health Administration
- HSA6905: Individual Study in Health Administration
- HSA6939: Capstone Seminar in Health Administration

Health Services Research, Management, and Policy Departmental Courses

- HSA5103: Introduction to the U.S. Health Care System
- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6175: Health Care Financial Management
- HSA6177: Advanced Health Care Finance
- HSA6179: Introduction to Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6196: Health Services Operations Management
- HSA6197: Information Management in Health Administration
- HSA6198: Information Management in Health Administration
- HSA6342: Human Resource Management for Health Services Managers
- HSA6385: Performance Management for Health Care Managers
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6438: Health Economics
- HSA6855: Internship in Health Administration
- HSA6858: Internship in Health Services Research
- HSA6878: Edemsnship in Legal Aspects of Health Services Administration
- HSA6905: Individual Study in Health Administration
- HSA6910: Supervised Research
- HSA6911: Research Seminar in Health Services Research
- HSA6930: Special Topics in Health Services Administration
- HSA6935: Seminar in Health Administration
- HSA6938: Capstone Seminar in Health Administration
- HSA6940: Supervised Teaching
- HSA6946: Internship in Public Health Management and Policy
College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIVAIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6931: Seminar in Contemporary Public Health Issues
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 6980: Research for Doctoral Dissertation
- PHC 6981: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
Health Services Research

College

Health Services Research, Management, and Policy Department

Health Services Research Program Information

The Department of Health Services Research, Management and Policy offers a doctoral degree in Health Services Research. Health services research is a multidisciplinary field of inquiry, both basic and applied, that examines the use, costs, quality, accessibility, delivery, organization, financing, and outcomes of healthcare services. The objective is to increase knowledge and understanding of the structure and processes of the healthcare system, and to assess subsequent effects on individuals and populations. Health services research draws on a variety of disciplines, and integrates their conceptual frameworks and methods to provide new ways of studying and understanding the health care system.

The Ph.D. Program in Health Services Research prepares individuals to conduct inquiry that will inform government officials, corporate leaders, clinicians, health plan managers, and others making decisions about complex health-related problems and issues. Students in the Ph.D. Program in Health Services Research learn to apply research methods and scientific knowledge to the study of health services organizations and systems.

Graduates of the Ph.D. Program in Health Services Research will find career opportunities in academic, private sector, and public service settings. For example, some graduates will combine research interests with a teaching career and accept academic appointments in a wide range of health-related departments in the nation's colleges and universities. Other graduates will pursue health services research in the context of healthcare delivery and choose employment opportunities with hospitals and health systems, managed care companies, the pharmaceutical industry and consulting firms. Finally, graduates may pursue careers in government or other public service entities (such as private foundations), whose programs are increasingly dependent upon the
findings and methodologies of health services research.

For more details about our program, please see our website: [http://hsrmp.phhp.ufl.edu/academic-programs/ph-d-in-health-services-research](http://hsrmp.phhp.ufl.edu/academic-programs/ph-d-in-health-services-research).

Degrees

Doctor of Philosophy

Health Services Research Program Courses

- HSA6910: Supervised Research
- HSA6911: Research Seminar in Health Services Research
- HSA6930: Special Topics in Health Services Administration
- HSA6940: Supervised Teaching
- HSA7106: Seminar in Health Care Access and Utilization
- HSA7116: Health Services Organizational Research
- HSA7157: Research Foundations of Health Policy
- HSA7414: Society, Health, and Medical Care
- HSA7437: Advanced Health Economics
- HSA7707: Health Services Research Methods I
- HSA7708: Health Services Research Methods II
- HSA7759: Quality and Outcomes in Health Services Research
- HSA7905: Advanced Individual Study in Health Services Research
- HSA7936: Seminar in Health Care Costs and Financing
- HSA7938: Advanced Seminar in Health Services Research
- HSA7979: Advanced Research
- HSA7980: Research for Doctoral Dissertation

Health Services Research, Management, and Policy Departmental Courses

- HSA5103: Introduction to the U.S. Health Care System
- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6175: Health Care Financial Management
- HSA6177: Advanced Health Care Finance
- HSA6179: Introduction to Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6196: Health Services Operations Management
- HSA6197: Information Management in Health Administration
- HSA6198: Information Management in Health Administration
- HSA6342: Human Resource Management for Health Services Managers
- HSA6385: Performance Management for Health Care Managers
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6436: Health Economics
- HSA6855: Internship in Health Administration
- HSA6858: Internship in Health Services Research
- HSA6878: Externship in Legal Aspects of Health Services Administration
- HSA6905: Individual Study in Health Administration
- HSA6910: Supervised Research
- HSA6911: Research Seminar in Health Services Research
- HSA6930: Special Topics in Health Services Administration
- HSA6935: Seminar in Health Administration
- HSA6939: Capstone Seminar in Health Administration
- HSA6940: Supervised Teaching
- HSA6946: Internship in Public Health Management and Policy
- HSA7106: Seminar in Health Care Access and Utilization
- HSA7116: Health Services Organizational Research
- HSA7157: Research Foundations of Health Policy
- HSA7414: Society, Health, and Medical Care
- HSA7437: Advanced Health Economics
- HSA7707: Health Services Research Methods I
- HSA7708: Health Services Research Methods II
- HSA7759: Quality and Outcomes in Health Services Research
- HSA7905: Advanced Individual Study in Health Services Research
- HSA 7936: Seminar in Health Care Costs and Financing
- HSA 7938: Advanced Seminar in Health Services Research
- HSA 7979: Advanced Research
- HSA 7980: Research for Doctoral Dissertation
- PHC 6313: Environmental Health Concepts in Public Health

**College of Public Health and Health Professions Courses**

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6308: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6601: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
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- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neurophysiology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6940: Supervised Teaching
- RSD 7979: Advanced Research
- RSD 7980: Research for Doctoral Dissertation
- RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
- RCS 6066: Rehabilitation Issues in Human Growth and Development
- RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
- RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
- RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
- RCS 6412: Rehabilitation Counseling Theory and Practice
- RCS 6470: Human Sexuality and Disability
- RCS 6601: Forensic Rehabilitation Consultation I
- RCS 6602: Forensic Rehabilitation Consultation II
- RCS 6625: Community Counseling and Case Management
- RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
- RCS 6740: Rehabilitation Research
- RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
- RCS 6801: Rehabilitation Counseling Practicum
- RCS 6825: Internship in Rehabilitation Counseling
- RCS 6905: Individual Work
- RCS 6910: Supervised Research
- RCS 6931: Special Topics
- RCS 6940: Supervised Teaching
- RCS 6945: Advanced Rehabilitation Counseling Practicum
- RCS 6971: Research for Master's Degree

Occupational Therapy Department

Chair: W. C. Mann.
Graduate Coordinator: C. A. Velozo, J.J. Foss.

Complete faculty listing by department: Follow this link.

The Department of Occupational Therapy offers graduate programs in occupational therapy leading to the Master of Health Science (M.H.S.) degree (on-campus nonthesis option and distance learning nonthesis option) and the entry-level Master of Occupational Therapy (M.O.T.) degree. Complete descriptions of the requirements for these degrees are provided in the General Information section of this catalog.

Master of Health Science: This program is designed for students who have earned an undergraduate degree in Occupational therapy. The thesis option requires four semesters of course work and a formal research thesis, while the nonthesis option requires three semesters of course work and a research project. The program emphasizes research and advanced theories related to occupational therapy practice. Preparation for teaching, administrative, and other occupational therapy roles is supplemented through elective courses. A coherent series of elective courses related to occupational therapy must be approved by the supervisory committee chairperson before the second semester of work.

In addition to the requirements of the Graduate School, admission requires the candidate to have completed a curriculum in occupational therapy accredited by the American Occupational Therapy Association or by the World Federation of Occupational Therapists.

The distance learning degree option for the Master of Health Science is specifically intended to meet the needs of the working professional. The nonthesis program is designed to improve the knowledge and skills of working occupational therapists for practice in a complex and challenging health care system. It provides preparation for new practice areas, leadership roles, and independent practice and is delivered through the Internet. In addition to the departmental requirements listed above, applicants to the distance learning program must have basic personal computer competency and access to a computer that meets minimal configuration requirements.

Additional information about the Master of Health Science is available at http://www.phhp.ufl.edu or http://gradschool.rgp.ufl.edu or by telephone at (352)273-6817. For distance learning, see http://otdlm.phhp.ufl.edu/ or call toll-free (866)878-3297.

Master of Occupational Therapy: This entry-level degree program is designed for students who do not have an undergraduate degree in occupational therapy. The program provides students with a holistic perspective, including an understanding of the philosophical and theoretical bases for practice in the current health care environment. The M.O.T. program provides a strong background in theory, assessment, and therapeutic interventions. Before their professional preparation in the M.O.T. program, students receive a liberal education in their preprofessional baccalaureate studies, including several courses specifically focused for students planning to enter the M.O.T. program. Students may enroll in courses in the Bachelor of Health Science degree program at the bachelor’s level, or they may complete these courses on a postbaccalaureate level before entering the M.O.T. program. Students are only admitted into the M.O.T. program in summer term and graduate at the end of the fall term after 1.33 years of full-time study (5 semesters) and 58 credits.

Admission requirements include completion of an undergraduate degree and the prerequisite course work. Three letters of reference and a letter of application are required by the Department. Additional information is available at http://www.phhp.ufl.edu/ot/ and http://gradschool.rgp.ufl.edu or by telephone (352)273-6817.

This program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association. The address for ACOTE is 4720 Montgomery Lane, Box 31220, Bethesda, MD, 20814-1220. The phone number is (301) 652-2632. Graduates of the program are eligible to sit for the national certification exam administered by the National Board for Certification in Occupational Therapy (NBCOT). The website address of NBCOT is www.nbcot.org.

Other
Occupational Therapy

College

College of Public Health and Health Professions

Department/School

Occupational Therapy Department

Occupational Therapy Program Information

The UF Department of Occupational Therapy offers a Masters in Occupational Therapy (MOT). This program prepares students to meet the demands of a highly technological and fast paced American health care system.

The Masters in Occupational Therapy Degree Program is designed for students who do not have a entry-level professional level OT degree. To prepare to enter the Masters in Occupational Therapy program, undergraduate students may complete the University of Florida Health Science (BHS) degree program and the pre-OT track.

Applicants that have earned an undergraduate degree in a program other than UF's Health Science program can enter the MOT program through our Conditional Graduate program.

By completing the Liberal Arts prerequisites for the program, students study the biological, psychological and social systems that impact on the performance of occupational roles. The MOT program provides a strong background in theory, assessment and therapeutic interventions and assists student to develop a strong professional identity.

Students selected from the Health Science/pre-OT track undergraduate program can apply the 6 pre-OT track course toward the MOT requirements for the MOT program. Students who have graduated from the other colleges or universities can be admitted to the MOT program and complete the 6 pre-OT track courses as part of their graduate program prior to initiating coursework in the Masters in Occupational Therapy Degree Program. The six Health Science prerequisite courses are offered the Fall and Spring semesters preceding the Summer start of the MOT coursework.

For more information, please see our website: http://ot.phhp.ufl.edu/academics/mot/program-description.

Degrees

Master of Health Science

Master of Occupational Therapy

Occupational Therapy Courses

- OTH 5002: Foundations of Occupational Therapy
- OTH 5115C: Therapeutic Skills II: Areas of Occupation
- OTH 5324: Psychosocial Intervention
- OTH 5435: Therapeutic Skills I
- OTH 5722: Professional Development in Occupational Therapy
- OTH 5726C: Service Delivery and OT Management
- OTH 5770C: Research for Occupational Therapy
- OTH 5812: Practicum I
- OTH 5816: Practicum II
- OTH 5848: Internship I
- OTH 5849: Internship II
- OTH 6008: Neuroscience of Human Occupation
- OTH 6106: Assistive Technology and Occupational Performance
- OTH 6539: Occupational Therapy Theory
- OTH 6635: Principles of Occupational Therapy Screening and Evaluation I
- OTH 6636: Principles of Occupational Therapy Screening and Evaluation II
- OTH 6641: Occupational Therapy Interventions I
- OTH 6642: Occupational Therapy Interventions II
- OTH 6707: OT Manager
- OTH 6708: Issues in Occupational Therapy Practice I
- OTH 6709: Issues in Occupational Therapy Practice II
• OTH 6720: Trends and Issues in Health Care
• OTH 6763: Evidence Based Practice
• OTH 6861: Specialty Internship
• OTH 6905: Individual Work
• OTH 6907: Professional Development Project
• OTH 6933: Special Topics in Occupational Therapy
• OTH 6971: Research for Master's Thesis

College of Public Health and Health Professions Courses

• HSC 5938: Special Topics
• HSC 6905: Independent Study
• HSC 6939: Special Topics
• HSC 6940: Supervised Teaching
• PHC 6000: Epidemiology Methods I
• PHC 6001: Principles of Epidemiology in Public Health
• PHC 6002: Epidemiology of Infectious Diseases
• PHC 6003: Epidemiology of Chronic Diseases and Disability
• PHC 6009: Biology and Epidemiology of HIV/AIDS
• PHC 6011: Epidemiology Methods II
• PHC 6016: Social Epidemiology in Public Health
• PHC 6036: Environmental Infectious Diseases: A Molecular Approach
• PHC 6050: Statistical Methods for Health Sciences Research I
• PHC 6102: Introduction to Public Health Administrative Systems
• PHC 6103: Systems Thinking for Public Health
• PHC 6104: Evidence-Based Management of Public Health Programs
• PHC 6146: Public Health Program Planning and Evaluation
• PHC 6153: Public Policy and Aging
• PHC 6183: Disaster Preparedness and Emergency Response
• PHC 6194: Spatial Epidemiology
• PHC 6195: Health information for Diverse Populations: Theory & Methods
• PHC 6220: Overview of Long-Term Care
• PHC 6251: Assessment and Surveillance in Public Health
• PHC 6301: Aquatic Systems and Environmental Health
• PHC 6309: Environmental Justice Issues in Public Health
• PHC 6312: Water Quality and Human Health
• PHC 6313: Environmental Health Concepts in Public Health
• PHC 6316: Health, Risk, and Crisis Communication
• PHC 6317: Risk Communication for Public Health Practice
• PHC 6346: Occupational and Environmental Health Among Agriculture Workers
• PHC 6370: Public Health Biology
• PHC 6403: Adolescence, Risk Taking and Health
• PHC 6404: Gender, Sexuality, and Health
• PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
• PHC 6413: Critical Incidents and Violence in Communities
• PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
• PHC 6419: Biomedical and Psychological Aspects of Very Late Life
• PHC 6421: Public Health Law and Ethics
• PHC 6441: Health Disparities in the United States
• PHC 6445: Global Public Health and Development II
• PHC 6447: Ecology of HIV/Aids in the Rural South
• PHC 6512: Environmental Management of Vector-Borne Diseases
• PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
• PHC 6519: Zoonotic Diseases in Humans and Animals
• PHC 6520: Foodborne Diseases
• PHC 6530: Public Health Issues of Mothers and Children
• PHC 6543: Community Practice of Behavioral Health Risk Prevention
• PHC 6544: Health Behavior Interventions in Practice
• PHC 6561: Public Health Laboratory Techniques
• PHC 6585: Health Promotion and Disease Prevention
• PHC 6586: Interventions for Public Health
• PHC 6607: Critical Issues in Public Health
• PHC 6700: Social and Behavioral Research Methods
• PHC 6702: Exposure Measurement and Assessment
• PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
• PHC 6762: International Public Health
• PHC 6905: Independent Study
• PHC 6917: Supervised Research Project
• PHC 6901: Seminar in Contemporary Public Health Issues
• PHC 6931: Seminars in Public Health
• PHC 6937: Special Topics in Public Health
• PHC 6945: Public Health Practicum
• PHC 6946: Public Health Internship
• PHC 7000: Epidemiology Seminar I: Critical Evaluation, Research Proposals, and Methods
• PHC 7038: Psychiatric Epidemiology
• PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
• PHC 7727: Grant Writing for Population Health Research
• PHC 7752: Seminar in Instrument Development for Public Health
• PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
• PHC 7907: Social and Behavioral Sciences Journal Club
• PHC 7979: Advanced Research
• PHC 7980: Research for Doctoral Dissertation
Speech, Language and Hearing Sciences Department

Chair: Scott K. Griffiths
Graduate Coordinators: Kenneth J. Logan and Alice Holmes

Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Speech and Language Pathology (M.A.) Program

The Department of Speech, Language, and Hearing Sciences offers comprehensive academic training and clinical experience for students who are interested in a career in speech-language pathology. The five-year graduate degree. Graduate students take coursework in theoretical and applied audiology and audology and research. There are no specific undergraduate courses required for admission to the Master's degree program, although applicants with a strong science background are encouraged to apply. Graduate of this program are eligible for the Certificate of Clinical Competence in Audiology (CCC-A) administered by the American Speech-Language-Hearing Association, Board Certification in Audiology administered by the American Academy of Audiology, and for state licensure in audiology. For more information, contact Kenneth J. Logan and Alice Holmes, Ph.D. (klogan@ufl.edu and aholmes@ufl.edu).

Master of Arts (M.A.) Program in Communication Sciences and Disorders provides a state-of-the-art education in research practices in speech-language pathology and audiology with a strong interdisciplinary focus. Our goal is to prepare the next generation of researchers who are specialized in basic and applied science that relates to a range of speech, language, hearing, and swallowing functions. The program is designed to develop researchers who are skilled in independently designing and conducting original research that adds to the body of knowledge in the field. Students are individually mentored and pursue individually designed programs of study tailored to their interests and needs, which incorporate training in appropriate adjacent fields such as engineering, dentistry, gerontology, linguistics, psychology, medicine and special education. For more information, contact Lori Altmann, Ph.D. (laltmann@ufl.edu).

Ph.D. Program in Communication Sciences and Disorders offers comprehensive academic training and clinical experience for students who are interested in a career in speech-language pathology. The five-year graduate program culminates in the completion of either a clinical externship or a Master's thesis, and it provides graduates with a solid foundation for obtaining employment in a variety of work settings. Students have the opportunity to complete clinical practice at sites within the University of Florida's Health Science Center and at other medical, rehabilitative, and educational facilities on and near the campus. These sites allow students to gain experience with providing clinical services to a range of patient populations.

Applicants to the Master's program must demonstrate successful completion of pre-requisite coursework in both normal bases of communication and introductory concepts in communication disorders. Additional information about these pre-requisites is available on the Department website. Graduate of the program are eligible for the Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP) from the American Speech-Language-Hearing Association as well as state licensure in speech-language pathology. For more information, contact Kenneth J. Logan, Ph.D. (klogan@ufl.edu).

The Department of Speech, Language, and Hearing Sciences is committed to providing its students with a high-quality educational experience that will prepare them for rewarding employment in the areas of speech-language pathology and audiology, as well as for careers in life-long learning and professional development. The department strives to enroll a diverse group of students who possess both high ethical standards and strong academic skills. The application deadlines are January 15 for fall admission to the Ph.D. program, and February 1 for fall admission to the Master's and Au.D. programs.

For more information, please see the program pages below and our website: http://slhs.phhp.ufl.edu.
Other

Audiology

College of Public Health and Health Professions

Department/School

Speech, Language and Hearing Sciences Department

Degrees Offered with a Major in Audiology

Doctor of Audiology

Speech, Language and Hearing Sciences Departmental Courses

- ASL 5406: Manual Communication with the Hearing Impaired
- LAE 6505: Applied Preschool Language Disorders: Diagnosis and Treatment
- LIN 5741: Applied English Grammar
- SPA 5051: Clinical Observation in Audiology
- SPA 5102: Auditory Anatomy and Physiology
- SPA 5128: Speech Perception
- SPA 5204: Phonological Disorders
- SPA 5211: Voice Disorders
- SPA 5225: Principles of Speech Pathology: Stuttering
- SPA 5245: Communicative Disorders Related to Cleft Palate
- SPA 5254: Neurocognitive Language Disorders
- SPA 5304: Principles of Audiological Evaluation
- SPA 5315: Peripheral and Central Auditory Disorders
- SPA 5401: Speech Pathology Language Disorder
- SPA 5405: Language Disorders II
- SPA 5553: Instrumentation and Diagnosis in Speech-Language Pathology
- SPA 5563: Psychosocial Aspects of Hearing Loss
- SPA 5646: Speech and Language of the Deaf and Hard of Hearing
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6010: Basic Auditory Sciences
- SPA 6117: Science of Singing
- SPA 6133L: Hearing Aid Analysis Laboratory
- SPA 6207: Applied Phonological Disorders: Diagnosis and Treatment
- SPA 6211: Applied Voice Disorders: Diagnosis and Treatment
- SPA 6217: Vocal Health and Habilitation
- SPA 6229: Applied Fluency Disorders: Diagnosis and Treatment
- SPA 6233: Speech Motor Control Disorders
- SPA 6270: Auditory Processing Disorders
- SPA 6805: Introduction to Graduate Research
- SPA 6305: Pediatric Audiology
- SPA 6311: Medical Audiology
- SPA 6312: Advanced Audiology and Neuro-Otology
- SPA 6317: Vestibular Disorders
- SPA 6323: Audiologic Rehabilitation for Adults
- SPA 6324: Audiologic Rehabilitation for Children
- SPA 6340: Amplification I
- SPA 6341: Amplification II
- SPA 6342: Amplification III
- SPA 6390: Proseminar: Speech-Language Pathology and Audiology
- SPA 6410: Adult Language Disorders
- SPA 6416: Applied Neurogenic Disorders: Diagnosis and Treatment
- SPA 6430: Applied Developmental Disorders: Diagnosis and Treatment in Speech and Language
- SPA 6436: Issues in Autism Spectrum Disorders
- SPA 6506: Clinical Clerkship in Audiology
- SPA 6507: Applied Augmentative and Alternative Communication
- SPA 6521: Practicum in Speech-Language Diagnostics: UFSC
- SPA 6524: Practicum in Speech-Language Therapy: UFSC
- SPA 6531: Clinical Practice in Hearing Assessment
- SPA 6533: Clinical Practice in Aural Rehabilitation
- SPA 6559: Alternative and Augmentative Communication
- SPA 6564: Communication and Aging
- SPA 6565: Seminar in Dysphagia
- SPA 6568: Clinical Evaluation in Medical Speech-Language Pathology
- SPA 6570: Seminar: Professional Aspects of Speech-Language Pathology
- SPA 6561: Special Clinical
- SPA 6580: Communication Disorders in Medically Complex Pediatric Populations
- SPA 6905: Individual Study
- SPA 6910: Supervised Research
- SPA 6930: Proseminar in Speech-Language Pathology and Audiology
- SPA 6935: Applied Reading Disabilities: Diagnosis and Treatment
- SPA 6936: Special Topics
- SPA 6940: Supervised Teaching
- SPA 6942: Externship in Speech-Language Pathology
- SPA 6971: Research for Master's Thesis
- SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
- SPA 7306: Audiology Assessment in a Medical Setting
- SPA 7318: Clinical Auditory Electrophysiology
- SPA 7319: Balance Disorders: Evaluation and Treatment
- SPA 7325: Audiolinguistics of Adult Language Disorders
- SPA 750D: Public School Practicum
- SPA 7523: Practicum in Speech Pathology in a Medical/Dental Setting
- SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
- SPA 7566: Counseling Individuals with Hearing Losses
- SPA 7833: Audiology Research Project
- SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
- SPA 7945: Graduate Practicum in Audiology
- SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology
- SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology
- SPA 7958: Clinical Externship
- SPA 7979: Advanced Research
- SPA 7980: Research for Doctoral Dissertation

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6163: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
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- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
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- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
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• PHC 6586: Interventions for Public Health
• PHC 6607: Critical Issues in Public Health
• PHC 6700: Social and Behavioral Research Methods
• PHC 6702: Exposure Measurement and Assessment
• PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
• PHC 6762: International Public Health
• PHC 6805: Independent Study
• PHC 6917: Supervised Research Project
• PHC 6601: Seminar in Contemporary Public Health Issues
• PHC 6631: Seminars in Public Health
• PHC 6937: Special Topics in Public Health
• PHC 6945: Public Health Practicum
• PHC 6946: Public Health Internship
• PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
• PHC 7038: Psychiatric Epidemiology
• PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
• PHC 7727: Grant Writing for Population Health Research
• PHC 7752: Seminar in Instrument Development for Public Health
• PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
• PHC 7907: Social and Behavioral Science Journal Club
• PHC 7979: Advanced Research
• PHC 7980: Research for Doctoral Dissertation
• PHT 5156: Exercise Physiology
• PHT 6125C: Concepts in Clinical Biomechanics
• PHT 6127C: Control of Gait and Posture
• PHT 6167C: Applied Neurophysiology for Physical Therapy
• PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
• PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
• PHT 6615L: Research Instrumentation in Physical Therapy
• PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
• RSD 6110: Rehabilitation Science Theory and Application I
• RSD 6112: Rehabilitation Science Theory and Application II
• RSD 6114: Rehabilitation in the United Kingdom
• RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
• RSD 6700: Rasch Measurement: Introduction and Application
• RSD 6705: Research Methods in Rehabilitation
• RSD 6706: Scientific Writing for the Rehabilitation Professional
• RSD 6900: College Classroom: Teaching Process and Practice
• RSD 6905: Individual Work
• RSD 6910: Supervised Research
• RSD 6930: Special Topics in Rehabilitation Science
• RSD 6940: Supervised Teaching
• RSD 7979: Advanced Research
• RSD 7980: Research for Doctoral Dissertation
• RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
• RCS 6066: Rehabilitation Issues in Human Growth and Development
• RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
• RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
• RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
• RCS 6412: Rehabilitation Counseling Theory and Practice
• RCS 6470: Human Sexuality and Disability
• RCS 6601: Forensic Rehabilitation Consultation I
• RCS 6602: Forensic Rehabilitation Consultation II
• RCS 6625: Community Counseling and Case Management
• RCS 6841: Applied Case Management and Consultation in Rehabilitation Counseling
• RCS 6740: Rehabilitation Research
• RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
• RCS 6801: Rehabilitation Counseling Practicum
• RCS 6825: Internship in Rehabilitation Counseling
• RCS 6905: Individual Work
• RCS 6910: Supervised Research
• RCS 6931: Special Topics
• RCS 6940: Supervised Teaching
• RCS 6945: Advanced Rehabilitation Counseling Practicum
• RCS 6971: Research for Master's Degree

Communication Sciences and Disorders

College of Public Health and Health Professions
Department/School

Speech, Language and Hearing Sciences Department

Degrees Offered with a Major in Communication Sciences and Disorders

Doctor of Philosophy

Master of Arts

Speech, Language and Hearing Sciences Departmental Courses

- ASL 5406: Manual Communication with the Hearing Impaired
- LAE 6505: Applied Preschool Language Disorders: Diagnosis and Treatment
- LIN 5741: Applied English Grammar
- SPA 5051: Clinical Observation in Audiology
- SPA 5102: Auditory Anatomy and Physiology
- SPA 5128: Speech Perception
- SPA 5204: Phonological Disorders
- SPA 5211: Voice Disorders
- SPA 5225: Principles of Speech Pathology: Stuttering
- SPA 5245: Communicative Disorders Related to Cleft Palate
- SPA 5254: Neuropsychological Language Disorders
- SPA 5304: Principles of Audiological Evaluation
- SPA 5315: Peripheral and Central Auditory Disorders
- SPA 5401: Speech Pathology Language Disorder
- SPA 5405: Language Disorders II
- SPA 5553: Instrumentation and Diagnosis in Speech-Language Pathology
- SPA 5563: Psychosocial Aspects of Hearing Loss
- SPA 5646: Speech and Language of the Deaf and Hard of Hearing
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6010: Basic Auditory Sciences
- SPA 6117: Science of Singing
- SPA 6133L: Hearing Aid Analysis Laboratory
- SPA 6207: Applied Phonological Disorders: Diagnosis and Treatment
- SPA 6211: Applied Voice Disorders: Diagnosis and Treatment
- SPA 6217: Vocal Health and Habilitation
- SPA 6229: Applied Fluency Disorders: Diagnosis and Treatment
- SPA 6233: Speech Motor Control Disorders
- SPA 6270: Auditory Processing Disorders
- SPA 6805: Introduction to Graduate Research
- SPA 6815: Special Topics in Audiology and Neuro-Otology
- SPA 6827: Advanced Audiology and Neuro-Otology
- SPA 6836: Issues in Autism Spectrum Disorders
- SPA 6838: Communication Disorders in Medically Complex Pediatric Populations
- SPA 6905: Individual Study
- SPA 6910: Supervised Research
• SPA 6930: Proseminar in Speech-Language Pathology and Audiology
• SPA 6935: Applied Reading Disabilities: Diagnosis and Treatment
• SPA 6936: Special Topics
• SPA 6940: Supervised Teaching
• SPA 6942: Externship in Speech-Language Pathology
• SPA 6971: Research for Master's Thesis
• SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
• SPA 7306: Audiologic Assessment in a Medical Setting
• SPA 7318: Clinical Auditory Electrophysiology
• SPA 7319: Balance Disorders: Evaluation and Treatment
• SPA 7325: Audiologic Rehabilitation
• SPA 7343: Cochlear Implants and Assistive Devices
• SPA 7348: Principles of Amplification
• SPA 7353: Environmental Hearing Conservation
• SPA 7354: Seminar in Audiology: Hearing Conservation and Noise Control
• SPA 7351: Business and Professional Issues in Audiology
• SPA 7415: Neurolinguistics of Adult Language Disorders
• SPA 7500: Public School Practicum
• SPA 7523: Practicum in Speech Pathology in a Medical/Dental Setting
• SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
• SPA 7566: Counseling Individuals with Hearing Losses
• SPA 7563: Audiology Research Project
• SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
• SPA 7945: Graduate Practicum in Audiology
• SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology
• SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology
• SPA 7958: Clinical Externship
• SPA 7979: Advanced Research
• SPA 7980: Research for Doctoral Dissertation

College of Public Health and Health Professions Courses

• HSC 5938: Special Topics
• HSC 6905: Independent Study
• HSC 6939: Special Topics
• HSC 6940: Supervised Teaching
• PHC 6000: Epidemiology Methods I
• PHC 6001: Principles of Epidemiology in Public Health
• PHC 6002: Epidemiology of Infectious Diseases
• PHC 6003: Epidemiology of Chronic Diseases and Disability
• PHC 6009: Biology and Epidemiology of HIV/AIDS
• PHC 6011: Epidemiology Methods II
• PHC 6016: Social Epidemiology in Public Health
• PHC 6036: Environmental Infectious Diseases: A Molecular Approach
• PHC 6050: Statistical Methods for Health Sciences Research I
• PHC 6102: Introduction to Public Health Administrative Systems
• PHC 6103: Systems Thinking for Public Health
• PHC 6104: Evidence-Based Management of Public Health Programs
• PHC 6146: Public Health Program Planning and Evaluation
• PHC 6153: Public Policy and Aging
• PHC 6183: Disaster Preparedness and Emergency Response
• PHC 6194: Spatial Epidemiology
• PHC 6195: Health Information for Diverse Populations: Theory & Methods
• PHC 6220: Overview of Long-Term Care
• PHC 6251: Assessment and Surveillance in Public Health
• PHC 6301: Aquatic Systems and Environmental Health
• PHC 6309: Environmental Justice Issues in Public Health
• PHC 6312: Water Quality and Human Health
• PHC 6313: Environmental Health Concepts in Public Health
• PHC 6316: Health, Risk, and Crisis Communication
• PHC 6317: Risk Communication for Public Health Practice
• PHC 6346: Occupational and Environmental Health Among Agriculture Workers
• PHC 6370: Public Health Biology
• PHC 6403: Adolescence, Risk Taking and Health
• PHC 6404: Gender, Sexuality, and Health
• PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
• PHC 6413: Critical Incidents and Violence in Communities
• PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
• PHC 6419: Biomedical and Psychological Aspects of Very Late Life
• PHC 6421: Public Health Law and Ethics
• PHC 6441: Health Disparities in the United States
• PHC 6445: Global Public Health and Development II
• PHC 6447: Ecology of HIV/AIDS in the Rural South
• PHC 6512: Environmental Management of Vector-Borne Diseases
• PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
• PHC 6519: Zoonotic Diseases in Humans and Animals
• PHC 6520: Foodborne Diseases
• PHC 6530: Public Health Issues of Mothers and Children
• PHC 6543: Community Practice of Behavioral Health Risk Prevention
• PHC 6544: Health Behavior Interventions in Practice
• PHC 6561: Public Health Laboratory Techniques
• PHC 6585: Health Promotion and Disease Prevention
• PHC 6586: Interventions for Public Health
• PHC 6607: Critical Issues in Public Health
• PHC 6700: Social and Behavioral Research Methods
• PHC 6702: Exposure Measurement and Assessment
• PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
• PHC 6762: International Public Health
• PHC 6905: Independent Study
• PHC 6917: Supervised Research Project
• PHC 6931: Seminars in Public Health
• PHC 6937: Special Topics in Public Health
• PHC 6945: Public Health Practicum
• PHC 6946: Public Health Internship
• PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
• PHC 7038: Psychiatric Epidemiology
• PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
• PHC 7727: Grant Writing for Population Health Research
• PHC 7752: Seminar in Instrument Development for Public Health
• PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
• PHC 7907: Social and Behavioral Science Journal Club
• PHC 7979: Advanced Research
• PHC 7980: Research for Doctoral Dissertation
• PHT 5156: Exercise Physiology
• PHT 6125C: Concepts in Clinical Biomechanics
• PHT 6127C: Control of Gait and Posture
• PHT 6167C: Applied Neurophysiology for Physical Therapy
• PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
• PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
• PHT 6615L: Research Instrumentation in Physical Therapy
• PHT 6718: Neuropsychology: A Foundation for Neuromotivation
• RSD 6110: Rehabilitation Science Theory and Application I
• RSD 6112: Rehabilitation Science Theory and Application II
• RSD 6114: Rehabilitation in the United Kingdom
• RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
• RSD 6700: Rasch Measurement: Introduction and Application
• RSD 6705: Research Methods in Rehabilitation
• RSD 6706: Scientific Writing for the Rehabilitation Professional
• RSD 6900: College Classroom: Teaching Process and Practice
• RSD 6905: Individual Work
• RSD 6910: Supervised Research
• RSD 6930: Special Topics in Rehabilitation Science
• RSD 6940: Supervised Teaching
• RSD 7979: Advanced Research
• RSD 7980: Research for Doctoral Dissertation
• RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
• RCS 6066: Rehabilitation Issues in Human Growth and Development
• RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
• RCS 6342C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
• RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
• RCS 6412: Rehabilitation Counseling Theory and Practice
• RCS 6470: Human Sexuality and Disability
• RCS 6601: Forensic Rehabilitation Consultation I
• RCS 6602: Forensic Rehabilitation Consultation II
• RCS 6625: Community Counseling and Case Management
• RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
• RCS 6740: Rehabilitation Research
• RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
• RCS 6801: Rehabilitation Counseling Practicum
• RCS 6825: Internship in Rehabilitation Counseling
• RCS 6905: Individual Work
• RCS 6910: Supervised Research
• RCS 6931: Special Topics
• RCS 6940: Supervised Teaching
• RCS 6945: Advanced Rehabilitation Counseling Practicum
• RCS 6971: Research for Master's Degree

College of Veterinary Medicine

Dear G. F. Hoffsis

Complete faculty listings: [Follow this link](http://www.vetmed.ufl.edu). The UF College of Veterinary Medicine is the state's only veterinary college. UF's College of Veterinary Medicine offers comprehensive services to the public through teaching, research, extension and state-of-the-art patient care.

For more information, please see our website: [http://www.vetmed.ufl.edu](http://www.vetmed.ufl.edu)

[Departments and Programs within the College of Veterinary Medicine](http://www.vetmed.ufl.edu)

[College of Veterinary Medicine Courses](http://www.vetmed.ufl.edu)

Other
Veterinary Medical Sciences

College

College of Veterinary Medicine

Veterinary Medical Sciences Program

Chair: C. Risco
Graduate Coordinator (Large Animals): I. Larkin
Graduate Coordinator (Small Animals): D. Lewis

Complete faculty listing by department: Follow this link.

The College of Veterinary Medicine offers graduate study leading to the Master of Science and Doctor of Philosophy degrees in veterinary medical sciences. The College also offers certification and a nonthesis concentration in forensic toxicology via web-based distance education. Minimum requirements for the Master of Science and Doctor of Philosophy degrees are described in the Graduate Degrees section of this catalog.

The program provides extensive training in basic and applied research for qualified students with a baccalaureate degree or a D.V.M. or equivalent degree. Applicants are expected to have a background in the biological sciences, mathematics, chemistry, and physics. Particular attention is paid to the advanced education of veterinarians, those interested solely in research, and those interested in combining their graduate study with residency training in a clinical specialty. The College offers three areas of specialization within the veterinary medical sciences program:

**Large and Small Animal Clinical Sciences:** Physiology, endocrinology, aquatic animal health, fish diseases, gastroenterology, immunology, vision sciences, perinatology, reproductive biology, pharmacokinetics, veterinary sports medicine, and wildlife and zoological medicine (I. Larkin and D. Lewis Graduate Coordinators).

**Physiological Sciences:** Comparative anatomy, physiology, pharmacology, biochemistry, neurobiology, nutrition, reproductive biology, and toxicology (R. Johnson, Graduate Coordinator).

**Infectious Diseases and Experimental Pathology:** Bacteriology, parasitology, virology, immunopathology, molecular mechanisms of disease and host defense, epidemiology, and veterinary public health (M.T. Long, Graduate Coordinator).

The College participates in the interdisciplinary specialization in toxicology, in cooperation with other departments and colleges in both the Health Science Center and the Institute of Food and Agricultural Sciences and with the Center for Environmental and Human Toxicology (see the Toxicology description under Interdisciplinary Graduate Studies).

The following courses in related areas are acceptable for graduate major credit in veterinary medical sciences: **Physiological Sciences:** ANS 6704, ANS 6751, BCH 5413, BCH 6206, BCH 6415, BCH 6740, BM 6510, GMS 6400C, GMS 6735, GMS 7706C, GMS 7743. **Infectious Diseases and Experimental Pathology:** BCH 5413, BCH 6415, BM 603, GMS 5304C, GMS 6140, GMS 6152, GMS 6330, GMS 6332, GMS 6333, GMS 6381, GMS 6382, GMS 6421, STA 6208, STA 6166, STA 6176. **Large and Small Animal Clinical Sciences:** all of the above.

Degrees Offered with a Major in Veterinary Medical Sciences

Doctor of Philosophy

without a concentration

concentration in Animal Molecular and Cellular Biology

concentration in Clinical and Translational Science

concentration in Toxicology

Master of Science
without a concentration

concentration in Forensic Toxicology

concentration in Shelter Medicine

concentration in Veterinary Forensic Sciences

Courses

- GMS 6070: Sensory and Motor Systems
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
- GMS 6312: Clinical Chemistry and Toxicology
- GMS 6313: Clinical Chemistry and Toxicology: A Rotation
- GMS 6393: Seminar in Clinical Chemistry
- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6116: In Vivo and In Vitro Stability of Drugs
- PHA 6118: Molecular Diversity
- PHA 6125: Pharmacokinetics and Biopharmaceutics
- PHA 6170C: Pharmaceutical Product Formulation
- PHA 6183: Pharmaceutical Gene Delivery
- PHA 6185: Pharmaceutical Drug Development
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6291: Pharmaceutical Health Care Systems
- PHA 6416: Pharmacoepidemiology I
- PHA 6417: Pharmacoepidemiology II
- PHA 6427: Pharmacogenetics of Drug Metabolism
- PHA 6440: Seminar in Drug Discovery
- PHA 6717: Measurement in Pharmacy Administration Research
- PHA 6793: Evidentiary Basis of Pharmaceutical Use
- PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
- PHA 6798: The Use and Abuse of Statistics in Drug Regulation
- PHA 6799: Patient Safety Program Evaluation
- PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA 6891: Introduction to Pharmacoepidemiology
- PHA 6892: Practices and Procedures of the IRB
- PHA 6893: Research Ethics
- PHA 6894: Introduction to Graduate Studies
- PHA 6896: Preclinical Drug Evaluation
- PHA 6937: Topics in Pharmaceutical Administration
- PHC 6107: Introduction to Veterinary Public Health
- VME 5162C: Avian Diseases
- VME 5244: Physiology: Organ Systems
- VME 6008: Care of Aquatic Megavertebrates
- VME 6010: Aquatic Animal Conservation Issues
- VME 6011: Introduction to Aquatic Wildlife Health Issues
- VME 6017: Marine Health & Conservation
VME 6051: Cruelty to Animals and Interpersonal Violence
VME 6052: Animal Crime Scene Processing
VME 6054: Scientific and Legal Principles of Forensic Evidence
VME 6056: Animal Law
VME 6078C: Andrology
VME 6135: Diseases of Laboratory Animals I
VME 6136: Diseases of Laboratory Animals II
VME 6186: Advanced Topics in Disease Pathogenesis
VME 6421: Biology and Molecular Biology of Avian Viruses
VME 6430C: Contemporary Issues in Small Animal Surgery
VME 6464: Molecular Pathogenesis
VME 6505: Autoimmunity
VME 6570: Wildlife Conservation and Forensic Science
VME 6571: Forensic Applied Animal Behavior
VME 6572: Forensic Aspects of Agricultural Animal Welfare
VME 6573: Wildlife Forensic Genetics
VME 6575: Veterinary Forensic Medicine
VME 6576: Veterinary Forensic Pathology
VME 6577: Veterinary Forensic Pathology in Practice
VME 6578: Forensic Veterinary Osteology
VME 6579: Veterinary Forensic Radiology and Imaging
VME 6602: General Toxicology
VME 6603: Advanced Toxicology
VME 6604: Literature Survey in Toxicology
VME 6605: Toxic Substances
VME 6606: Ecological Risk Assessment
VME 6607: Human Health Risk Assessment
VME 6613: Forensic Toxicology I
VME 6614: Forensic Toxicology II
VME 6615: Veterinary Forensic Toxicology
VME 6650: Principles of Mammalian Pharmacology
VME 6766: Laboratory Quality Assurance/Quality Control
VME 6767: Issues in the Responsible Conduct of Research
VME 6771: Veterinary Epidemiologic Research
VME 6905: Problems in Veterinary Medical Sciences
VME 6910: Supervised Research
VME 6931: Seminar in Veterinary Medical Sciences
VME 6932: Seminar in Physiological Sciences
VME 6933: Seminar in Infectious Diseases and Experimental Pathology
VME 6934: Topics in Veterinary Medical Sciences
VME 6936: Seminar in Pathophysiology
VME 6938: Topics in Aquatic Animal Health
VME 6940: Supervised Teaching
VME 6971: Research for Master's Thesis
VME 7979: Advanced Research
VME 7980: Research for Doctoral Dissertation
WIS 5323C: Impact of Diseases on Wildlife Population

College of Pharmacy Courses

PHA 5171: Pharmaceutical Biotechnology
PHA 6521C: Research Techniques in Pharmacodynamics
PHA 6806: Pharmacoeconomic Modeling
PHA 6910: Supervised Research
PHA 6935: Selected Topics in Pharmacy
PHA 6936: Advanced Topics in Pharmaceutical Sciences
PHA 6938: Research Seminar
PHA 6940: Supervised Teaching
PHA 6971: Research for Master's Thesis
PHA 7979: Advanced Research
PHA 7980: Research for Doctoral Dissertation

Pharmacodynamics Courses

PHA 5531: Neurotoxicology
PHA 6508: Systems Physiology and Pathophysiology I
PHA 6509: Systems Physiology and Pathophysiology II
PHA 6512L: Experimental Research Training in Pharmacodynamics
PHA 6521C: Research Techniques in Pharmacodynamics
PHA 6522L: ICBR Molecular Techniques Laboratory
PHA 6540: Neurochemical Foundation of Pharmacodynamics
PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

GMS 6563: Molecular Pharmacology
Animal Molecular and Cellular Biology Department

Director: P.J. Hansen
Complete faculty listing by department: Follow this link.

For more information about the program, contact P.J. Hansen at pjhansen@ufl.edu, follow the link below to our catalog page, or visit the program's website at http://www.animal.ufl.edu/amcb/

Other

Animal Molecular and Cellular Biology

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine

Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
- Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program's website at http://www.animal.ufl.edu/amcb/.

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5905: Individual Study
- ALS 6046: Grant Writing
- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
Programs within the College of Design, Construction, and Planning

College of Design, Construction, and Planning

Dear: C. Silver

Complete faculty listings: Follow this link.

DCP is home to five independent professional disciplines: architecture, construction management, interior design, landscape architecture and urban and regional planning. The college also is home to an interdisciplinary program in historic preservation, which allows graduate students to gain expertise in research and application of historic preservation in the United States and abroad.

Accreditation and Degrees

The academic programs in the college have an accreditation process from the professional organizations of each discipline.

- Architecture – National Architectural Accrediting Board
DCP offers both undergraduate and graduate degrees and programs. Through its academic units, the college offers doctoral, master's, and bachelor's degrees, as well as distance education programs, combined degrees, joint degrees, certificate programs, and academic minors.

**College Institutes, Centers and Programs**

Research and service projects conducted through the research centers and institutes often entail multidisciplinary, cross-campus student input and effort. Each division of the college is involved in ongoing projects that advance both scholarly study and professional practice. The college contributes to community, state, regional and national efforts to conserve and improve the quality of the natural and built environments through its research centers. The college's teaching and research programs have national and international prominence.

For more information, please see our website: [http://www.dcp.ufl.edu](http://www.dcp.ufl.edu)

**Departments and Programs within the College of Design, Construction, and Planning**

**College of Design, Construction, and Planning Courses**

**Other**

**Design, Construction, and Planning (Ph.D.)**

**College**

**College of Design, Construction, and Planning**

**Degrees Offered with a Major in Design, Construction, and Planning**

**Doctor of Philosophy**

without a concentration

concentration in Construction Management

  - optional second concentration in Geographic Information Systems

concentration in Geographic Information Systems

concentration in Historic Preservation

  - optional second concentration in Geographic Information Systems

concentration in Interior Design

  - optional second concentration in Geographic Information Systems

concentration in Landscape Architecture

  - optional second concentration in Geographic Information Systems

concentration in Urban and Regional Planning

  - optional second concentration in Geographic Information Systems
Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6357: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Connections
- ARC 6399: Advanced Topics in Urban Design
- ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
- ARC 6576: Architectural Structures
- ARC 6611: Advanced Topics in Architectural Technology
- ARC 6621: Graduate Environmental Technology 2
- ARC 6642: Architectural Acoustic Design Laboratory
- ARC 6643: Architectural Acoustics
- ARC 6670: Lighting Design Seminar
- ARC 6685: Life Safety, Sanitation, and Plumbing Systems
- ARC 6705: Graduate Architectural History 3
- ARC 6711: Architecture of the Ancient World
- ARC 6750: Architectural History: America
- ARC 6773: Strains of Modernism
- ARC 6793: Advanced Topics in Regional Architecture
- ARC 6805: Architectural Conservation
- ARC 6821: Preservation Problems and Processes
- ARC 6822: Preservation Programming and Design
- ARC 6851: Technology of Preservation: Materials and Methods I
- ARC 6852: Technology of Preservation: Materials and Methods II
- ARC 6883: Vernacular Architecture & Sustainability
- ARC 6911: Architectural Research
- ARC 6912: Architectural Research II
- ARC 6913: Architectural Research III
- ARC 6932: Advanced Topics in Architectural Methods
- ARC 6933: Sustainable Site Design
- ARC 6934: European Approach to Sustainable Design
- ARC 6935: Seminar in Sustainable Design
- ARC 6940: Supervised Teaching
- ARC 6971: Research for Master's Thesis
- ARC 6979: Master's Research Project

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
BCN 6910: Supervised Research
BCN 6933: Advanced Construction Management
BCN 6934: Construction Research
BCN 6940: Supervised Teaching
BCN 6971: Research for Master's Thesis
FES 6705: Communications in Emergency Management
FES 6724: Fire and Emergency Services Response Planning
FES 6726: Hazard Mitigation and Preparedness
FES 6735: International Emergency/Disaster Management
FES 6736: Homeland Security and Emergency Management
FES 6786: Research Methods in FES
FES 6806: Disaster Response and Recovery
FES 6826: Emergency Services - Disaster Planning
FES 6827: Business Continuity and Disaster Planning
FES 6836: Impacts of Natural and Man-made Disasters on Buildings
FES 6916: Research for Master's Report
FES 6940: Practicum in FES
ICM 5905: Special Studies
ICM 6420: Commercial Management and Cost Control
ICM 6440: Construction Value Management
ICM 6680: Principles of International Sustainable Construction
ICM 6682: Construction Ecology and Metabolism
ICM 6684: High-Performance Green Building Delivery Systems
ICM 6710: Construction Human Resource Management
ICM 6750: Managing Construction Information Technology
ICM 6751: International Construction Management
ICM 6752: Construction Finance and Investment
ICM 6761: Advanced Planning, Scheduling, and Logistics
ICM 6762: Construction Risk Management
ICM 6770: Advanced Project Safety Management
ICM 6772: International Strategic Management
ICM 6905: Directed Independent Study in International Construction
ICM 6910: Supervised Research
ICM 6930: Construction Communication and Research
ICM 6934: International Construction Research

Interior Design Departmental Courses

IND 5023: Introduction to Architectural Interiors
IND 5106: History of Interior Design I
IND 5136: History of Interior Design II
IND 5212C: Architectural Interiors I
IND 5213C: Introduction to Architectural Interiors Lab
IND 5227C: Advanced Architectural Interiors I
IND 5231C: Architectural Interiors II
IND 5232C: Advanced Architectural Interiors II
IND 5317C: Interior Design Communication Systems
IND 5427C: Interior Design Construction Documents
IND 5428: Materials for Interior Design
IND 5434C: Interior Lighting
IND 5445C: Furniture Design
IND 5454C: Advanced Interior Design Detailing and Construction Documents
IND 5464C: Computer Applications in Three-Dimensional Design
IND 5468: Interior Environmental Technology
IND 5508: Business and Professional Practices for Interior Designers
IND 5638: Design Environments and Human Interaction
IND 5937: Current Topics in Interior Design
IND 6239: Advanced Topics in Interior Design Studio
IND 6639: Methods of Interior Design Research
IND 6906: Independent Studies and Readings
IND 6940: Supervised Teaching
IND 6941: Interior Design Internship
IND 6971: Research for Master's Thesis

Landscape Architecture Departmental Courses

LAA 5331: Site Design Methodologies
LAA 5366: Principles of Landscape Architecture
LAA 6231: Landscape Architecture Theory
LAA 6322: Project Management for Landscape Architects
LAA 6342: Landscape Architecture Criticism
LAA 6349C: Design Communications for Landscape Architects
LAA 6382: Ecological and Environmental Policy
LAA 6525L: Advanced Landscape Construction Design
LAA 6536: Landscape Management
LAA 6556C: Advanced Landscape Architectural Design
LAA 6713: Cultural Landscapes
LAA 6716: History of Landscape Architecture
LAA 6905: Directed Study
Urban and Regional Planning Departmental Courses

- URP 6042: Urban Economy
- URP 6061: Planning Administration and Ethics
- URP 6100: Planning Theory and History
- URP 6122: Alternative Conflict Management
- URP 6131: Growth Management Powers I
- URP 6132: Growth Management Seminar
- URP 6203: Planning Research Design
- URP 6231: Quantitative Data Analysis for Planners
- URP 6270: Survey of Planning Information Systems
- URP 6271: Planning Information Systems
- URP 6272: Advanced Planning Information Systems
- URP 6274: GPS for Planners: Introduction to Global Positioning System
- URP 6275: Spatial Database Design and Development
- URP 6312: Land Development Planning and Evaluation
- URP 6341: Urban Planning Project
- URP 6421: Environmental Impact Statements
- URP 6424: Sustainable Urbanism in the Americas
- URP 6428: Advanced Environmental Planning
- URP 6429: Natural Resources Planning and Management
- URP 6445: Planning for Climate Change
- URP 6526: Health and the Built Environment
- URP 6541: Economic Development Planning
- URP 6542: Urban Land Economics
- URP 6543: Seminar in Capital Improvement Finance
- URP 6547: Local Public Finance for Urban Planners
- URP 6601: State Planning
- URP 6603: Development Review
- URP 6610: International Development Planning
- URP 6716: Transportation Policy and Planning
- URP 6718: Bikeways Planning and Design
- URP 6745: Housing, Public Policy, and Planning
- URP 6746: Topical Debates in Housing
- URP 6821: Transportation and Land-Use Modeling
- URP 6871: Planning and Design I
- URP 6872: Planning and Design II
- URP 6880: Defensible Space and CPTED in Urban Design
- URP 6884: Community Conservation and Revitalization
- URP 6905: Exploration and Directed Study
- URP 6910: Supervised Research
- URP 6920: Colloquium
- URP 6931: Topical Seminar
- URP 6933: Planning Information Seminar
- URP 6940: Supervised Teaching
- URP 6941: Urban Planning Internship
- URP 6971: Research for Master's Thesis
- URP 6979: Terminal Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6900: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
Historic Preservation

Degrees Offered with a Major in Historic Preservation

Master of Historic Preservation

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6357: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Connections
- ARC 6399: Advanced Topics in Urban Design
- ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
- ARC 6576: Architectural Structures
- ARC 6611: Advanced Topics in Architectural Technology
- ARC 6621: Graduate Environmental Technology 2
- ARC 6642: Architectural Acoustic Design Laboratory
- ARC 6643: Architectural Acoustics
- ARC 6670: Lighting Design Seminar
- ARC 6685: Life Safety, Sanitation, and Plumbing Systems
- ARC 6705: Graduate Architectural History 3
- ARC 6711: Architecture of the Ancient World
- ARC 6750: Architectural History: America
- ARC 6773: Strains of Modernism
- ARC 6793: Advanced Topics in Regional Architecture
- ARC 6805: Architectural Conservation
- ARC 6821: Preservation Problems and Processes
- ARC 6822: Preservation Programming and Design
- ARC 6851: Technology of Preservation: Materials and Methods I
- ARC 6852: Technology of Preservation: Materials and Methods II
- ARC 6883: Vernacular Architecture & Sustainability
- ARC 6911: Architectural Research
- ARC 6912: Architectural Research II
- ARC 6913: Architectural Research III
- ARC 6932: Advanced Topics in Architectural Methods
- ARC 6933: Sustainable Site Design
- ARC 6934: European Approach to Sustainable Design
- ARC 6935: Seminar in Sustainable Design
- ARC 6940: Supervised Teaching
- ARC 6971: Research for Master’s Thesis
- ARC 6979: Master’s Research Project

Construction Management Departmental Courses
BCN 5470: Construction Methods Improvements
BCN 5618C: Comprehensive Estimating
BCN 5625: Construction Cost Analysis
BCN 5705C: Project Management for Construction
BCN 5715: Advanced Construction Labor Problems
BCN 5722: Advanced Construction Planning and Control
BCN 5729: Design-Build Delivery Methods
BCN 5737: Advanced Issues in Construction Safety and Health
BCN 5754C: Site Development
BCN 5776: International Construction Business Management
BCN 5778: Facilities Operation and Maintenance
BCN 5789C: Construction Project Delivery
BCN 5874: Equipment and Methods for Heavy Construction
BCN 5885: Methods and Management for Heavy Construction
BCN 5905: Special Studies in Construction
BCN 5949: Graduate Construction Management Internship
BCN 5957: Advanced International Studies in Construction
BCN 6036: Research Methods in Construction
BCN 6580: High-Performance Green Building Delivery Systems
BCN 6585: Sustainable Construction
BCN 6586: Construction Ecology and Metabolism
BCN 6621: Bidding Strategy
BCN 6641: Construction Value Engineering
BCN 6748: Construction Law
BCN 6755: Construction Financial Management
BCN 6756: Housing Economics and Policy
BCN 6777: Construction Management Processes
BCN 6785: Construction Information Systems
BCN 6905: Directed Independent Study in Construction
BCN 6910: Supervised Research
BCN 6933: Advanced Construction Management
BCN 6934: Construction Research
BCN 6940: Supervised Teaching
BCN 6971: Research for Master's Thesis
FES 6705: Communications in Emergency Management
FES 6724: Fire and Emergency Services Response Planning
FES 6726: Hazard Mitigation and Preparedness
FES 6735: International Emergency/Disaster Management
FES 6736: Homeland Security and Emergency Management
FES 6766: Research Methods in FES
FES 6806: Disaster Response and Recovery
FES 6826: Emergency Services - Disaster Planning
FES 6827: Business Continuity and Disaster Planning
FES 6836: Impacts of Natural and Man-made Disasters on Buildings
FES 6916: Research for Master's Report
FES 6940: Practicum in FES
ICM 5905: Special Studies
ICM 6420: Commercial Management and Cost Control
ICM 6440: Construction Value Management
ICM 6680: Principles of International Sustainable Construction
ICM 6682: Construction Ecology and Metabolism
ICM 6684: High-Performance Green Building Delivery Systems
ICM 6710: Construction Human Resource Management
ICM 6750: Managing Construction Information Technology
ICM 6751: International Construction Management
ICM 6752: Construction Finance and Investment
ICM 6761: Advanced Planning, Scheduling, and Logistics
ICM 6762: Construction Risk Management
ICM 6770: Advanced Project Safety Management
ICM 6772: International Strategic Management
ICM 6905: Directed Independent Study in International Construction
ICM 6910: Supervised Research
ICM 6930: Construction Communication and Research
ICM 6934: International Construction Research

Interior Design Departmental Courses

IND 5023: Introduction to Architectural Interiors
IND 5106: History of Interior Design I
IND 5136: History of Interior Design II
IND 5212C: Architectural Interiors I
IND 5213C: Introduction to Architectural Interiors Lab
IND 5227C: Advanced Architectural Interiors I
IND 5231C: Architectural Interiors II
IND 5232C: Advanced Architectural Interiors II
IND 5317C: Interior Design Communication Systems
IND 5427C: Interior Design Construction Documents
IND 5428: Materials for Interior Design
IND 5434C: Interior Lighting
IND 5448C: Furniture Design
IND 5464C: Advanced Interior Design Detailing and Construction Documents
IND 5464C: Computer Applications in Three-Dimensional Design
• IND 5466: Interior Environmental Technology
• IND 5508: Business and Professional Practices for Interior Designers
• IND 5638: Design Environments and Human Interaction
• IND 5937: Current Topics in Interior Design
• IND 6239: Advanced Topics in Interior Design Studio
• IND 6639: Methods of Interior Design Research
• IND 6906: Independent Studies and Readings
• IND 6940: Supervised Teaching
• IND 6941: Interior Design Internship
• IND 6971: Research for Master's Thesis

Landscape Architecture Departmental Courses

• LAA 5331: Site Design Methodologies
• LAA 5366: Principles of Landscape Architecture
• LAA 6231: Landscape Architecture Theory
• LAA 6322: Project Management for Landscape Architects
• LAA 6342: Landscape Architecture Criticism
• LAA 6349C: Design Communications for Landscape Architects
• LAA 6382: Ecological and Environmental Policy
• LAA 6525L: Advanced Landscape Construction Design
• LAA 6536: Landscape Management
• LAA 6656C: Advanced Landscape Architectural Design
• LAA 6713: Cultural Landscapes
• LAA 6716: History of Landscape Architecture
• LAA 6905: Directed Study
• LAA 6931: Water Conservation through Site Design and Green Roofs
• LAA 6931C: Special Topics
• LAA 6933: Topics in European Design: Paris, France
• LAA 6935: Gardens of the World
• LAA 6941: Supervised Internship
• LAA 6952C: European Landscape Architecture Studio
• LAA 6971: Research for Master's Thesis
• LAA 6979: Terminal Project

Urban and Regional Planning Departmental Courses

• URP 6042: Urban Economy
• URP 6051: Planning Administration and Ethics
• URP 6100: Planning Theory and History
• URP 6122: Alternative Conflict Management
• URP 6131: Growth Management Powers I
• URP 6132: Growth Management Seminar
• URP 6203: Planning Research Design
• URP 6231: Quantitative Data Analysis for Planners
• URP 6270: Survey of Planning Information Systems
• URP 6271: Planning Information Systems
• URP 6272: Advanced Planning Information Systems
• URP 6274: GPS for Planners: Introduction to Global Positioning System
• URP 6275: Spatial Database Design and Development
• URP 6312: Land Development Planning and Evaluation
• URP 6341: Urban Planning Project
• URP 6421: Environmental Impact Statements
• URP 6424: Sustainable Urbanism in the Americas
• URP 6428: Advanced Environmental Planning
• URP 6429: Natural Resources Planning and Management
• URP 6445: Planning for Climate Change
• URP 6526: Health and the Built Environment
• URP 6541: Economic Development Planning
• URP 6542: Urban Land Economics
• URP 6543: Seminar in Capital Improvement Finance
• URP 6547: Local Public Finance for Urban Planners
• URP 6601: State Planning
• URP 6603: Development Review
• URP 6610: International Development Planning
• URP 6716: Transportation Policy and Planning
• URP 6718: Bikeways Planning and Design
• URP 6745: Housing, Public Policy, and Planning
• URP 6746: Topical Debates in Housing
• URP 6821: Transportation and Land-Use Modeling
• URP 6871: Planning and Design I
• URP 6872: Planning and Design II
• URP 6880: Defensible Space and CPTED in Urban Design
• URP 6884: Community Conservation and Revitalization
• URP 6905: Exploration and Directed Study
• URP 6910: Supervised Research
• URP 6920: Colloquium
• URP 6931: Topical Seminar
• URP 6933: Planning Information Seminar
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

School of Architecture

Director: M. Gold.
Graduate Coordinator: N. M. Clark.

Complete faculty listing [Follow this link].

Doctor of Philosophy: The college offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization in this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning, Doctoral Program, 331 Arch, Box 115701.

Master of Architecture: The School of Architecture offers graduate work leading to the first professional degree, Master of Architecture. During graduate studies, each student has the opportunity to focus on one or more areas, including design, history and theory, urban design, preservation, structures, and technology. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design. The student's overall college experience, both undergraduate and graduate programs, is intended to be a complete unit of professional education leading to practice in architecture related fields.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Florida School of Architecture offers the following NAAB-accredited degree programs:

- Master of Architecture (pre-professional degree + 52 graduate credits)
- Master of Architecture (professional degree + 30 graduate credits)
- Master of Architecture (non-pre-professional degree + 54 undergraduate credits + 52 graduate credits)

Accredited 5-year professional base: For students with a baccalaureate degree in architecture from an accredited 5-year professional degree program, the Master of Architecture degree is available. In these cases, a specialized curriculum is developed that complements the needs of the applicant. Minimum registration is 30 credits; however, the minimum may increase if transcript reviews show that further course work is needed to meet registration and curriculum requirements. AR 6356 is a prerequisite for the thesis or master's project.
Most states require individuals intending to become architects to hold an accredited degree. The National Architectural Accrediting Board acknowledges two types of degrees: the Bachelor of Architecture (minimum 5 years of study), and the Master of Architecture (minimum 3 years of study after an unrelated bachelor's degree, or 2 years after a related pre-professional bachelor's degree). These professional degrees educate those who aspire to registration and licensure to practice as architects.

**Student work:** The College may retain student work for the purpose of record, exhibition, or instruction.

**Master of Science in Architectural Studies:** The M.S.A.S. is a nonprofessional degree for advanced investigations in specialized areas of architectural history, architectural pedagogy, theory, technology, design, preservation, or practice. Students with a bachelor's degree in any discipline from an accredited university are eligible to apply to this program; the proposed area of focus should be precisely defined in the application. This is a 3- to 4-semester program (32 hours minimum) that includes a thesis. (No more than 6 hours of ARC 6971 may be counted in the minimum credit hours for the degree.) Interdisciplinary study is encouraged. Concentrations and certificates are available in historic preservation, sustainable architecture, and sustainable design.

The School sponsors special curricula in architecture to enhance the academic program. *Preservation Institute: Caribbean, Preservation Institute: Nantucket, and Vicenza Institute of Architecture (Italy)* accepts students from the University of Florida, and also from academic circles throughout the United States and the world for year-round study. Any student in a graduate architecture program at the University of Florida may apply for one or more of these programs.

Requirements for the M.Arch., M.S.A.S., and Ph.D. degrees are described in the *General Information* section of this catalog.

The School also participates in a program granting an Interdisciplinary Concentration and Certificate in Sustainable Architecture. For more information, see the *Interdisciplinary Graduate Studies* section of this catalog.

**Applications:** All applications for fall term graduate admission (including official transcripts, GRE scores, and TOEFL scores, if necessary) must be received by the Office of the Registrar by January 15. In addition to satisfying University requirements for admission, applicants are required to submit to the Graduate Program Assistant, School of Architecture, 231 ARCH, Box 115702, the following: a portfolio of their creative work; a scholarly statement of intent and objectives; and three letters of recommendation. This material must be received by January 15 to be considered for admission in the next fall term. Students may apply after the January 15 deadline but will only be considered if spaces become available. (Updates of portfolios are accepted after January 15; however, applications will not be considered until they are complete.)

The School reserves the right to retain student work for purposes of record, exhibition, or instruction. Field trips are required of all students; students should plan to have adequate funds available. It may be necessary to assess studio fees to defray costs of base maps and other generally used materials.

**Other**

**Architecture**

**College**

*College of Design, Construction, and Planning*

**Department/School**

*School of Architecture*

**Degrees Offered with a Major in Architecture**

**Master of Science in Architectural Studies**

without a concentration

concentration in Historic Preservation

concentration in Sustainable Architecture

concentration in Sustainable Design
Master of Architecture

without a concentration

collection in Historic Preservation

collection in Sustainable Architecture

collection in Sustainable Design

Courses

- ARC 6512: Structural Modeling
- ARC 6116: Drawing toward Architecture
- ARC 6311C: Building Information Modeling
- ARC 6383: St. Augustine Interdisciplinary Design Studio
- DCP 6710: History and Theory of Historic Preservation
- DCP 6715: Preservation Building Technology
- DCP 6971: Research for Master's Thesis
- URP 6272: Advanced Planning Information Systems

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6357: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Constructions
- ARC 6399: Advanced Topics in Urban Design
- ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
- ARC 6576: Architectural Structures
- ARC 6611: Advanced Topics in Architectural Technology
- ARC 6621: Graduate Environmental Technology 2
- ARC 6642: Architectural Acoustic Design Laboratory
- ARC 6643: Architectural Acoustics
- ARC 6670: Lighting Design Seminar
- ARC 6685: Life Safety, Sanitation, and Plumbing Systems
- ARC 6705: Graduate Architectural History 3
- ARC 6711: Architecture of the Ancient World
- ARC 6750: Architectural History, America
- ARC 6773: Strains of Modernism
- ARC 6793: Advanced Topics in Regional Architecture
- ARC 6805: Architectural Conservation
- ARC 6821: Preservation Problems and Processes
- ARC 6822: Preservation Programming and Design
- ARC 6851: Technology of Preservation: Materials and Methods I
- ARC 6852: Technology of Preservation: Materials and Methods II
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- ARC 6883: Vernacular Architecture & Sustainability
- ARC 6911: Architectural Research
- ARC 6912: Architectural Research II
- ARC 6913: Architectural Research III
- ARC 6932: Advanced Topics in Architectural Methods
- ARC 6933: Sustainable Site Design
- ARC 6934: European Approach to Sustainable Design
- ARC 6935: Seminar in Sustainable Design
- ARC 6940: Supervised Teaching
- ARC 6971: Research for Master's Thesis
- ARC 6979: Master's Research Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

M.E. Rinker, Sr., School of Construction Management

Director: Robert Ries
Director of Master's Programs: Robert E. Minchin
Complete faculty listing: Follow this link.

Doctor of Philosophy: The college offers an interdisciplinary doctoral program in design, construction, and planning. Areas of specialization in the program include architecture, construction management, interior design, landscape architecture, and urban and regional planning. Within the area of construction management, specialization options include sustainable construction, information systems, construction safety, affordable housing productivity, and human resource management. These specializations prepare students to assume college-level faculty positions and industry research positions in construction management and the building sciences. For more information on the Ph.D. program, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701. For information on the specializations in the Rinker School of Construction Management, write to the Director of Graduate and Distance Education, Rinker School of Construction Management, 304 Rinker Hall, P.O. Box 115700.

The M.E. Rinker Sr. School offers courses leading to the degrees of Master of Science in Construction Management (thesis), Master of Construction Management (nonthesis), and Master of International Construction Management (nonthesis distance education program for experienced professionals). An individual plan of study is prepared for each student to assure that the student's goals are achieved within the broad policy guidelines of the Rinker School. Specialization may be in such areas as construction management, sustainable construction, information systems, construction safety, and construction law. Requirements for the M.B.C., M.S.B.C., M.I.C.M., and Ph.D. degrees are given in the General Information section of this catalog.

Master of Construction Management (M.C.M.) or Master of Science in Construction Management (M.S.C.M.): To be eligible for admission to the M.C.M. or M.S.C.M. programs, a student must hold a 4-year undergraduate degree in building construction or an equivalent in related fields. "Equivalent in related fields" should include studies in construction materials and methods, structures, and management. Students with deficiencies in these related fields may need longer residence for the master's degree, as they will be required to take specified basic courses to provide a foundation for advanced courses. There is no foreign language requirement.

No more than 3 credits of BCN 6971 may be used to satisfy the credit requirements for the M.S.C.M. degree without written permission of the Director of Master's Programs.

Master of International Construction Management (M.I.C.M.): This program prepares students to assume upper-level management responsibilities in a multinational company. To be eligible for admission to the M.I.C.M. program, a student must have

- A 4-year undergraduate degree
- At least 5 years of meaningful, supervisory-level construction management experience
- Acceptable GRE scores (verbal and quantitative)
- A grade point average of 3.0 on a 4.0 scale
- Employer sponsorship
- International students must submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

No more than 3 credits of ICM 6934 may be used to satisfy the credit requirements for the M.I.C.M. without written permission of the Director. All candidates are required to take ICM 6930. In addition to these 6 research-oriented graduate hours, the student selects one or two areas of emphasis and then takes the rest of the required 33 credit hours from the remaining courses and special electives. All candidates are required to pass a comprehensive oral and/or written examination at the completion of the course work and their master's research report/project.

The M.E. Rinker Sr. School reserves the right to retain student work for purposes of record, exhibition, or instruction.
Research facilities: The Shimberg Center for Housing Studies, operating within the School, researches the problems and possible solutions associated with developing and producing affordable housing. The Powell Center for Construction and the Environment conducts research on implementing sustainability in creating, operating, and constructing a built environment. The Florida Program for Construction Safety researches and disseminates information on matters related to construction safety and health. The Center for Advanced Construction Information Modeling educates members of the AECO industry about new and emerging technologies in virtual design and construction.

Combined program: The School offers a combined bachelor's/master's degree program. Contact the Director of Master's Programs for information.

For more information, please see our website: [http://www.bcn.ufl.edu](http://www.bcn.ufl.edu).

Other

Construction Management

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr., School of Construction Management

Degrees Offered with a Major in Construction Management

Master of Construction Management

without a concentration

concentration in Historic Preservation

concentration in Sustainable Construction

concentration in Sustainable Design

Master of Science in Construction Management

without a concentration

concentration in Historic Preservation

concentration in Sustainable Construction

concentration in Sustainable Design

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 6036: Research Methods in Construction
- BCN 6036: Research Methods in Construction
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7970: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Fire and Emergency Services

College
Department/School

M.E. Rinker, Sr., School of Construction Management

Fire and Emergency Services Program Information

The Master of Fire and Emergency Services degree program focuses on Emergency Services/Disaster Management (ES/DM) and is designed for individuals who are seeking knowledge in emergency planning, hazard mitigation and preparedness, disaster response and recovery, and homeland security. The goal is to create broad experience that includes the many elements of current cases in ES/DM and emphasizes both the critical thinking and leadership skills necessary to advance in the field.

The M.F.E.S. degree provides post-professional advancement for the critical technical issues beyond the initial fire science practices and administrative studies. Major research topics include interdisciplinary studies in material sciences, suppression systems, advanced planning and geographic systems, pre- and post-disaster mitigation planning, computer applications, and technological innovations.

The M.F.E.S. is an online distance education program. All courses are conveniently delivered utilizing a web-based e-Learning system.

For more information, please see our website: http://www.bcn.ufl.edu/academics/masters/msfesesdm

Degrees Offered with a Major in Fire and Emergency Services

Master of Fire and Emergency Services

without a concentration

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
ICM 5905: Special Studies
ICM 6420: Commercial Management and Cost Control
ICM 6440: Construction Value Management
ICM 6680: Principles of International Sustainable Construction
ICM 6682: Construction Ecology and Metabolism
ICM 6684: High-Performance Green Building Delivery Systems
ICM 6710: Construction Human Resource Management
ICM 6750: Managing Construction Information Technology
ICM 6751: International Construction Management
ICM 6752: Construction Finance and Investment
ICM 6761: Advanced Planning, Scheduling, and Logistics
ICM 6762: Construction Risk Management
ICM 6770: Advanced Project Safety Management
ICM 6772: International Strategic Management
ICM 6905: Directed Independent Study in International Construction
ICM 6910: Supervised Research
ICM 6930: Construction Communication and Research
ICM 6934: International Construction Research

College of Design, Construction, and Planning Courses

DCP 6205: Ecological Issues in Sustainability and the Built Environment
DCP 6211: Preservation Topics, Issues, and Practice
DCP 6710: History and Theory of Historic Preservation
DCP 6711: History of the Built Environment for Preservation Practice
DCP 6712: Preservation Technology: Conserving Modern Buildings
DCP 6713: Historic Preservation: Principles, Practice, and Engineering
DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
DCP 6715: Preservation Building Technology
DCP 6716: Cultural Resource Management
DCP 6730: Preservation Policy
DCP 6905: Independent Study
DCP 6931: Special Topics in Design, Construction, and Planning
DCP 6943: Practicum in Historic Preservation
DCP 6971: Research for Master's Thesis
DCP 7790: Doctoral Core I
DCP 7792: Doctoral Core II
DCP 7794: Doctoral Seminar
DCP 7911: Advanced Design, Construction, and Planning Research I
DCP 7940: Supervised Teaching
DCP 7949: Professional Internship
DCP 7979: Advanced Research
DCP 7980: Research for Doctoral Dissertation

International Construction Management

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr., School of Construction Management

Degrees Offered with a Major in International Construction Management

Master of International Construction Management

without a concentration

concentration in Historic Preservation
Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5847: Equipment and Methods for Heavy Construction
- BCN 5855: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6932: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
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- ICM 6440: Construction Value Management
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- ICM 6682: Construction Ecology and Metabolism
- ICM 6684: High-Performance Green Building Delivery Systems
- ICM 6710: Construction Human Resource Management
- ICM 6750: Managing Construction Information Technology
- ICM 6751: International Construction Management
- ICM 6752: Construction Finance and Investment
- ICM 6761: Advanced Planning, Scheduling, and Logistics
- ICM 6762: Construction Risk Management
- ICM 6770: Advanced Project Safety Management
- ICM 6772: International Strategic Management
- ICM 6905: Directed Independent Study in International Construction
- ICM 6910: Supervised Research
- ICM 6930: Construction Communication and Research
- ICM 6934: International Construction Research

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
Sustainable Construction

College

Sustainable Construction

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr., School of Construction Management

Degrees Offered with a Major in Sustainable Construction

Master of Science in Construction Management

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
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- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Interior Design Department

Chair: M. Portillo.
Graduate Coordinator: N. Park

Complete faculty listing by department: Follow this link.

Doctor of Philosophy:

The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in design, construction, and planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

Master of Interior Design:

The Master of Interior Design (M.I.D.) provides opportunities for students to direct their attention toward a variety of topics, including

- Design pedagogy and processes
- Sustainable, safe, and secure environments
- Creative performance and innovation
- Built heritage conservation.

Regardless of the study emphasis selected by the student, the M.I.D. program has a central focus with three categories of course work:

- Design studio
- Seminars in current interior design topics
- Theories and methods of research.

All M.I.D. students must complete an approved research topic with a written thesis. Requirements for the M.I.D. and Ph.D. degrees are given in the General Information section of this catalog.

Applications:

All applications must include acceptable GRE scores, transcripts for all previous academic work, and if the applicant's native language is not English, a satisfactory score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute. This information must be received in the Office of the Registrar by February 2. In addition to satisfying University requirements for admission, the applicants are required to submit to the Graduate Program Assistant, Department of Interior Design, 336 Architecture, P.O. Box 115705, University of Florida, Gainesville, FL 32611-5705, the following:
• A portfolio of your design work (if applicable). The portfolio must be accompanied by a self-addressed, stamped envelope.
• A written essay on your goals and aspirations related to graduate studies
• Three letters of recommendation.
• A personal interview is not required, but many applicants choose to visit the campus and Department as a part of the application process.

Students enrolled in the Bachelor of Interior Design program at the University of Florida may apply to the M.I.D. program during their junior year (see below).

The Department reserves the right to retain student course work for the purposes of record, exhibition, or instruction. Field trips are required for all students; students should plan to have adequate funds available. Students are required to purchase a computer for course work. It may be necessary to assess studio fees to defray costs of base maps, plans, and other generally used materials.

Admission: Applications are processed through February 2 for fall term and all applicants are encouraged to apply as soon as possible. Admission decisions are made between February and the end of April. All new students begin their studies in the fall to coincide with curriculum sequencing.

Graduate course requirements according to background: After assessment of previous design work, leveling courses may be required to prepare the student for the M.I.D. 36 hours of graduate course work. Therefore, each student entering the Master of Interior Design program works with the graduate coordinator to evaluate the student's unique background to determine the specific courses needed to facilitate interest and experience. Estimated credit hours and length of study time vary according to each student's individual baccalaureate degree and experience.

There are four options.

• For students enrolled in the Bachelor of Design program at the University of Florida, 12 hours of graduate-level course work in the senior year can be counted for both the undergraduate and the M.I.D. degrees. An additional 24 graduate credit hours are required. Expect at least 1 additional year to complete the M.I.D.
• For students who graduated from a Council of Interior Design Accreditation (CIDA) accredited first professional degree program within an architectural framework, the course of study is estimated to be 36 graduate credit hours. Expect 2 years to complete the M.I.D.
• For students who graduated from a design-related (architecture or interior design) baccalaureate degree program, the course of study is estimated to be a minimum of 59 graduate credit hours (includes the 36-hour M.I.D.). Expect 3 years to complete leveling courses and the master's degree.
• For students with a bachelor's degree in a field other than design, the course of study is estimated to be 86 undergraduate and graduate credit hours. Expect 3 to 4 years to complete leveling courses and the M.I.D.

Estimates of the number of credit hours and length of study time may be adjusted based on the individual student's previous preparation including experience as a practicing designer, architect, or other professional.

Program requirements: After leveling courses are completed and with approval by the graduate coordinator and supervisory committee chair, a student completes 24 hours of departmentally approved graduate work in the Department of Interior Design. In addition, with the graduate coordinator's approval, the student is required to take 3 hours of course work in graduate statistics and 9 hours of multidisciplinary graduate electives that reinforce and extend the research.

Courses from such academic units as Psychology, Anthropology, Sociology, Engineering, Education, and Business Administration provide possible electives. The College of Design, Construction and Planning offers the Certificate in Historic Preservation. If the focus of a student is the renovation and preservation of built environments, then historic preservation courses leading to a certificate would strengthen the research and design effort. Likewise, existing appropriate courses in Architecture, Landscape Architecture, Urban and Regional Planning, and Building Construction offer both collaborative study and research opportunities for M.I.D students.

Each student must select a two-member supervisory committee to guide course selection and to guide thesis selection, study, and production.

Other

Interior Design

College

College of Design, Construction, and Planning

Department/School

Interior Design Department

Degrees Offered with a Major in Interior Design

Master of Interior Design

without a concentration

concentration in Historic Preservation
concentration in Sustainable Design

Courses

- IND 5326: Color Theory Planning and Practice

Interior Design Departmental Courses

- IND 5023: Introduction to Architectural Interiors
- IND 5106: History of Interior Design I
- IND 5136: History of Interior Design II
- IND 5212C: Architectural Interiors I
- IND 5213C: Architectural Interiors Lab
- IND 5227C: Advanced Architectural Interiors I
- IND 5231C: Architectural Interiors II
- IND 5232C: Advanced Architectural Interiors II
- IND 5317C: Interior Design Communication Systems
- IND 5427C: Interior Design Construction Documents
- IND 5428: Materials for Interior Design
- IND 5434C: Interior Lighting
- IND 5445C: Furniture Design
- IND 5445C: Advanced Interior Design Detailing and Construction Documents
- IND 5464C: Computer Applications in Three-Dimensional Design
- IND 5466: Interior Environmental Technology
- IND 5508: Business and Professional Practices for Interior Designers
- IND 5638: Design Environments and Human Interaction
- IND 5937: Current Topics in Interior Design
- IND 6239: Advanced Topics in Interior Design Studio
- IND 6639: Methods of Interior Design Research
- IND 6906: Independent Studies and Readings
- IND 6940: Supervised Teaching
- IND 6941: Interior Design Internship
- IND 6971: Research for Master's Thesis

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Consering Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Planning Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practice in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Landscape Architecture Department

College of Design, Construction, and Planning

Chair: Gina Gurucharri
Graduate Coordinator: Kevin Thompson

Complete faculty listing by department: Follow this link
The mission of the Department of Landscape Architecture is to advance the ethical, creative, and skillful application of the art and the science of planning and designing urban, rural and natural environments. The Master of Landscape Architecture seeks excellence through professional practice and service, and through research and scholarly pursuit.

Internationally field trips are required as part of the normal program curriculum. Students should plan to have adequate funds for field trips and for studio materials. Students are also required to own a laptop computer meeting minimum department requirements. These specifications are available through the department of Landscape Architecture's website at URL: 
http://www.dcp.ufl.edu/landscape.

The Graduate program in Landscape Architecture offers flexibility in meeting the needs of applicants with varied backgrounds. Students entering the graduate program in landscape architecture follow one of the four following tracks:

**Pre MLA Program**
Graduate students who do not possess an LAAB accredited professional degree in landscape architecture are invited to enroll in the Pre MLA program.

The Pre MLA Program aids the development of basic analytical, design and graphic skills. Upon successful completion of the Pre MLA Summer term, students advance into a two-semester sequence of articulation courses that provide a foundation of applied landscape design and planning theory as well as competencies in landscape construction.

**MLA Advanced Graduate Studies Program**
Graduate students having completed the Pre MLA program or entering the MLA program with an LAAB accredited professional baccalaureate degree in Landscape Architecture commence a two year program of advanced graduate coursework towards the completion of the MLA degree.

**MLA Program + Construction**
Graduate students with a non-accredited or non-LAAB accredited degree in Landscape Architecture may apply directly to the MLA program but may be required to take additional coursework to develop core competencies required for advanced graduate study.

**MLA Research Degree**
Graduate students with an LAAB accredited professional degree in Landscape Architecture and a significant history of achievement in professional practice may tailor a program of advanced study to meet their specific needs. Proposals for the MLA Research Degree option are reviewed by the Graduate Coordinator and an approved course of study is determined through consultation with the Graduate Committee.

The normal tenure of advanced graduate study is five semesters which includes a summer semester internship. Students complete a minimum of 52 credit hours composed of lecture courses, seminars, design and construction studios, internship and individual study (special studies, supervised research and thesis or terminal project).

This time period would be extended should a student elect to expand the course work or seek a concurrent degree in a related field.

**Design studios:** Graduate design studios build on required lecture and seminar courses. A core of three advanced design studios are topically-oriented focusing on issues of human, ecological and regional concern. Each studio requires students to engage a method appropriate to the studio’s selected projects, to analyze the findings generated by this research and to use the findings to build a rational argument that leads to a defendable design position. Interdisciplinary and multidisciplinary collaborations are encouraged on both a formal and an informal basis. Graduate studio projects also deal with current issues related to the mission of the Department with an additional focus on research and community service.

**Thesis or terminal project:** The Department recognizes that students have different professional goals and personal strengths and interests. A thesis is appropriate for students interested in further research or teaching, or in pursuing advanced degrees. A project (with a significant research component) is appropriate for students interested in design or project-oriented aspects of landscape architecture, or if their specific areas of interest suggest a nontraditional approach.

**Programs, centers, and institutes:** The College of Design, Construction, and Planning has several research centers and institutes. The course work and summer sessions afforded by these programs offer both required and elective course work for graduate students in landscape architecture:

- **The Center for Landscape Conservation Planning:** The Center for Landscape Conservation Planning conducts applied research on the relationship between conservation and land use while providing learning opportunities for students.
- **The Center for International Design and Planning:** The Center for International Design and Planning conducts interdisciplinary research with a focus on emerging design and planning trends in an era of globalization with a focus on resilient development systems and adaptive design and planning strategies.
- **The Preservation Institute:** The Preservation Institute: Nantucket gives students an opportunity to receive specialized educational experience in a broad range of preservation topics using Nantucket as a resource for case-study projects.
- **The Preservation Institute:** Caribbean gives students an opportunity to conduct and apply research regarding the conservation of the rich cultural traditions of the Greater Caribbean basin.
- **The GEOPLAN Center** is dedicated to the development of geographic and spatial information systems. Graduate students receive instruction in geographic information systems and are involved in a multidisciplinary studio that applies the tools and systems understanding afforded by GIS.

**Graduate advisement:** Students are initially advised by the Graduate Coordinator. He or she has guided the student's application through the acceptance process and is familiar with the student's background and needs. A plan of study is developed that includes required and optional courses. By the end of the second semester of study, each student is required to form a supervisory committee composed of two faculty members. The primary purpose of the graduate committee is to advise the student on educational objectives and the thesis or terminal project course work.

**Application Procedure**
Details of application procedure are found on the Department of Landscape Architecture's website. Applicants are encouraged to familiarize themselves with the details of the application procedures and the application requirements. Applications will ONLY be considered for the track for which they have been submitted. Make certain you are applying to the correct track based on your background and credentials.

**Application Dates**
Applications are to be completed and submitted prior to the deadline noted on the Department's website. Unless otherwise noted, international applications must be received by November 1st. Applications from within the US are to be received no later than February 1st. Early applications are encouraged.

**Application materials to be submitted online and/or to the Office of the Registrar**
Application materials include the online application form accompanied by official transcripts, Letters of Recommendation, GRE scores, and TOEFL scores (applicants with English as a second language). To Office of the Registrar: Admissions Session, Criser Hall, University of Florida, Gainesville, Florida 32611.

**Application Materials to be submitted directly to the Department**
In addition to the materials submitted to the registrar's office, applicants must also submit a letter of intention to the Department of Landscape Architecture (Graduate Program Assistant).

**Application Portfolio**
All applicants are encouraged to submit a portfolio of creative works.

Post professional degree applicants applying for either the Pre MLA Fall Start or MLA Advanced Graduate Study program are required to submit a portfolio that both exhibits creative work experience and shows evidence of acquired technical proficiencies in the practice of landscape architecture.

All portfolio must be digital. PDF is preferred.

**Application Status**
Applications will be processed once all material has been received and must be complete prior to the application deadline. Applicants will be contacted by the Program Assistant if their application is incomplete. Please respond quickly if you have been contacted to increase the chances of your application being considered in the current review period. Only completed applications will be processed for review.

Once the application has been processed for review, applicants will receive written notification of their application status, generally sometime in the middle of March. Please do not contact the department with inquiries of your application status prior to the end of March.

Preparatory courses (see Undergraduate Catalog): LAA 2330, LAA 2350, LAA 2360, LAA 2370, LAA 3420, LAA 3350, LAA 3352, LAA 3421, LAA 3550, LAA 6716, and ORH 3513.

Other

Landscape Architecture

College

College of Design, Construction, and Planning

Department/School

Landscape Architecture Department

Landscape Architecture Program

The Department of Landscape Architecture offers graduate programs leading to the Master of Landscape Architecture (M.L.A.) degree in Landscape Architecture. A Ph.D. degree with a concentration in Landscape Architecture is also offered through the College of Design, Construction and Planning. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Master of Landscape Architecture: The MLA is a Landscape Architecture Accreditation Board (LAAB) accredited professional Master's degree in Landscape Architecture. Graduation from an accredited program is an essential first step toward licensing in Florida and other states that regulate the practice of landscape architecture. For more information, please see our website: http://www.dcp.ufl.edu/landscape.

Degrees Offered with a Major in Landscape Architecture

Master of Landscape Architecture

without a concentration

concentration in Geographic Information Systems

concentration in Historic Preservation

concentration in Sustainable Design

concentration in Wetland Sciences
Landscape Architecture Departmental Courses

- LAA 5331: Site Design Methodologies
- LAA 5366: Principles of Landscape Architecture
- LAA 6231: Landscape Architecture Theory
- LAA 6322: Project Management for Landscape Architects
- LAA 6342: Landscape Architecture Criticism
- LAA 6349C: Design Communications for Landscape Architects
- LAA 6382: Ecological and Environmental Policy
- LAA 6525L: Advanced Landscape Construction Design
- LAA 6536: Landscape Management
- LAA 6666C: Advanced Landscape Architectural Design
- LAA 6713: Cultural Landscapes
- LAA 6716: History of Landscape Architecture
- LAA 6905: Directed Study
- LAA 6931: Water Conservation through Site Design and Green Roofs
- LAA 6931C: Special Topics
- LAA 6933: Topics in European Design: Paris, France
- LAA 6935: Gardens of the World
- LAA 6941: Supervised Internship
- LAA 6952C: European Landscape Architecture Studio
- LAA 6971: Research for Master’s Thesis
- LAA 6979: Terminal Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master’s Thesis
- DCP 7790: Preservation Policy
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Urban and Regional Planning Department

Director of School of Landscape Architecture and Planning: Kristin Larsen
Chair: Joseli Macedo
Graduate Coordinator: Stanley Latimer
Graduate Coordinator of Online Degree program: Ferdinand Lewis

Complete faculty listing by department: Follow this link.

Doctor of Philosophy: The College offers an interdisciplinary program leading to the Doctor of Philosophy degree in Design, Construction, and Planning. Areas of specialization within this program include architecture, building construction, interior design, landscape architecture, and urban and regional planning. For information, write to the Ph.D. Director, College of Design, Construction, and Planning Doctoral Program, 331 ARCH, P.O. Box 115701.

Master of Arts in Urban and Regional Planning: The Department of Urban and Regional Planning offers graduate work leading to the degree of Master of Arts in Urban and Regional Planning (M.A.U.R.P.). Students are encouraged to enter the program in the fall semester. The program is usually completed in two academic years. The student entering with an undergraduate degree and no graduate study must complete 52 hours of credit for the M.A.U.R.P. degree. Students who have a master’s degree in a related field may transfer up to 18 graduate semester hours toward the 52 hour requirement. Such a transfer of credit requires the approval of the Department. The Department encourages students with any undergraduate degree who are interested in the field of planning to apply for admission. Complete descriptions of the requirements for the M.A.U.R.P. and Ph.D. degrees are provided in the General Information section of this catalog.

The urban and regional planning curriculum is designed to provide a set of core studies and contextual projects which prepare the graduate for the practice of planning in public or private agencies at both national and international levels. The core studies include history and theory of planning, planning methods, growth management at local, regional, and state levels; and related studies in community and regional social, natural, and economic systems. Contextual projects include, among many subject areas, urban design, transportation, regional planning, community...
redevelopment and preservation, housing, real estate, and economic development. The program emphasizes planning, policies, and design for the physical environment. Current specializations include growth management and transportation, urban design, housing, community and economic development, information technologies for planning, and environmental planning. Students are also encouraged to take advantage of the extensive faculty, course offerings, and other resources available in the College of Design, Construction, and Planning and throughout the University. The Department has two research centers: The Geo-facilities Planning and Information Center (GeoPlan), the Center for Building Better Communities (CBBC), and the Center for Health and the Built Environment (CHBE).

The curriculum is supported by an extensive GIS laboratory, and a visual aid library. Variation from the core studies may be approved by the Department if the student can demonstrate education and experience to the faculty that would support such an alternative. The M.A.U.R.P. degree is accredited by the Planning Accreditation Board, a joint undertaking of the American Institute of Certified Planners and the Association of Collegiate Schools of Planning, for having achieved the highest applicable standards for graduate education in the field of planning. Graduates of the Department are prepared to practice urban and regional planning.

The Department of Urban and Regional Planning and the College of Law offer a joint degree program (see Requirements for Master’s Degrees in the General Information section of this catalog). Areas of concentration with other programs in the Graduate School may be developed to meet the individual needs of students. In addition to course work the student is required to complete an internship with a public or private planning office and the student must complete a thesis.

The Department reserves the right to retain student work for purposes of record, exhibition, or instruction.

Other

Urban and Regional Planning

College

College of Design, Construction, and Planning

Department/School

Urban and Regional Planning Department

Degrees Offered with a Major in Urban and Regional Planning

Master of Arts in Urban and Regional Planning

without a concentration

concentration in Geographic Information Systems

concentration in Historic Preservation

concentration in Sustainable Design

concentration in Tropical Conservation and Development

concentration in Wetland Sciences
Courses

- URP 6276: Internet Geographic Information Systems
- URP 6277: Land Use Visioning and Analysis
- URP 6610: International Development Planning
- URP 6711: Transportation and Land Use Coordination
- URP 6743: Affordable Housing Law
- URP 6855: Urban Form in Cities throughout the Americas
- URP 6887: Advanced Defensible Space in Urban Design

Urban and Regional Planning Departmental Courses

- URP 6942: Urban Economy
- URP 6601: Planning Administration and Ethics
- URP 6100: Planning Theory and History
- URP 6122: Alternative Conflict Management
- URP 6131: Growth Management Powers I
- URP 6132: Growth Management Seminar
- URP 6203: Planning Research Design
- URP 6231: Quantitative Data Analysis for Planners
- URP 6270: Survey of Planning Information Systems
- URP 6271: Planning Information Systems
- URP 6272: Advanced Planning Information Systems
- URP 6274: GPS for Planners: Introduction to Global Positioning System
- URP 6275: Spatial Database Design and Development
- URP 6312: Land Development Planning and Evaluation
- URP 6341: Urban Planning Project
- URP 6421: Environmental Impact Statements
- URP 6424: Sustainable Urbanism in the Americas
- URP 6426: Advanced Environmental Planning
- URP 6429: Natural Resources Planning and Management
- URP 6445: Planning for Climate Change
- URP 6526: Health and the Built Environment
- URP 6541: Economic Development Planning
- URP 6542: Urban Land Economics
- URP 6543: Seminar in Capital Improvement Finance
- URP 6547: Local Public Finance for Urban Planners
- URP 6601: State Planning
- URP 6603: Development Review
- URP 6610: International Development Planning
- URP 6716: Transportation Policy and Planning
- URP 6718: Bikeways Planning and Design
- URP 6745: Housing, Public Policy, and Planning
- URP 6746: Topical Debates in Housing
- URP 6821: Transportation and Land-Use Modeling
- URP 6871: Planning and Design I
- URP 6872: Planning and Design II
- URP 6880: Defensible Space and CPTED in Urban Design
- URP 6884: Community Conservation and Revitalization
- URP 6905: Exploration and Directed Study
- URP 6910: Supervised Research
- URP 6920: Colloquium
- URP 6931: Topical Seminar
- URP 6933: Planning Information Seminar
- URP 6940: Supervised Teaching
- URP 6941: Urban Planning Internship
- URP 6971: Research for Master's Thesis
- URP 6979: Terminal Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Presentation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
Programs within the College of Engineering

College of Engineering

Dear: C. Abernathy

Complete faculty listings: Follow this link.

The College of Engineering is organized into a number of departments focusing on today's most pressing engineering questions. There is an interdisciplinary culture at the core of Gator Engineering, though, and researchers regularly collaborate with colleagues in departments and colleges beyond their own.

For more information, please see our website: http://www.eng.ufl.edu

Departments and Programs within the College of Engineering

Agricultural and Biological Engineering Department

Chair: Dorota Z. Haman
Graduate Coordinator: Greg Kiker

Complete faculty listing by department: Follow this link.

The degrees of Master of Science, Master of Engineering and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

For more information about the program, please visit the program link below and the graduate studies pages on the departmental website at http://www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

- **Agricultural production** includes development and application of precision agriculture concepts and tools, climate risk in agriculture, post-harvest operations, technical systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

- **Biological engineering** includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

- **Information systems** includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

- **Land and water resources** includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Other

Agricultural and Biological Engineering (Engineering)

College
Agricultural and Biological Engineering Program

The degrees of Master of Science, Master of Engineering, and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences.

Requirements for these degrees are given in the Graduate Degrees section of this catalog. Additional information can also be found on the graduate studies pages on the department website at www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

Agricultural production includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

Biological engineering includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

Information systems includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

Land and water resources includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Degrees Offered with a Major in Agricultural and Biological Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences
concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Agricultural and Biological Engineering Courses

- ABE 5015: Empirical Models of Crop Growth and Yield Response
- ABE 5038: Recent Developments and Applications in Biosensors
- ABE 5152: Electro-Hydraulic Circuits and Controls
- ABE 5332: Advanced Agricultural Structures
- ABE 5442: Advanced Agricultural Process Engineering
- ABE 5643C: Biological Systems Modeling
- ABE 5646: Biological and Agricultural Systems Simulation
- ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials
- ABE 5663: Advanced Applied Microbial Biotechnology
- ABE 5707C: Agricultural Waste Management
- ABE 5815C: Food and Bioprocess Engineering Design
- ABE 6005: Applied Control for Automation and Robots
College of Engineering Courses

- ABE 6031: Instrumentation in Agricultural Engineering Research
- ABE 6035: Advanced Remote Sensing: Science and Sensors
- ABE 6037C: Remote Sensing in Hydrology
- ABE 6252: Advanced Soil and Water Management Engineering
- ABE 6254: Simulation of Agricultural Watershed Systems
- ABE 6265: Vadose Zone Modeling
- ABE 6266: Nanotechnology in Water Research
- ABE 6615: Advanced Heat and Mass Transfer in Biological Systems
- ABE 6644: Agricultural Decision Systems
- ABE 6616: Food and Bioprocess Sterilization
- ABE 6905: Individual Work in Agricultural and Biological Engineering
- ABE 6910: Supervised Research
- ABE 6931: Seminar
- ABE 6933: Special Topics in Agricultural and Biological Engineering
- ABE 6940: Supervised Teaching
- ABE 6971: Research for Master's Thesis
- ABE 6972: Research for Engineer's Thesis
- ABE 6974: Nonthesis Project
- ABE 6966: Applied Mathematics in Agricultural and Biological Engineering
- ABE 7979: Advanced Research
- ABE 7980: Research for Doctoral Dissertation
- AOM 5334C: Agricultural Chemical Application Technology
- AOM 5431: GIS and Remote Sensing in Agriculture and Natural Resources
- AOM 5435: Advanced Precision Agriculture
- AOM 6905: Individual Work in Agricultural Operations Management
- AOM 6932: Special Topics in Agricultural Operations Management
- CWR 6536: Stochastic Subsurface Hydrology
- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6644: Agricultural Decision Systems
- EGN 6645: Engineering Leadership

Biomedical Engineering Department

Chair: C. Schmidt
Graduate Coordinator: D. Hintenlang

Complete faculty listing by department: Follow this link

The mission of the J. Crayton Pruitt Family Department of Biomedical Engineering (BME) is to educate students with strong engineering and science backgrounds for Master's and/or Ph.D. degrees in biomedical engineering. Graduates in BME typically apply their skills and training directly to engineering solutions to clinical problems in medicine. The BME mission is accomplished through a core program of study that has strong collaborations with faculty in the Colleges of Engineering and Medicine. The Biomedical Engineering Department faculty members work collaboratively with joint, affiliate, and adjunct faculty from many other departments in the College of Engineering, the College of Medicine, and local industry. This diversity ensures students the highest-quality education and varied opportunities for cutting-edge research. The BME Department currently focuses in: neural engineering, biomaterials, tissue engineering, biomechanics, nanomedicine, biomedical imaging and medical physics. A concentration in Medical Physics is available at both the M.S. and Ph.D. level and prepares students for clinical or research careers in medical imaging or radiation therapy. The Medical Physics concentration is fully accredited by CAMPEP. Additional information on admissions requirements, faculty, and research projects is available at: http://www.bme.ufl.edu.

BME graduate students are admitted directly through the BME Department. The BME Graduate Academic Committee reviews and makes all decisions regarding admission. Each student's research adviser must hold a Graduate Faculty appointment in the BME Department. Supervisory committees for BME students normally include at least one member from the College of Engineering and one from the College of Medicine to emphasize the need for a clinical focus in the research.

Other

Biomedical Engineering

College

College of Engineering

Department/School
Biomedical Engineering Program Information

The master’s degree (thesis or nonthesis) requires at least 30 semester hours. The Ph.D. degree requires at least 90 semester credit hours beyond the bachelor’s degree. No more than 30 hours of a master’s degree from another institution will be transferred to the Ph.D. degree. If a student holds a master’s degree in a discipline different from the doctoral program, the master’s work will not be counted toward the doctoral degree unless the BME Department successfully petitions the Dean of the Graduate School. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Complete BME program details and courses available are listed in the Biomedical Engineering Graduate Guidelines, on the BME web site (which also offers information on available areas of study). Graduate-level courses in either the College of Engineering or the College of Medicine may be applied toward the BME degree programs with the approval of the supervisory committee chair and the graduate coordinator.

Combined program: Biomedical Engineering also offers a combined bachelor's/master's degree program in collaboration with the other departments in the College of Engineering. This program allows qualified students to earn both a bachelor's degree and a master's degree within 5 years for a net savings of 1 year. Contact the BME academic services office for more information or see http://www.bme.ufl.edu/academics/combined.

Degrees Offered with a Major in Biomedical Engineering

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

concentration in Medical Physics

Master of Engineering

Master of Science

without a concentration

concentration in Medical Physics

Courses

- BME 5052L: Biomedical Engineering Laboratory
- BME 5085: Patents, Product Development, and Technology Transfer
College of Engineering and College of Medicine Courses

- Click here for information about available College of Engineering courses.

Chemical Engineering Department

Chair: R. Dickinson,
Graduate Coordinator: A. Chauhan.

Complete faculty listing by department: Follow this link.

The Ph.D., M.E., and M.S. degrees in chemical engineering require course work in three core areas:

- The chemical engineering basic area, consisting of three core courses in the mathematical, the molecular, and the continuum bases of chemical engineering
- The chemical engineering science and systems area, consisting of a selection of courses in such areas as transport phenomena, electrochemical engineering, thermodynamics, kinetics, reaction engineering, process control, separation processes, and heat and mass transfer
- The research specialty area, consisting of courses designed to build depth in a field of specialization. Courses may be from other academic units, or may be chemical engineering courses such as colloid science, corrosion, polymer science, advanced materials, and biochemical engineering

Other

Chemical Engineering

College

College of Engineering

Department/School
Chemical Engineering Department

Degrees Offered with a Major in Chemical Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Courses

- BME 6221: Biomolecular Cell Mechanics
- BME 6322: Dynamics of Cellular Processes
- ECH 5708: Disinfection, Sterilization, and Preservation
- ECH 5938: Topics in Colloid Science
- ECH 6126: Thermodynamics of Reaction and Phase Equilibria
- ECH 6207
- ECH 6270: Continuum Basis of Chemical Engineering
- ECH 6272: Molecular Basis of Chemical Engineering
- ECH 6285: Transport Phenomena
- ECH 6326: Computer Control of Processes
- ECH 6506: Chemical Engineering Kinetics
- ECH 6526: Reactor Design and Optimization
- ECH 6644: Pharmacokinetics
- ECH 6709: Electrochemical Engineering Fundamentals and Design
- ECH 6726: Interfacial Phenomena I
- ECH 6727: Interfacial Phenomena II
- ECH 6843: Experimental Basis of Chemical Engineering
- ECH 6847: Mathematical Basis of Chemical Engineering
- ECH 6851: Impedance Spectroscopy
- ECH 6905: Individual Work
- ECH 6910: Supervised Research
- ECH 6926: Graduate Seminar
- ECH 6937: Topics in Chemical Engineering I
- ECH 6938: Topics in Chemical Engineering II
- ECH 6940: Supervised Teaching
- ECH 6971: Research for Master's Thesis
- ECH 6XXX
- ECH 7938: Advanced Special Chemical Engineering Topics for Doctoral Candidates
- ECH 7970: Advanced Research
- ECH 7980: Research for Doctoral Dissertation

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NSF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Civil and Coastal Engineering Department

Chair: K. Hatfield
Graduate Coordinator: A. Drescher
Complete faculty listing by department: Follow this link.
The Department of Civil and Coastal Engineering offers two distinct graduate programs: civil engineering and coastal and oceanographic engineering. All degrees except the Ph.D. are available in a thesis or nonthesis option. The nonthesis option has two formats: report and 30-hour non-report. Students who elect the nonthesis report must successfully complete a document of substantial engineering content for a minimum of two hours credit in CGN 6974 for civil engineering majors, or EOC 6905 for coastal and oceanographic engineering majors.

Civil and Coastal Engineering degree programs include areas of specialization in construction, civil engineering management, geotechnical engineering, water resources and hydrology, public works, structural engineering, civil engineering materials, geosensing systems engineering, coastal engineering, oceanographic engineering and offshore structures, and transportation engineering.

Minor or supporting work is encouraged from a variety of related or allied fields of study. Ph.D. students are required to take a preliminary examination. Requirements for the M.S., M.E., and Ph.D. degrees are given in the Graduate Degrees section of this catalog.

Other

Civil Engineering

College

College of Engineering

Department/School

Civil and Coastal Engineering Department

Civil Engineering Program

The civil engineering program is offered through the Department of Civil and Coastal Engineering with the following degrees: Master of Engineering, Master of Science, and Doctor of Philosophy. The master's degree in civil engineering is also offered through the Electronic Delivery of Graduate Engineering (EDGE) program, which is a distance learning program delivered either via streaming video or DVD directly to the students. Subject to approval by the supervisory committee, graduate-level courses taken through the Departments of Environmental Engineering Sciences, Geological Sciences, and Mechanical and Aerospace Engineering are considered as major credit.

For courses taken through the Department of Civil and Engineering, credit hours graded S/U will not count toward graduation except for:

- 6 hours of CGN 6971 or EOC 6971 for thesis students
- 3 hours of CGN 6974 for students working on the M.E. report
- CGN 7979 or EOC 7979
- CGN 7980 or EOC 7980

Degrees Offered with a Major in Civil Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences
Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Courses

- CCE 5035: Construction Planning and Scheduling
- CCE 5405: Construction Equipment and Procedures
- CCE 6037: Civil Engineering Operations I
- CCE 6038: Innovative Construction Techniques
- CCE 6505: Computer Applications in Construction Engineering
- CCE 6507: Computer Applications in Construction Engineering II
- CCE 6516: Topics in Airborne Laser Mapping Technology
- CEG 5105: Geotechnical Engineering
- CEG 5114: Advanced Geotechnical Aspects of Landfill Design
- CEG 5115: Foundation Design
- CEG 5205C: Insitu Measurement of Soil Properties
- CEG 5206: Geosensing I
- CEG 5805: Ground Modification Design
- CEG 6015: Advanced Soil Mechanics
- CEG 6116: Advanced Shallow Foundation Design
- CEG 6117: Advanced Deep Foundation Design
- CEG 6201: Experimental Determination of Soil Properties
- CEG 6207: Geosensing II
- CEG 6405: Seepage in Soils
• CEG 6505: Numerical Methods of Geomechanics
• CEG 6515: Earth Retaining Systems and Slope Stability
• CES 5010: Probabilistic and Stochastic Methods in Civil Engineering
• CES 5116: Finite Elements in Civil Engineering
• CES 5325: Design of Highway Bridges
• CES 5606: Topics in Steel Design
• CES 5607: Behavior of Steel Structures
• CES 5715: Prestressed Concrete
• CES 5726: Design of Concrete Systems
• CES 5801: Design and Construction in Timber
• CES 5835: Design of Reinforced Masonry Structures
• CES 6106: Advanced Structural Analysis
• CES 6108: Structural Dynamics
• CES 6165: Computer Methods in Structural Engineering
• CES 6551: Design of Folded Plates and Shells
• CES 6588: Protective Structures
• CES 6590: Impact Engineering
• CES 6591: Applied Protective Structures
• CES 6592: Retrofit Protective Structures
• CES 6593: Advanced Protective Structures
• CES 6706: Advanced Reinforced Concrete
• CES 6855: Condition Assessment of Structures
• CGN 5606: Public Works Management
• CGN 5715: Experimentation and Instrumentation in Civil Engineering Materials Research
• CGN 6155: Civil Engineering Practice I
• CGN 6156: Construction Engineering II
• CGN 6505: Properties, Design and Control of Concrete
• CGN 6506: Bituminous Materials
• CGN 6525: Sustainable Materials
• CGN 6905: Special Problems in Civil Engineering
• CGN 6910: Supervised Research
• CGN 6936: Civil Engineering Graduate Seminar
• CGN 6940: Supervised Teaching
• CGN 6971: Research for Master's Thesis
• CGN 6972: Research for Engineer's Thesis
• CGN 6974: Master of Engineering or Engineer Degree Report
• CGN 7979: Advanced Research
• CGN 7982: Research for Doctoral Dissertation
• CWR 5125: Groundwater Flow I
• CWR 5127: Evaluation of Groundwater Quality
• CWR 5235: Open Channel Hydraulics
• CWR 6115: Surface Hydrology
• CWR 6236: Sediment Transport I
• CWR 6255: Diffuse and Dispersive Transport
• CWR 6525: Groundwater Flow II
• CWR 6537: Contaminant Subsurface Hydrology
• TTE 5305: Advanced Transportation Systems Analysis
• TTE 5506: Advanced Urban Transportation Planning
• TTE 5566: Traffic Engineering
• TTE 5805: Geometric Design of Transportation Facilities
• TTE 5835: Pavement Design
• TTE 5837: Pavement Management Systems
• TTE 6205: Freeway Operations and Simulation
• TTE 6259: Urban Streets Simulation and Control
• TTE 6267: Traffic Flow Theory
• TTE 6306: Computational Methods in Transportation Engineering
• TTE 6315: Highway Safety Analysis
• TTE 6505: Discrete Choice Analysis
• TTE 6606: Urban Transportation Models

Civil and Coastal Engineering Departmental Courses

• CES 6571: Design of Temporary Structures
• CES 6585: Wind Engineering
• CGN 5125: Legal Aspects of Civil Engineering
• CGN 5315: Civil Engineering Systems
• CGN 5605: Public Works Planning
• CGN 6150: Engineering Project Management
• CWR 6126: Variable-Density Groundwater Flow
• CWR 6240: Mixing and Transport in Turbulent Flow
• TTE 6207: Advanced Highway Capacity Analysis

Hydrology / Water Resources Shared Courses

• CGN 6905: Special Problems in Civil Engineering
• CWR 5125: Groundwater Flow I
• CWR 5127: Evaluation of Groundwater Quality
• CWR 5235: Open Channel Hydraulics
• CWR 6115: Surface Hydrology
Coastal and Oceanographic Engineering Program

The coastal and oceanographic engineering program is offered through the Department of Civil and Coastal Engineering with the following degrees: Master of Engineering, Master of Science, and Doctor of Philosophy degree. Subject to approval by the supervisory committee, graduate-level courses taken through the Departments of Environmental Engineering Sciences, Geological Sciences, and Mechanical and Aerospace Engineering are considered as major credit.

For courses taken through the Department of Civil and Coastal Engineering, credit hours graded S/U will not count toward graduation except for:

- 6 hours of CGN 6971 or EOC 6971 for thesis students
- 3 hours of CGN 6974 for students working on the M.E. report
- CGN 7979 or EOC 7979
- CGN 7980 or EOC 7980

Degrees Offered with a Major in Coastal and Oceanographic Engineering

Doctor of Philosophy

Master of Engineering

Master of Science
Coastal and Oceanographic Engineering Courses

- EGM 5816: Intermediate Fluid Dynamics
- EOC 5860: Port and Harbor Engineering
- EOC 6196: Littoral Processes
- EOC 6430: Coastal Structures
- EOC 6850: Numerical Simulation Techniques in Coastal and Ocean Engineering
- EOC 6905: Individual Study in Coastal and Oceanographic Engineering
- EOC 6932: Selected Field and Laboratory Problems
- EOC 6934: Advanced Topics in Coastal and Oceanographic Engineering
- EOC 6939: Graduate Seminar
- EOC 6971: Research for Master's Thesis
- EOC 6972: Research for Engineer's Thesis
- EOC 7979: Advanced Research
- EOC 7980: Research for Doctoral Dissertation
- EOC 5293: Coastal Processes
- OCP 6050: Physical Oceanography
- OCP 6165: Ocean Waves I: Linear Theory
- OCP 6165L: Ocean Waves Laboratory
- OCP 6167: Ocean Waves II: Nonlinear Theory
- OCP 6168: Data Analysis Techniques for Coastal and Ocean Engineers
- OCP 6169: Random Sea Analysis
- OCP 6295: Estuarine and Shelf Hydrodynamics I
- OCP 6297: Coastal and Estuarine Sediment Transport
- OCP 6298: Coastal Sediment Transport Processes

Civil and Coastal Engineering Departmental Courses

- CES 6571: Design of Temporary Structures
- CES 6585: Wind Engineering
- CGN 5125: Legal Aspects of Civil Engineering
- CGN 5315: Civil Engineering Systems
- CGN 5605: Public Works Planning
- CGN 6150: Engineering Project Management
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6240: Mixing and Transport in Turbulent Flow
- TTE 6207: Advanced Highway Capacity Analysis

Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM 5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6441: Water Resources Planning and Management
- ENV 6508: Wetland Hydrology
- ENV 6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Computer and Information Science and Engineering Department

College of Engineering

Chair: Paul Gader
Graduate Coordinator: Jih-kwon Peir

Complete faculty listing by department: [Follow this link](http://www.cise.ufl.edu).

The Department of Computer and Information Science and Engineering is concerned with the theory, design, development, and application of computer systems and information processing techniques. The mission of the CISE Department is to educate undergraduate and graduate majors as well as the broader campus community in the fundamental concepts of the computing discipline, to create and disseminate computing knowledge and technology, and to use our expertise in computing to help society solve problems.

The Department of Computer and Information Science and Engineering (CISE) offers

- Master of Engineering, Master of Science, and Ph.D. degrees in computer engineering through the College of Engineering
- Master of Science degree in digital arts and sciences through the College of Liberal Arts and Sciences
- Master of Science degree in computer science through the College of Liberal Arts and Sciences.

The CISE Department has six broad areas of specialization:

- **Computer systems**: computer architecture, distributed systems, networks and communication, operating systems, performance evaluation, security, mobile computing, software engineering, programming languages, multimedia systems, and web technologies
- **Database and information systems**: database management systems, database design, database theory and implementation, data mining, database machines, parallel and distributed databases, digital libraries, E-services and commerce, medical, and bio-informatics
- **High-performance computing/applied algorithms**: design and analysis of algorithms, data structures, parallel and distributed computing, medical algorithms, numerical methods, computational complexity, and applied computational geometry
- **Computer graphics, modeling, and art**: modeling methodology, simulation, virtual reality, aesthetic computing, computer arts, animation, real-time rendering, medical modeling, digital media, and musical acoustics
- **Intelligent systems and computer vision**: artificial intelligence, machine learning, visualization, image analysis and processing, pattern recognition, signal processing, biomedical imaging, and image databases
- **Computer networks and security**: wired and wireless networks, network routing and protocols, and QoS

Applications for admission must be approved by both the Department and the college in which the student wishes to enroll. Applicants should have a strong computer science background. All master's students must satisfy a core requirement by completing four specified graduate-level core courses (12 credits) or their approved equivalents with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- An additional 12 credits of course work beyond the core (a minimum of 6 graduate-level credits in CISE and with approval, at most 6 credits in some other department), and a written thesis.
- A minimum of 6 credit hours must be taken in CIS 6971.

The nonthesis option requires:

- An additional 12 credits of letter-graded course work in CISE beyond the core
- 6 letter-graded credits from either CISE or (with approval) from some other department.
- Each nonthesis master's student is required to pass a comprehensive examination.

The Digital Arts and Sciences project in lieu of thesis option requires 6 credit hours of project/performance credits.

To demonstrate breadth and proficiency, all Ph.D. students must take 4 required core courses obtaining a 3.4 GPA in 3 of the 4 required core courses, with no more than one of the core courses receiving a letter grade below "B." Students can select a thesis or nonthesis option for the master's degree. Digital Arts and Sciences students must choose either thesis or project in lieu of thesis. All options require a minimum of 30 credit hours. The thesis degree requires:

- A minimum of 6 credit hours must be taken in CIS 7980. A minimum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

Ph.D. students are required to take a minimum of 90 credit hours. Of these, at least 36 hours must be graduate-level CISE course work excluding individual study and research credits. A minimum of 5 hours must be taken in CIS 7980. A minimum of 30 credits may be awarded toward the Ph.D. degree from an appropriate master's degree.

The Database Systems Research and Development Center, the Software Engineering Research Center, the Center for Computer Vision and Visualization Center, and a number of other campus research centers provide opportunities for students enrolled in the program.

The department offers a combined bachelor's/master's degree program. Contact the Department's Student Services Center for information.

For more information, please see the program pages below, or visit our website: [http://www.cise.ufl.edu](http://www.cise.ufl.edu).

**Other**

**Computer Engineering**

**College**

**College of Engineering**

**Department/School**

**Computer and Information Science and Engineering Department**

**Computer Engineering Program Information**

The Department of Computer and Information Science and Engineering offers the Master of Science and the Doctor of Philosophy degrees in Computer Engineering through the College of Engineering. Minimum requirements for these degrees are given in the [Graduate Degrees](http://www.cise.ufl.edu) section of this catalog.

The department offers graduate study and research in Algorithms, Computer Vision, Databases, Graphics and Modeling, Machine Learning, Networks, and Systems, with active labs in Bioinformatics; Computational Science and Intelligence; Vision, Graphics and Medical Imaging; Database Systems Research and Development; Data Science Research; Mobile and Pervasive Computing; Human-Centered Computing; and Cybersecurity.
Specific degree requirements and options may be found here: [http://cise.ufl.edu/academics/grad](http://cise.ufl.edu/academics/grad)

Instructions for application for admission may be found here: [http://cise.ufl.edu/admissions/grad](http://cise.ufl.edu/admissions/grad)

Degrees Offered with a Major in Computer Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

without a concentration

concentration in Digital Arts and Sciences

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5805: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6686: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6166: High Performance Computer Architecture
- CEN 5035: Software Engineering
- CEN 6070: Software Testing and Verification
- CEN 6075: Software Specification
- CIS 6905: Individual Study
- CIS 6910: Supervised Research
- CIS 6930: Special Topics in CIS
- CIS 6935: Graduate Seminar
- CIS 6940: Supervised Teaching
- CIS 6971: Research for Master's Thesis
- CIS 7979: Advanced Research
- CIS 7980: Research for Doctoral Dissertation
- CNT 5105C: Computer Networks
- CNT 5410: Computer and Network Security
- CNT 5517: Mobile Computing
- CNT 6107: Advanced Computer Networks
- CNT 6885: Distributed Multimedia Systems
- COP 5536: Advanced Data Structures
- COP 5555: Programming Language Principles
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Digital Arts and Sciences (Engineering)

College

- College of Engineering

Department/School

- Computer and Information Science and Engineering Department

Digital Arts and Sciences (Engineering) Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science degree in Digital Arts and Sciences through the College of Engineering. Minimum requirements for this degree are given in the Graduate Degrees section of this catalog.

This specialized program integrates engineering and design and was created for students with an interest in video games, human-computer interaction, 3D modeling and animation, virtual reality, and computer graphics. The curriculum includes core computer science with a special emphasis on human-centered computing and provides students the flexibility to focus on both computer science and design, and to create software that is computationally complex, user friendly and aesthetically pleasing.

Specific degree requirements and options may be found here: http://cise.ufl.edu/academics/grad

Instructions for application for admission may be found here:
http://cise.ufl.edu/admissions/grad

Degrees

Master of Science

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5806: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5910L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Electrical and Computer Engineering Department

Chair: J. Harris.
Graduate Coordinators: G. Bosman, J. McNair

Complete faculty listing: Follow this link.

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the Graduate Degrees Section of this catalog. For more information about our program, please visit the link below.

Other

Electrical and Computer Engineering

College

College of Engineering

Department/School
Electrical and Computer Engineering Program Information

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in computer engineering, devices, electromagnetics and energy systems, electronics, and signals and systems.

Graduate students in the Department of Electrical and Computer Engineering have bachelor's degrees from many areas: electrical engineering, other engineering disciplines, chemistry, mathematics, physics, and other technical fields. The Department of Electrical and Computer Engineering offers both thesis and nonthesis options for the master's degrees.

In the thesis option a student shall complete a minimum of 30 semester credit hours with a maximum of 6 semester credit hours of EEL 6971 (Research for Master's Thesis). While the Graduate School sets the minimum requirements, the supervisory committee determines the appropriate number of thesis hours a student shall be required to take for the thesis. Other course requirements include a minimum of 18 hours at the 5000 or 6000 level in electrical and computer engineering. Excluded from satisfying these course requirements are EEL 5905 and EEL 6905 (Individual Work), EEL 6910 (Supervised Research), 6932 (Graduate Seminar), EEL 6940 (Supervised Teaching), and EEL 6971 (Research for Master's Thesis). No more than 6 hours of Individual Work may be counted toward the degree.

In the nonthesis option a student shall complete a minimum of 30 semester credit hours with a maximum of 6 semester credit hours of Individual Work. The course requirements include a minimum of 21 semester credit hours at the 5000 or 6000 level in electrical and computer engineering. Excluded from satisfying these course requirements are EEL 5905 and EEL 6905 (Individual Work), EEL 6910 (Supervised Research), 6932 (Graduate Seminar), EEL 6940 (Supervised Teaching), and EEL 6971 (Research for Master's Thesis).

The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both a bachelor's degree and master's degree with a saving of one semester. Qualified students may begin their master's programs while seniors, counting up to 12 hours of specified electrical and computer engineering graduate courses for both bachelor's and master's degree requirements. Bachelor's/master's program admission requirements are (1) satisfaction of Graduate School admission requirements for the master's degree, (2) an upper-division (undergraduate) GPA of at least 3.3, and (3) completion of at least 7 EEL core courses and 2 EEL laboratories. Students with a GPA between 3.3 and 3.59 can double count up to 6 hours, while students with a GPA of 3.6 or higher can double count up to 12 hours.

All prospective doctoral students must take the written part of the Ph.D. qualifying examination within the first year of enrollment. Other requirements for the doctoral degree, as well as requirements for master's and engineer degrees, are given in the Electrical and Computer Engineering Department’s Graduate Guidelines (see http://www.ece.ufl.edu/content/graduate-academics) and in the front section of this catalog.

The following course listing indicates the major areas of faculty interest. Special topics courses EEL 5934 and EEL 6935 cover a wide variety of subjects for which there are no present courses.

Degrees Offered with a Major in Electrical and Computer Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Courses

- CNT 6805: Network Science and Applications
- EEE 5317C: Introduction to Power Electronics
- EEE 5320: Bipolar Analog IC Design
- EEE 5322: VLSI Circuits and Technology
- EEE 5364: Fundamentals of Data Converters
- EEE 5400: Future of Microelectronics Technology
- EEE 5405: Microelectronic Fabrication Technologies
- EEE 5428: Introduction to Nanodevices
- EEE 6287: Brain Machine Interface Engineering
- EEE 6321: MOS Analog IC Design
- EEE 6323: Advanced VLSI Design
- EEE 6325: Computer Simulation of Integrated Circuits and Devices
- EEE 6328C: Microwave IC Design
- EEE 6374: Radio Frequency (RF) Integrated Circuits and Technologies
- EEE 6382: Semiconductor Physical Electronics
- EEE 6390: VLSI Device Design
- EEE 6397: Semiconductor Device Theory I
- EEE 6402: Nonclassical Si-Based Nanoscale CMOS Devices
- EEE 6428: Computational Nanoelectronics
- EEE 6431: Carbon Nanotubes
- EEE 6460: Advanced Microsystem Technology
- EEE 6465: Design of MEMS Transducers
- EEL 5182: State Variable Methods in Linear Systems
- EEL 5225: Principles of Micro-Electro-Mechanical Transducers
- EEL 5400: Airborne Sensors and Instrumentation
- EEL 5401: Airborne Laser Scanning: Data Processing and Analysis
- EEL 5441: Fundamentals of Photonics
- EEL 5462: Advanced Antenna Systems
- EEL 5490: Lightning
- EEL 5502: Foundations of Digital Signal Processing
- EEL 5544: Noise in Linear Systems
- EEL 5556: Electronic Countermeasures
- EEL 5666C: Intelligent Machines Design Laboratory
- EEL 5718: Computer Communications
- EEL 5721: Reconfigurable Computing
- EEL 5737: Principles of Computer System Design
- EEL 5764: Computer Architecture
- EEL 5840: Elements of Machine Intelligence
- EEL 5905: Individual Work
- EEL 5934: Special Topics in Electrical Engineering
- EEL 6065: Electrical & Computer Engineering Technical Writing
- EEL 6264: Advanced Electric Energy Systems I
- EEL 6265: Advanced Electric Energy Systems II
- EEL 6443: Integrated and Fiber Optics
- EEL 6486: Electromagnetic Field Theory and Applications I
- EEL 6487: Electromagnetic Field Theory and Applications II
- EEL 6504: Adaptive Signal Processing
- EEL 6507: Queueing Theory and Data Communications
- EEL 6509: Wireless Communication
- EEL 6503: Digital Filtering
- EEL 6532: Information Theory
- EEL 6533: Statistical Decision Theory
- EEL 6535: Digital Communications
- EEL 6537: Spectral Estimation
- EEL 6550: Error Correction Coding
- EEL 6552: Digital Communications with Software-defined Radios
- EEL 6555: Signal Processing for Active Sensing
- EEL 6586: Automatic Speech Processing
- EEL 6588: Wireless Ad Hoc Networks
- EEL 6591: Wireless Networks
- EEL 6614: Modern Control Theory
- EEL 6617: Linear Multivariable Control
- EEL 6619: Robust Control Systems
- EEL 6666: Embedded Systems Seminar
- EEL 6706: Fault-Tolerant Computer Architecture
- EEL 6763: Parallel Computer Architecture
- EEL 6769: Hardware-Software Interactions: Nonnumeric Processing
- EEL 6814: Neural Networks for Signal Processing
- EEL 6825: Pattern Recognition and Intelligent Systems
- EEL 6841: Machine Intelligence and Synthesis
- EEL 6871: Autonomic Computing
- EEL 6892: Virtual Computers
- EEL 6905: Individual Work
- EEL 6910: Supervised Research
- EEL 6933: Electrical and Computer Engineering Graduate Seminar
- EEL 6935: Special Topics in Electrical Engineering
- EEL 6940: Supervised Teaching
- EEL 6971: Research for Master's Thesis
- EEL 6972: Research for Engineer's Thesis
- EEL 7979: Advanced Research
- EEL 7980: Research for Doctoral Dissertation

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Environmental Engineering Sciences Department

Director: K. Hatfield
Graduate Coordinator: P. Chadik

Complete faculty listing [Follow this link.]

The Department of Environmental Engineering Sciences offers graduate study in the following areas: Air Resources; Biogeochemical Systems; Environmental Nanotechnology; Solid and Hazardous Waste Management; Storm Water, Water Supply and Waste Water; Sustainability Science & Engineering Systems Ecology and Ecological Engineering and Water Resources. Students graduated from the program will demonstrate depth in individual focus areas as well as breadth of core knowledge concepts in all areas. Please visit the link below for more information about our program in Environmental Engineering Sciences.

Other

Environmental Engineering Sciences

College

[College of Engineering]

Department/School

[Environmental Engineering Sciences Department]

Environmental Engineering Sciences Program Information

Graduate study is offered leading to the degrees Master of Engineering, Master of Science, and Doctor of Philosophy in the field of environmental engineering sciences. Our graduate research and education areas are

Air Resources
• Monitoring of air pollutants: indoor, ambient, industrial, and occupational
• Monitoring methodology and instrumentation development
• Formation and fate of air pollutants
• Air quality modeling
• Air pollution control: system, process and materials
• Sustainability of air quality
• Health effects and environmental impact of air pollutant

Biogeochemical Systems
• Green Engineering
• Microbiology of Natural and Engineered Systems
• Environmental Fate and Transport of Pollutants in Soils and Aquatic Systems
• Biological and Chemical Remediation of Contaminated Systems
• Environmental Toxicology and Nanotoxicology
• Effects of Climate and Land Use Changes on Biogeochemical Cycles
• Aqueous Geochemistry and Water Treatment

Environmental Nanotechnology
• Manufacturing and tailoring of nanomaterials and nanodevices for application in environmental and human health research
• Environmental fate and transport of nanomaterials
• Environmental implications of nanomaterials

Solid and Hazardous Waste Management
• Bioreactor Landfills
• Combustion and Thermal Treatment Residuals
• Contaminated Soil Characterization and Treatment
• Construction and Demolition Debris
• Electronic Waste
• Hazardous Waste
• Landfill Design and Operations
• Landfill Gas and Leachate
• Recycling and Beneficial Use of Wastes
• Treated Wood
• Waste Characterization and Leaching
• Solid Waste Management in Developing Countries

Stormwater, Water Supply and Wastewater
• Fundamental characterization of aqueous and particulate-phase contaminants including emerging contaminants; representative ambient monitoring, methodology, and load quantification.
• Source and generation of aqueous and particulate phase contaminants, physics and chemistry of contaminant transport and fate.
• Water contaminant control: systems, unit operation and processes, and materials development, in particular innovative mass transfer materials and low impact development materials.
• Water reuse as part of the urban water cycle: volumetric and contaminant load impacts
• Unit operation and process modeling: scalable physical models and computational fluid dynamics (CFD).
• Integrated physical, chemical, biological and thermal treatment phenomena for water cycle components.
• Coupling fundamental monitoring and material balance testing with urban water modeling.
• Fundamental and applied studies of physical-chemical water treatment processes, such as adsorption, coagulation, ion exchange, and oxidation, for a wide range of water qualities including surface water, groundwater, membrane concentrate, landfill leachate, and human urine.
• Innovative applications of ion exchange for water treatment.
• Fundamental studies in aquatic chemistry with a focus on the role of natural organic matter.
• Fundamental and applied studies of adsorption and photocatalysis, including surface optimization
• Bottom up integrated urban water system simulation and optimization

Sustainability Science & Engineering
• Rational design of nanomaterial through acute and full-life-cycle toxicity assessment
• Life cycle assessment calculations and comparisons of alternative energy and materials options
• Industrial ecology
• Corporate water resources sustainability
• Campus green building codes
• Green laboratory techniques
• Operation of buildings to meet green energy requirements

Systems Ecology and Ecological Engineering
• Ecological Engineering
• Emergy Analysis
• Wetlands ecosystem research
• Ecological Modeling
• Estuarine Systems

Water Resources
• Contaminant transport and fate
• Decision support systems
• Hydrology and hydrologic restoration
• Hydrology
• Stormwater control
• Water resources planning and management
• Water conservation
• Urban water infrastructure

Graduate students can also combine one or more of the above areas with specialties in other departments at the University of Florida.

The department participates in the hydrologic sciences interdisciplinary concentration that is offered through 9 departments in 3 colleges. This concentration is described under Interdisciplinary Graduate Studies.

Direct admission into the Master of Science and Doctor of Philosophy programs requires a bachelor’s degree in engineering or in a basic science such as chemistry, geology, physics, biology, or mathematics. Persons with a degree in a nontechnical field may also be admitted into this program after completing appropriate technical courses. Direct admission into the Master of Engineering program requires a bachelor’s degree in engineering.

Requirements for a master’s degree normally take 12 to 24 months to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, and may be completed in 3 years, but often takes longer, depending on prior academic experience.

Concurrent program: The department offers a combined bachelor’s/master’s degree program. This program allows qualified students to earn both a bachelor’s degree and a master’s degree, with a savings of 12 credits.

Joint program: The Environmental Engineering Sciences Department, in partnership with the Levin College of Law, offers a joint program leading to the M.S. or M.E. degree in environmental engineering sciences and the Juris Doctor degree. Twelve credits of appropriate course work are counted toward both degrees.

Degrees Offered with a Major in Environmental Engineering Sciences

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences
Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Courses

- CEG 5206: Geosensing I
- CWR 6115: Surface Hydrology
- CWR 6116: Advanced Surface Hydrology
- CWR 6252: Environmental Biochemistry of Trace Metals
- CWR 6536: Stochastic Subsurface Hydrology
- CWR 6537: Contaminant Subsurface Hydrology
- EES 5105: Advanced Wastewater Microbiology
- EES 5107: Ecological and Biological Systems
- EES 5207: Environmental Chemistry
- EES 5245: Water Quality Analysis
- EES 5305C: Ecological and General Systems
- EES 5306: Energy Analysis
- EES 5307: Ecological Engineering
- EES 5315: Ecology and the Environment
- EES 5415: Environmental Health
- EES 6007: Advanced Energy and Environment
- EES 6009: Ecological Economics
- EES 6026C: Environmental Systems Dynamics
- EES 6028: Spatial Modeling Using Geographic Information Systems
- EES 6051: Advanced Environmental Planning and Design
Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6128: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6441: Water Resources Planning and Management
- ENV 6508: Wetland Hydrology
- ENV 6510: Groundwater Restoration
- ENV 6511: Biological Wastewater Treatment
- ENV 6556: Advanced Waste Treatment Operations
- ENV 6617: Principles of Green Engineering Design and Sustainability
- ENV 6905: Individual Work
- ENV 6910: Supervised Research
- ENV 6916: Nonthesis Project
- ENV 6932: Special Problems in Environmental Engineering
- ENV 6935: Graduate Environmental Engineering Seminar
- ENV 6971: Research for Master's Thesis
- ENV 7979: Advanced Research
- ENV 7980: Research for Doctoral Dissertation

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
Industrial and Systems Engineering Department

Chair: J. Geunes.
Graduate Coordinator: J. C. Smith and P. Momcilovic.

Complete faculty listing by department: Follow this link.

The Department of Industrial and Systems Engineering offers the Master of Engineering and the Master of Science degrees, each with a thesis or non-thesis option, with specialization in engineering management, manufacturing and logistics systems engineering, operations research, quality engineering, and special interest options such as health systems. In addition, the Department offers the Engineer degree and the Doctor of Philosophy degree with specialization in linear, combinatorial, nonlinear, and global optimization; supply chain management and e-commerce; financial engineering; manufacturing management; facilities location and layout; quality engineering; and stochastic processes.

Complete descriptions of the requirements for the M.E., M.S., Engineer, and Ph.D. degrees are provided in the General Information section of this catalog.

A degree in one of the engineering disciplines or in mathematics, statistics, physics, computer sciences, quantitative management, or similar fields is prerequisite. Where the student's background is deficient, an articulation program of foundation courses will be required.

The Department offers a combined bachelor's/master's degree program of B.S.I.S.E./Master of Science (Management), B.S.I.S.E./Master of Engineering or Master of Science, and a B.S. from disciplines within the College of Engineering/Master of Science or Master of Engineering. Contact the graduate coordinator for information.

Other

Industrial and Systems Engineering

College

College of Engineering

Department/School

Industrial and Systems Engineering Department

Degrees Offered with a Major in Industrial and Systems Engineering

Doctor of Philosophy

without a concentration

concentration in Quantitative Finance

Engineer

Master of Engineering
Master of Science

Industrial and Systems Engineering Courses

- EIN 6227: Advanced Quality Management and Engineering for Business Processes
- EIN 6336: Advanced Production and Inventory Control
- EIN 6357: Advanced Engineering Economy
- EIN 6367: Facilities Layout and Location
- EIN 6392: Manufacturing Management
- EIN 6905: Special Problems
- EIN 6910: Supervised Research
- EIN 6918: Graduate Seminar
- EIN 6940: Supervised Teaching
- EIN 6971: Research for Master's Thesis
- EIN 6972: Research for Engineer's Thesis
- EIN 7933: Special Problems
- EIN 7979: Advanced Research
- EIN 7980: Research for Doctoral Dissertation
- ESI 5236: Reliability Engineering
- ESI 6162C: Advanced Industrial Applications of Microprocessors
- ESI 6314: Deterministic Methods in Operations Research
- ESI 6323: Models for Supply Chain Management
- ESI 6341: Intro to Stochastic Optimization
- ESI 6355: Decision Support Systems for Industrial and Systems Engineers
- ESI 6417: Linear Programming and Network Optimization
- ESI 6418: Linear Programming Extensions and Applications
- ESI 6420: Fundamentals of Mathematical Programming
- ESI 6428: Introduction to Nonlinear Optimization
- ESI 6448: Discrete Optimization Theory
- ESI 6449: Integer Programming
- ESI 6470: Principles of Manufacturing Systems Engineering
- ESI 6492: Global Optimization
- ESI 6529: Digital Simulation Techniques
- ESI 6533: Advanced Simulation Design and Analysis
- ESI 6546: Stochastic Modeling and Analysis
- ESI 6552: Systems Architecture
- ESI 6553: Systems Design
- ESI 6555: Systems Management
- ESI 6912: Advanced Topics in ISE

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6039: Engineering Leadership
- EGN 6422: Engineering Innovation
- EGN 6640: Entrepreneurship for Engineers

Materials Science and Engineering Department

Chair: S. Phillpot
MSE Graduate Coordinator: J. M. Macholosky, Jr.
NE Graduate Coordinator: E. Dugan

The Department of Materials Science and Engineering offers the Master of Science and Doctor of Philosophy degrees in Materials Science & Engineering (MSE) and Nuclear Engineering (NE). Requirements for these degrees are described in the General Information section of this catalog.

Degrees in MSE include specific areas of research and study in biomaterials, ceramics, composites, computational materials science, electronic materials, metals, polymers, nanomaterials, and nuclear materials. Degrees in NE include specific areas of research and study in advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security.

Nontraditional Degree Programs: The Department offers combined bachelor/master’s degree programs: MSE BS/MS, NE BS/MS, and students may also combine the MSE BS with the MS awarded through the Dept. of Biomedical Engineering (BME). The combined bachelor/master’s program allows qualified students to earn both degrees in materials science and engineering with savings of a tangible number of credit hours. Qualified students are allowed to begin master’s coursework in their junior years and double count specific graduate courses for both degrees. The master’s degree may be completed within 2 to 3 semesters after completing the bachelor’s degree. Program admission requirements are (1) satisfaction of Graduate School admission requirements prior to the beginning of the senior year, (2) an upper division GPA of at least 3.5 in MSE and 3.4 in NE, (3) for MSE, completion of a minimum of 18 credit hours of courses, (4) admission by the Department’s Graduate Admission Committee and approval by the College of Engineering and the Graduate School. For more information, contact the Department.

The J.D./M.S. in MSE (thesis/nonthesis) is a joint degree program culminating in both the Juris Doctor degree, awarded by the College of Law, and the Master of Science (thesis/nonthesis),...
awarded by the College of Engineering. Under this program, a student can earn both degrees in approximately 1 year less than it would take to attain both degrees if pursued consecutively.

Concurrent M.D./Ph.D. degrees are offered through a collaborative program between the College of Medicine and Materials Science and Engineering. For more information, please contact the Department.

To be eligible for regular admission to the graduate program within the Department, the student must hold a B.S. in an appropriate major. Because of the breadth of MSE graduate programs, students with degrees in materials, ceramics, metallurgy, other engineering, mathematics, or science areas (such as biology, chemistry, or physics) have found ample opportunities to pursue their research and training areas of interest.

The faculties of the Department of Materials Science and Engineering (MSE) of the University of Florida (UF) and the University of Roma Tor Vergata (URT) have approved a cooperative degree program in Materials Science and Engineering culminating in a Doctor of Philosophy degree, awarded by both universities. Contact the Department for details.

Other

Materials Science and Engineering

College

College of Engineering

Department/School

Materials Science and Engineering Department

Degrees Offered with a Major in Materials Science and Engineering

Doctor of Philosophy

without a concentration

in concentration in Clinical and Translational Science

Master of Engineering

Master of Science

Courses

- EMA 5008: Particle Science and Technology: Theory and Practice
- EMA 5095: Critical Analysis of Research in Materials Science & Engineering
- EMA 5108: Vacuum Science and Technology
- EMA 5365: Biomimetic Synthesis
- EMA 6005: Thin and Thick Films
- EMA 6105: Fundamentals and Applications of Surface Science
College of Engineering Courses

Mechanical and Aerospace Engineering Department

Chair: David W. Hahn
Graduate Coordinator: D. W. Mikolaitis

Complete faculty listing by department: Follow this link.

The Department of Mechanical and Aerospace Engineering offers the degrees of Master of Science (thesis or nonthesis), Master of Engineering (thesis or nonthesis), Engineer, and Doctor of Philosophy in aerospace engineering and mechanical engineering. Minimum requirements for these degrees are given in the General Information section of this catalog. Additional information can be found at http://www.mae.ufl.edu/graduate. Prospective students are expected to have strong backgrounds in engineering. For the first year of study, each student is generally required to take a minimum of three regular courses each semester. There are three areas of specialization available for graduate studies: dynamics, systems, and control; solid mechanics, design, and manufacturing thermal science and fluid dynamics. Within a specialization there are unique opportunities to conduct analytical, experimental, and/or numerical study in a wide variety of
challenging problems. The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Other

Aerospace Engineering

College

College of Engineering

Mechanical and Aerospace Engineering Department

Degrees Offered with a Major in Aerospace Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Mechanical and Aerospace Engineering Departmental Courses

- BME 5580: Introduction to Microfluidics and BioMEMS
- EAS 5938: Special Topics in Aerospace Engineering
- EAS 6135: Molecular Theory of Fluid Flows
- EAS 6138: Gasdynamics
- EAS 6242: Advanced Structural Composites
- EAS 6415: Guidance and Control of Aerospace Vehicles
- EAS 6905: Aerospace Research
- EAS 6910: Supervised Research
- EAS 6935: Graduate Seminar
- EAS 6939: Special Topics in Aerospace Engineering
- EAS 6971: Research for Master's Thesis
- EAS 7979: Advanced Research
- EAS 7980: Research for Doctoral Dissertation
- EGM 5005: Laser Principles and Applications
- EGM 5111L: Experimental Stress Analysis
- EGM 5121C: Data Measurement and Analysis
- EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
- EGM 5584: Biomechanics of Soft Tissue
- EGM 5816: Intermediate Fluid Dynamics
- EGM 5933: Special Topics in Engineering Science and Mechanics
- EGM 6006: Laser-Based Diagnostics
- EGM 6321: Principles of Engineering Analysis I
- EGM 6322: Principles of Engineering Analysis II
- EGM 6323: Principles of Engineering Analysis III
- EGM 6341: Numerical Methods of Engineering Analysis I
- EGM 6342: Fundamentals of Computational Fluid Dynamics
- EGM 6352: Advanced Finite Element Methods
- EGM 6365: Structural Optimization
- EGM 6570: Principles of Fracture Mechanics
- EGM 6611: Continuum Mechanics
- EGM 6671: Inelastic Materials
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6539: Engineering Leadership

Mechanical Engineering

College

College of Engineering
Mechanical and Aerospace Engineering Department

Degrees Offered with a Major in Mechanical Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Mechanical and Aerospace Engineering Departmental Courses

- BME 5580: Introduction to Microfluidics and BioMEMS
- EAS 5938: Special Topics in Aerospace Engineering
- EAS 6135: Molecular Theory of Fluid Flows
- EAS 6138: Gasdynamics
- EAS 6242: Advanced Structural Composites
- EAS 6415: Guidance and Control of Aerospace Vehicles
- EAS 6906: Aerospace Research
- EAS 6910: Supervised Research
- EAS 6935: Graduate Seminar
- EAS 6939: Special Topics in Aerospace Engineering
- EAS 6971: Research for Master's Thesis
- EAS 7979: Advanced Research
- EAS 7980: Research for Doctoral Dissertation
- EGM 5005: Laser Principles and Applications
- EGM 5111L: Experimental Stress Analysis
- EGM 5121C: Data Measurement and Analysis
- EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
- EGM 5584: Biomechanics of Soft Tissue
- EGM 5586: Intermediate Fluid Dynamics
- EGM 5933: Special Topics in Engineering Science and Mechanics
- EGM 6006: Laser-Based Diagnostics
- EGM 6321: Principles of Engineering Analysis I
- EGM 6322: Principles of Engineering Analysis II
- EGM 6323: Principles of Engineering Analysis III
- EGM 6341: Numerical Methods of Engineering Analysis I
- EGM 6342: Fundamentals of Computational Fluid Dynamics
- EGM 6352: Advanced Finite Element Methods
- EGM 6365: Structural Optimization
- EGM 6611: Continuum Mechanics
- EGM 6617: Inelastic Materials
- EGM 6812: Fluid Mechanics I
- EGM 6813: Fluid Mechanics II
- EGM 6855: Bio-Fluid Mechanics and Bio-Heat Transfer
- EGM 6905: Individual Study
- EGM 6910: Supervised Research
- EGM 6934: Special Topics in Engineering Mechanics
- EGM 6936: Graduate Seminar
- EGM 6971: Research for Master's Thesis
- EGM 7819: Computational Fluid Dynamics
- EGM 7845: Turbulent Fluid Flow
- EGM 7979: Advanced Research
- EGM 7980: Research for Doctoral Dissertation
- EML 5045: Computational Methods for Design and Manufacturing
- EML 5104: Classical and Statistical Thermodynamics
- EML 5124: Two-Phase Flow and Boiling Heat Transfer
- EML 5131: Combustion
- EML 5215: Analytical Dynamics I
- EML 5223: Structural Dynamics
- EML 5224: Acoustics
- EML 5233: Failure of Materials in Mechanical Design
- EML 5311: Control System Theory
Other

of the student's deficiency.

requirements 40-42 credit hours. For a master's degree in health physics, a student must complete 42 hours of credit. If articulation work is required, it may take longer, depending upon the extent

Normally, the requirements for a master's degree can be completed in 12 months. Students in the medical physics option usually take 21 to 24 months to complete the master's degree, which

nuclear engineering sciences, including a 4-credit (minimum) special project,

Depending on professional objectives, the student may select a non-thesis option for the MS degree and substitute 8 credits of graduate-level course work, of which at least 6 credits are in

articulation program of background courses will be required.

depending upon the extent of the student's deficiency.

Nuclear and Radiological Engineering Department

Chair: D. Hintenlang
Graduate Coordinator: W. Bolch

Complete faculty listing Follow this link.

The Department offers the degrees of Master of Science, Master of Engineering, and Doctor of Philosophy in nuclear engineering sciences with emphases in nuclear power engineering, medical physics, and health physics. Complete descriptions of the minimum requirements for these degrees are provided in the General Information section of this catalog.

The medical physics and health physics options are offered through interdepartmental programs in cooperation with the College of Medicine (see the Health Physics and Medical Physics description under Interdisciplinary Graduate Studies).

Combined Program — The Department also offers a B.S.N.E./M.S. degree program. This program allows qualified students to earn both a bachelor's degree and a master's degree with a savings of one semester. Qualified students may begin their master's program while seniors counting 12 hours of specified nuclear engineering sciences graduate courses for both the bachelor's and master's degree requirements. Seniors admitted to the combined program are eligible for teaching and research assistantships. Program admission requirements are (1) satisfaction of Graduate School admission requirements for a master's degree, (2) an upper-division (undergraduate) GPA of at least 3.6, and (3) completion of specified bachelor's degree requirements.

The graduate program has two major programs, Nuclear Engineering and Medical Physics. Specific areas of research and study in Nuclear Engineering include advanced nuclear power concepts and systems, digital control of nuclear reactor power plant technology and operations, reactor dynamics and control, and advanced radiation detectors and analysis in support of nuclear forensics and homeland security. The Medical Physics program is a CAMPEP accredited program designed to meet the professional requirements for a career in clinical service or research and development. Areas of Medical Physics study and research include diagnostic medical imaging, radiation therapy, nuclear medicine imaging, and radiation dosimetry.

The requirement for admission to the graduate program in nuclear engineering sciences is a bachelor's degree in an approved program in engineering or in the sciences. Students applying to the Medical Physics program should have completed the equivalent of at least a minor in physics. If the student's background is considered deficient for the planned course of study, an articulation program of background courses will be required.

Regarding professional objectives, the student may select a non-thesis option for the MS degree and substitute 8 credits of graduate-level course work, of which at least 6 credits are in nuclear engineering sciences, including a 4-credit (minimum) special project, ENU 6936. Completion of 32 credits will meet the minimum requirements for the non-thesis MS degree.

Normally, the requirements for a master's degree can be completed in 12 months. Students in the medical physics option usually take 21 to 24 months to complete the master's degree, which requires 40-42 credit hours. For a master's degree in health physics, a student must complete 42 hours of credit. If articulation work is required, it may take longer, depending upon the extent of the student's deficiency.
Nuclear Engineering Sciences

College

College of Engineering

Department/School

Nuclear and Radiological Engineering Department

Degrees Offered with a Major in Nuclear Engineering Sciences

Doctor of Philosophy

without a concentration

concentration in Imaging Science and Technology

Master of Engineering

Master of Science

Courses

- ENU 5142: Reliability and Risk Analysis for Nuclear Facilities
- ENU 5176L: Principles of Nuclear Reactor Operations Laboratory
- ENU 5186: Nuclear Fuel Cycles
- ENU 5196: Nuclear Reactor Power Plant System Dynamics and Control
- ENU 5516L: Nuclear Engineering Laboratory II
- ENU 5615C: Nuclear Radiation Detection and Instrumentation
- ENU 5615L: Nuclear Radiation Detection and Instrumentation Lab
- ENU 5626: Radiation Biology
- ENU 5658: Imaging System Analysis with Medical Physics Applications
- ENU 5705: Advanced Concepts for Nuclear Energy
- ENU 6051: Radiation Interaction Basics and Applications I
- ENU 6052: Radiation Transport Basics and Applications
- ENU 6053: Radiation Interaction Basics and Applications II
- ENU 6061: Survey of Medical Radiological Physics
- ENU 6106: Nuclear Reactor Analysis I
- ENU 6107: Nuclear Reactor Analysis II
- ENU 6126: Fundamentals of Reactor Kinetics
- ENU 6135: Nuclear Thermal Hydraulics
- ENU 6623: Radiation Dosimetry
- ENU 6627: Therapeutic Radiological Physics
- ENU 6636: Medical Radiation Shielding & Protection
- ENU 6651: Clinical Rotation in Radiation Therapy
- ENU 6652: Clinical Rotation in Diagnostic Radiology
Graduate Degrees

College of Journalism and Mass Communication Courses

For additional information, please see our website: http://www.jou.ufl.edu/grad

College of Journalism and Communications

Dean: D. McFarlin
Senior Associate Dean for Graduate Studies and Research: D. Treise

Graduate Coordinators:
(Advertising) J. R. Goodman
(International Communication) M. Leslie
(Journalism) R. Rodgers
(Public Relations) M.A. Ferguson
(Science/Health Communication) D. Treise
(Telecommunication) J. Cleary.

Complete faculty listings: Follow this link.

Through the Division of Graduate Studies and Research, the College of Journalism and Communications offers the Doctor of Philosophy degree, the Master of Arts in Mass Communication (thesis or project option) degree, and the Master of Advertising (thesis) degree. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Doctoral students work closely with faculty members in research leading to a dissertation embodying a humanities, law/policy, or social sciences approach. Emphases within these approaches for which faculty members have expertise include advertising, journalism, public relations, telecommunication, international communication, and political communication. Details of doctoral faculty research interests and other aspects of the program are given in the College's Ph.D. Handbook.

Master's students may complete a thesis in advertising, journalism, public relations, telecommunication, international communication, or science/health communication. With the approval of the Sr. Associate Dean of Graduate Studies and Research and other faculty members, master's students may develop an individualized program of study, with thesis, to meet their specific needs and interests. A project in lieu of thesis option is available for some specializations.

Mass Communication/Law joint degree programs: Programs leading to the Master of Arts in Mass Communication or the Doctor of Philosophy and the Juris Doctor are offered under the joint auspices of the College of Journalism and Communications and the College of Law. For students interested in scholarship or practice of communication law or in pursuing the double law degree, the programs offer the opportunity to blend relevant work from the two colleges. Students must meet the entrance requirements of both colleges. A thesis or dissertation is required. Interested students should apply for admission to both the Graduate School and the College of Law, noting on the applications the joint nature of the admission requests. Further information on the programs and on application procedures is available from the Holland Law Center and from the Division of Graduate Studies and Research of the College of Journalism and Communications.

General admission: Admission is granted to applicants with and without background in mass communication. Students without academic preparation in mass communication or appropriate experience may be required to take articulation work. These courses are taken concurrently with general graduate courses, starting in the first term of registration. Some degree plans require a background course in statistics. Students who have satisfied that requirement must provide written verification. Including articulation courses, the master's degree normally can be earned in one and one-half or two years of full-time study. Doctoral studies require three or more years of full-time study and research. Students who may require articulation courses should contact the Sr. Associate Dean of Graduate Studies and Research.

Grading policy: Any student whose cumulative GPA falls below 3.0 will be placed on probation. Any doctoral student who receives one grade below B- or a Master's student who receives one grade below C+ will be placed on probation, with the exception of courses taken from the Levin College of Law. For these courses, any student receiving one grade below C in any course from the Levin College of Law will be placed on probation. A requirement of the probation is that the student must achieve or maintain a cumulative grade point average of 3.0 or higher at the end of the next academic term in residence. A student who fails to satisfy the requirement will be suspended. A Doctoral student who accumulates two grades below "B-" or a Master's student who accumulates two grades below C+ during graduate studies will be suspended, as will a student who receives one grade of "D+" or lower at any time. Students will be allowed only one suspension.

Combined degree program: The College offers a combined bachelor's/master's program. For information, contact the Associate Dean for Graduate Studies.

For additional information, please see our website: http://www.jou.ufl.edu/grad.

College of Journalism and Mass Communication Courses

Other

Advertising

Programs within the College of Journalism and Communications

College of Engineering Courses

- EEE 5345L: Semiconductor Device Fabrication Laboratory
- EGN 5010C: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

- ENU 6655: Advanced Diagnostic Radiological Physics
- ENU 6657: Diagnostic Radiological Physics
- ENU 6659: Nuclear Medicine Instrumentation and Procedure
- ENU 6835: Nuclear Fuels
- ENU 6905: Individual Work
- ENU 6910: Supervised Research
- ENU 6935: Nuclear and Radiological Engineering Seminar
- ENU 6936: Special Projects in Nuclear and Radiological Engineering Sciences
- ENU 6937: Special Topics in Nuclear and Radiological Engineering Sciences
- ENU 6971: Research for Master's Thesis
- ENU 6972: Research for Engineer's Thesis
- ENU 7979: Advanced Research
- ENU 7980: Research for Doctoral Dissertation

EGN 5949: Practicum/Internship/Cooperative Work Experience

- ENU 6835: Nuclear Fuels
- ENU 6839: Nuclear and Radiological Engineering Seminar
- ENU 6840: Nuclear and Radiological Engineering Seminar
- ENU 6905: Individual Work
- ENU 6910: Supervised Research
- ENU 6935: Nuclear and Radiological Engineering Seminar
- ENU 6936: Special Projects in Nuclear and Radiological Engineering Sciences
- ENU 6937: Special Topics in Nuclear and Radiological Engineering Sciences
- ENU 6971: Research for Master's Thesis
- ENU 6972: Research for Engineer's Thesis
- ENU 7979: Advanced Research
- ENU 7980: Research for Doctoral Dissertation

Programs within the College of Engineering and Communications

Programs leading to the Master of Arts in Mass Communication or the Doctor of Philosophy and the Juris Doctor are offered under the joint auspices of the College of Journalism and Communications and the College of Law. For students interested in scholarship or practice of communication law or in pursuing the double law degree, the programs offer the opportunity to blend relevant work from the two colleges. Students must meet the entrance requirements of both colleges. A thesis or dissertation is required. Interested students should apply for admission to both the Graduate School and the College of Law, noting on the applications the joint nature of the admission requests. Further information on the programs and on application procedures is available from the Holland Law Center and from the Division of Graduate Studies and Research of the College of Journalism and Communications. General admission: Admission is granted to applicants with and without background in mass communication. Students without academic preparation in mass communication or appropriate experience may be required to take articulation work. These courses are taken concurrently with general graduate courses, starting in the first term of registration. Some degree plans require a background course in statistics. Students who have satisfied that requirement must provide written verification. Including articulation courses, the master's degree normally can be earned in one and one-half or two years of full-time study. Doctoral studies require three or more years of full-time study and research. Students who may require articulation courses should contact the Sr. Associate Dean of Graduate Studies and Research. Grading policy: Any student whose cumulative GPA falls below 3.0 will be placed on probation. Any doctoral student who receives one grade below B- or a Master's student who receives one grade below C+ will be placed on probation, with the exception of courses taken from the Levin College of Law. For these courses, any student receiving one grade below C in any course from the Levin College of Law will be placed on probation. A requirement of the probation is that the student must achieve or maintain a cumulative grade point average of 3.0 or higher at the end of the next academic term in residence. A student who fails to satisfy the requirement will be suspended. A Doctoral student who accumulates two grades below "B-" or a Master's student who accumulates two grades below C+ during graduate studies will be suspended, as will a student who receives one grade of "D+" or lower at any time. Students will be allowed only one suspension. Combined degree program: The College offers a combined bachelor's/master's program. For information, contact the Associate Dean for Graduate Studies. For additional information, please see our website: http://www.jou.ufl.edu/grad.
Advertising Program Information

The Master of Advertising (M.Adv.) program is designed to develop leaders in the profession by providing students with

1. the theoretical, research and decision-making skills essential for strategic advertising and integrated communications planning, as well as
2. the opportunity to develop expertise in a specialized area such as account management, research, creative strategy, media planning, new technology and advertising sales management.

Students without basic course background or substantial professional experience in marketing or advertising are required to complete articulation courses before entering the program. These prerequisite courses include Introduction to Advertising and Introduction to Marketing.

A minimum of 33 graduate level credit hours, including a thesis, is required. In some areas of specialization, with permission from the departmental graduate faculty, a terminal project may be elected in lieu of a thesis.

Students select a supervisory committee to guide their course selection as well as thesis topic or project in lieu of thesis and completion of the thesis or project. Students will complete and orally defend their theses or projects. The student's supervisory committee is responsible for the evaluation of the document and the final defense.

The deadline for Fall applications is January 30 for international applicants and April 1 for domestic students. Applications may be considered after the April 1 deadline, if space is available. The Master of Advertising program does not accept any applications for Spring.

For admissions information and application materials, contact Sarah G. Lee.

For information about the advertising curriculum and program requirements, contact Dr. Robyn Goodman.

For more information, please see our website: http://www.jou.ufl.edu/academics/masters/master-of-advertising

Degrees Offered with a Major in Advertising

Master of Advertising

College of Journalism and Communications Courses

- ADV 5005: Advertising Planning
- ADV 6006: Theories of Advertising
- ADV 6305: Advanced Media Planning
- ADV 6325: Advertising and Social Media
- ADV 6405: International Advertising
- ADV 6503: Advertising Creative Strategy and Research
- ADV 6505: Advertising Research Methods
- ADV 6602: Advertising Management
- COM 6315: Advanced Research Methods
- COM 6338: Advanced Web Topics I: Advanced Design
- COM 6940: Supervised Teaching
- FIL 6061: History of Documentary Film I
- FIL 6062: History of Documentary Film II
- FIL 6101: Advanced Radio, Television, and Film Writing
- FIL 6315: Writing for Documentary I
- FIL 6317: Producing and Writing the Documentary
- FIL 6335: Business of Documentary
- FIL 6340: Issues and Problems in Documentary
- FIL 6365: Documentary Pre-Production Planning
- FIL 6366: Documentary Procedures II
- FIL 6377: Documentary Field Production
- FIL 6378: Documentary/Research Methods
- FIL 6380: Advanced Post-Production Techniques
- JOU 5007: History of Journalism
- JOU 5705: Issues and the Press
- JOU 6102: Reporting Workshop
- JOU 6114: Journalist Bootcamp
- JOU 6309: Seminar in Journalism as Literature
- JOU 6344: Journalist Toolkit 1
- JOU 6349: Journalist Toolkit 2
- JOU 6502: Newsroom Management
- MMC 5005: Mass Communication History
- MMC 5006: Introduction to Multimedia Communication
- MMC 5015: Electronic Publishing
Mass Communication

College

College of Journalism and Communications

Mass Communication Program Information
Ph.D. in Mass Communication

The Ph.D. degree is a research degree. The Ph.D. program is designed to help develop knowledge, attitudes, and skills so graduates can make important contributions to understanding mass communication. Faculty members help students lay the foundation for a lifetime of significant, creative work.

The doctoral program prepares students for a variety of opportunities in mass communication. Graduates are expected to teach at colleges and universities; conduct research for organizations in advertising, journalism, public relations, telecommunication, and other mass communication fields; do consulting and conduct research and contribute to policy in government and private organizations. Doctoral students in the College of Journalism and Communications gain valuable experience in both teaching and research. Assistantships help prepare students for academic and other research positions. Students in the program have consistently been among the nation's leaders in winning top-paper awards at national and regional scholarly meetings.

Master of Arts in Mass Communication (MA/MC)

There are several specializations available for the Master of Arts in Mass Communication:

The Journalism specialization program is designed to teach scientists and health specialists to communicate effectively via media, and to teach mass media specialists the background science to translate the language of science and health into meaningful and understandable stories for their audiences. These goals are achieved through theoretical writing and applied courses. At least two aspects of the program make it unique among science communication programs nationwide. First, other existing science communication programs in the U.S. focus on training journalists. UF's program is open to journalists who want to specialize in covering science and health, offers training for people planning to work as public affairs or science and health communications specialists the background science to translate the language of science and health into meaningful and understandable stories for their audiences. These goals are achieved through theoretical writing and applied courses. At least two aspects of the program make it unique among science communication programs nationwide. First, other existing science communication programs in the U.S. focus on training journalists. UF's program is open to journalists who want to specialize in covering science and health, offers training for people planning to work as public affairs or public information officers for science and health organizations, for other communication specialists, and for scientists who need to be able to communicate with the public about their work. Second, the program focuses on training students to understand and communicate effectively about science and health policy. For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mamc-journalism.

The Public Relations specialization is designed to teach scientists and health specialists to communicate effectively via media, and to teach mass media specialists the background science to translate the language of science and health into meaningful and understandable stories for their audiences. These goals are achieved through theoretical writing and applied courses. At least two aspects of the program make it unique among science communication programs nationwide. First, other existing science communication programs in the U.S. focus on training journalists. UF's program is open to journalists who want to specialize in covering science and health, offers training for people planning to work as public affairs or public information officers for science and health organizations, for other communication specialists, and for scientists who need to be able to communicate with the public about their work. Second, the program focuses on training students to understand and communicate effectively about science and health policy. For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mamc-public-relations.

The Telecommunication specialization program is designed to teach scientists and health specialists to communicate effectively via media, and to teach mass media specialists the background science to translate the language of science and health into meaningful and understandable stories for their audiences. These goals are achieved through theoretical writing and applied courses. At least two aspects of the program make it unique among science communication programs nationwide. First, other existing science communication programs in the U.S. focus on training journalists. UF's program is open to journalists who want to specialize in covering science and health, offers training for people planning to work as public affairs or public information officers for science and health organizations, for other communication specialists, and for scientists who need to be able to communicate with the public about their work. Second, the program focuses on training students to understand and communicate effectively about science and health policy. For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mamc-telecommunication.

The International/Intercultural Communication specialization program is designed to teach scientists and health specialists to communicate effectively via media, and to teach mass media specialists the background science to translate the language of science and health into meaningful and understandable stories for their audiences. These goals are achieved through theoretical writing and applied courses. At least two aspects of the program make it unique among science communication programs nationwide. First, other existing science communication programs in the U.S. focus on training journalists. UF's program is open to journalists who want to specialize in covering science and health, offers training for people planning to work as public affairs or public information officers for science and health organizations, for other communication specialists, and for scientists who need to be able to communicate with the public about their work. Second, the program focuses on training students to understand and communicate effectively about science and health policy. For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mamc-internationalintercultural-communication.

The Science and Health Communications specialization program is designed to teach scientists and health specialists to communicate effectively via media, and to teach mass media specialists the background science to translate the language of science and health into meaningful and understandable stories for their audiences. These goals are achieved through theoretical writing and applied courses. At least two aspects of the program make it unique among science communication programs nationwide. First, other existing science communication programs in the U.S. focus on training journalists. UF's program is open to journalists who want to specialize in covering science and health, offers training for people planning to work as public affairs or public information officers for science and health organizations, for other communication specialists, and for scientists who need to be able to communicate with the public about their work. Second, the program focuses on training students to understand and communicate effectively about science and health policy. For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mamc-sciencehealth.

Degrees Offered with a Major in Mass Communication

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Master of Arts in Mass Communication

College of Journalism and Communications Courses
• ADV 5005: Advertising Planning
• ADV 6006: Theories of Advertising
• ADV 6305: Advanced Media Planning
• ADV 6325: Advertising and Social Media
• ADV 6405: International Advertising
• ADV 6503: Advertising Creative Strategy and Research
• ADV 6505: Advertising Research Methods
• ADV 6602: Advertising Management
• COM 6315: Advanced Research Methods
• COM 6338: Advanced Web Topics I: Advanced Design
• COM 6940: Supervised Teaching
• FIL 6061: History of Documentary Film I
• FIL 6062: History of Documentary Film II
• FIL 6101: Advanced Radio, Television, and Film Writing
• FIL 6315: Writing for Documentary
• FIL 6317: Producing and Writing the Documentary
• FIL 6335: Business of Documentary
• FIL 6340: Issues and Problems in Documentary
• FIL 6365: Documentary Pre-Production Planning
• FIL 6366: Documentary Procedures II
• FIL 6377: Documentary Field Production
• FIL 6378: Documentary Research Methods
• FIL 6380: Advanced Post-Production Techniques
• JOU 5007: History of Journalism
• JOU 5705: Issues and the Press
• JOU 6102: Reporting Workshop
• JOU 6114: Journalist Bootcamp
• JOU 6309: Seminar in Journalism as Literature
• JOU 6344: Journalist Toolkit 1
• JOU 6349: Journalist Toolkit 2
• JOU 6502: Newsroom Management
• MMC 5005: Mass Communication History
• MMC 5006: Introduction to Multimedia Communication
• MMC 5015: Electronic Publishing
• MMC 5206: Advanced Law of Mass Communication
• MMC 5277: Web Design Principles
• MMC 5306: International Communication
• MMC 5315: Survey of Foreign Correspondence
• MMC 5427: Research Methods in Digital Communication
• MMC 5636: Introduction to Social Media
• MMC 5708: Foundations of Intercultural Communication
• MMC 6202: Legal Problems of Mass Communication
• MMC 6278: Advanced Web Topics II
• MMC 6307: Seminar in International Communication
• MMC 6400: Mass Communication Theory
• MMC 6402: Seminar in Mass Communication Theory
• MMC 6405: Seminar in Mass Communication and Public Opinion
• MMC 6409: Science/Health Communication
• MMC 6417: Seminar in Mass Media and Health
• MMC 6421: Research Methods in Mass Communication
• MMC 6423: Content-Analysis Methods
• MMC 6425: Seminar in Qualitative Research
• MMC 6428: Collaborative Communication Research
• MMC 6429: News and Numbers
• MMC 6560: Seminar in History of Mass Communication
• MMC 6612: New Media and a Democratic Society
• MMC 6615: Race, Class, Gender, and Media
• MMC 6618: Survey of Political Communication
• MMC 6619: Seminar in Political Advertising
• MMC 6660: Mass Communication and Society
• MMC 6665: Seminar in First Amendment Theory
• MMC 6666: Seminar in Research in Mass Communication Law
• MMC 6667: Seminar in Advanced Topics in Mass Communication Law
• MMC 6668: Seminar in Public Policy Toward Mass Media
• MMC 6706: Covering the Arts
• MMC 6725: Social Media and Society
• MMC 6726: Social Media and Virtual Worlds
• MMC 6727: Social Media Metrics
• MMC 6728: Branding Using Social and Mobile Media
• MMC 6730: Social Media Management
• MMC 6805: Individual Work
• MMC 6910: Supervised Research
• MMC 6920: Communication Proseminar
• MMC 6929: Communication Colloquium
• MMC 6930: Seminar in Mass Communication Teaching
• MMC 6936: Special Topics in Mass Communication
• MMC 6949: Professional Internship
• MMC 6951: Masters Project Seminar
• MMC 6971: Research for Master's Thesis
• MMC 6973: Project in Lieu of Thesis
• MMC 7979: Advanced Research
• MMC 7980: Research for Doctoral Dissertation
• PUR 5507: Persuasion Theory and Research
Programs within the College of Nursing

College of Nursing

Dear A.M. McDaniel

Complete faculty listings: Follow this link.

The nationally ranked College of Nursing offers the graduate degrees of Master of Science in Nursing, Doctor of Nursing Practice, and Doctor of Philosophy in nursing sciences. Requirements for these degrees are given in the Graduate Degrees section of this catalog. Students may request special review by the College of Nursing Admissions Committee if they believe they are strong candidates for graduate study but do not fully meet all criteria.

The College offers the master's degree and post-master's certification for nurse midwifery and the following nurse practitioner roles: adult acute care, adult, family, pediatric, and neonatal. Additional offerings include:

- Psychiatric/mental clinical nurse specialists/nurse practitioners
- Clinical Nurse Leader

For additional information about the Nursing programs, visit http://www.nursing.ufl.edu or call (352) 273-6331.

College of Nursing Courses

Other

Nursing

College of Nursing Courses

Master of Science in Nursing (MSN)

The master's degree prepares nurses for advanced practice, clinical nurse specialist, or to be a clinical nurse leader. The graduate nursing core includes nursing theory, research, statistics, health policy, ethics, finance, and health promotion. The advanced practice core includes specific theory and clinical courses with relevant clinical experiences.

The College offers the master's degree and post-master's certification for nurse midwifery and the following nurse practitioner roles: adult acute care, adult, family, pediatric, and neonatal. Additional offerings include:

- Psychiatric/mental clinical nurse specialists/nurse practitioners
- Clinical Nurse Leader

Graduates are eligible for Florida licensure and national certification.

To be considered for the M.S.N. program, students must meet the following minimum requirements:

- Bachelor of Science in Nursing degree with an upper-division grade point average of 3.0 or higher from a CCNE or NLN AC accredited program
- A score of 500 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination (GRE) General Test. In the new version of the GRE a minimum score of 153 in the verbal section and 144 in the quantitative section. Analytical writing section is optional.
- Eligibility for licensure to practice as a registered nurse in the state of Florida

For application materials:
http://www.nursing.ufl.edu/prospective/prospective_msn_application_process.shtml
Degrees

Master of Science in Nursing

without a concentration

College of Nursing Courses

- NGR 5934: Cultural Influences on Health Care
- NGR 6002C: Advanced Health Assessment
- NGR 6006: Principles of Clinical Outcomes Management
- NGR 6054C: Advanced Neonatal Health Assessment and Diagnostic Reasoning
- NGR 6052C: Adult Nursing: Diagnostics and Procedures
- NGR 6101: Theory and Research for Nursing
- NGR 6140: Physiology and Pathophysiology for Advanced Nursing Practice
- NGR 6172: Pharmacotherapeutics for Advanced Practice Nursing
- NGR 6892: Health Care Policy and Organizational Delivery
- NGR 6230C: Acute Care Nurse Practitioner: Diagnostics and Procedures for the Critically Ill
- NGR 6240: Primary Care for Adults
- NGR 6241: Adult Nursing: Common Health Problems
- NGR 6241L: Adult Nurse Practitioner: Common Health Problems Laboratory
- NGR 6243: Acute Care Nurse Practitioner: Critically Ill Adult
- NGR 6243L: Acute Care Nurse Practitioner: Critically Ill Adult Laboratory
- NGR 6244: Adult Nursing: Chronic Health Problems
- NGR 6244L: Adult Nurse Practitioner: Chronic Health Problems Laboratory
- NGR 6247: Complex High Prevalence Illnesses Of Adults
- NGR 6247L: Complex High Prevalence Illnesses Of Adults
- NGR 6248: Adult Acute Care Nurse Practitioner 3
- NGR 6248L: Adult Acute Care Nurse Practitioner 3
- NGR 6255: Advanced Nursing Care of Older Adult
- NGR 6301: Advanced Child Health Nursing I
- NGR 6301L: Advanced Child Health Nursing I
- NGR 6302: Advanced Child Health Nursing II
- NGR 6302L: Advanced Child Health Nursing II
- NGR 6307: Advanced Child Health Nursing III
- NGR 6307L: Advanced Child Health Nursing III
- NGR 6320C: Neonatal Care I
- NGR 6321C: Neonatal Care II
- NGR 6323C: Neonatal Care III
- NGR 6350: Family Nurse Practitioner: Women, Adolescents, And Children
- NGR 6350L: Family Nurse Practitioner: Women, Adolescents, And Children
- NGR 6360C: Nurse-Midwifery Care I
- NGR 6361C: Nurse-Midwifery Care II
- NGR 6364: Seminar: The Nurse-Midwife
- NGR 6371: Pharmacotherapeutics for Advanced Neonatal Nursing
- NGR 6372C: Advanced Pediatric Procedures and Diagnostics
- NGR 6500C: Individual and Family Therapy for Psychiatric-Mental Health Nursing
- NGR 6501C: Group Therapy and Community Interventions for Psychiatric-Mental Health Nursing
- NGR 6538: Psychopharmacology for Psychiatric Nursing
- NGR 6612: Family Nurse Practitioner: Complex Family Health Care (Focus On Gerontology)
- NGR 6612L: Family Nurse Practitioner: Complex Family Health Care (Focus On Gerontology)
- NGR 6636: Wellness: Promotion and Disease Prevention
- NGR 6726: Management of the Care Environment II
- NGR 6727: Management of the Care Environment I
- NGR 6740: Role Transition: Issues in Advanced Practice Nursing
- NGR 6770: Leadership/Role of Clinical Nurse Leader
- NGR 6771: Clinical Nurse Leader Role Seminar
- NGR 6773: Clinical Nurse Leader Residency Internship
- NGR 6815: Foundations of Qualitative Research in Nursing
- NGR 6840: Applied Statistical Analysis I
- NGR 6845: Applied Statistical Analysis II
- NGR 6850: Research Methods and Utilization for Nursing
- NGR 6905: Individual Study
- NGR 6941: Practicum in Nursing
- NGR 6950: Special Topics in Nursing
- NGR 6944: Individual Clinical Practice
- NGR 6970: Research for Master's Project
- NGR 6971: Research for Master's Thesis
- NGR 7176: Advanced Topics in Pharmacotherapeutics in Nursing
- NGR 7816: Quantitative Research Design and Measurement in Nursing
Nursing Sciences

College

College of Nursing

Nursing Sciences Program

Chairs: S. Schaffer, M.J. Snider, and J. Stechmiller
Graduate Coordinator: J. Ballantyne

Complete faculty listing by department: Follow this link.

For more information about the Master of Science in Nursing and the Doctor of Nursing Practice, please visit Graduate Degrees or http://www.nursing.ufl.edu

The College's Ph.D. program prepares scientists, scholars, advanced practitioners, and leaders in nursing. Comprehensive research and practice preparation is achieved by pairing students with faculty. Students have access to an array of faculty members for interdisciplinary study, clinical practice, and research. Individually directed dissertation research is a major aspect of the Ph.D. program. Research in the College includes aging and health, women's health, bio-behavioral interventions, and health policy.

Progression in the program depends on the student's ability to meet academic standards and clinical competencies as defined by College policy.

To be considered for admission to the Ph.D. program, students must meet the following minimum requirements:

• A BSN or master's degree in nursing from a CCNE/NLN AC accredited program.

• A master's program GPA of 3.5 on a 4.0 scale and a score of 500 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination (GRE) General Test. In the current version of the GRE a minimum score of 153 in the verbal section and 144 in the quantitative section.

OR

• A master's program GPA of 3.2 on a 4.0 scale and a score of 600 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination General Test. In the current version of the GRE a score a minimum score of 160 in the verbal section and 148 in the quantitative section.

• Completion of the GRE analytical section

• Eligibility for licensure to practice as a registered nurse in the state of Florida

A personal interview is preferred to establish a Graduate Faculty mentor who will work with the student to individualize the academic program and to structure the student's research or practice focus.

You may also call 352-273-6331 for more information.

Degrees

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science
College of Nursing Courses

- NGR 5934: Cultural Influences on Health Care
- NGR 6002C: Advanced Health Assessment
- NGR 6006: Principles of Clinical Outcomes Management
- NGR 6054C: Advanced Neonatal Health Assessment and Diagnostic Reasoning
- NGR 6052C: Adult Nursing: Diagnostics and Procedures
- NGR 6101: Theory and Research for Nursing
- NGR 6140: Physiology and Pathophysiology for Advanced Nursing Practice
- NGR 6172: Pharmacotherapeutics for Advanced Practice Nursing
- NGR 6892: Health Care Policy and Organizational Delivery
- NGR 6230C: Acute Care Nurse Practitioner: Diagnostics and Procedures for the Critically Ill
- NGR 6240: Primary Care for Adults
- NGR 6241: Adult Nursing: Common Health Problems
- NGR 6241L: Adult Nurse Practitioner: Common Health Problems Laboratory
- NGR 6243: Acute Care Nurse Practitioner: Critically Ill Adult
- NGR 6243L: Acute Care Nurse Practitioner: Critically Ill Adult Laboratory
- NGR 6244: Adult Nursing: Chronic Health Problems
- NGR 6244L: Adult Nurse Practitioner: Chronic Health Problems Laboratory
- NGR 6247: Complex High Prevalence Illnesses of Adults
- NGR 6247L: Complex High Prevalence Illnesses of Adults Laboratory
- NGR 6248: Adult Acute Care Nurse Practitioner 3
- NGR 6248L: Adult Acute Care Nurse Practitioner 3 Laboratory
- NGR 6255: Advanced Nursing Care of Older Adult
- NGR 6301: Advanced Child Health Nursing I
- NGR 6301L: Advanced Child Health Nursing I Laboratory
- NGR 6302: Advanced Child Health Nursing II
- NGR 6302L: Advanced Child Health Nursing II Laboratory
- NGR 6307: Advanced Child Health Nursing III
- NGR 6307L: Advanced Child Health Nursing III Laboratory
- NGR 6320C: Neonatal Care I
- NGR 6321C: Neonatal Care II
- NGR 6323C: Neonatal Care III
- NGR 6350: Family Nurse Practitioner: Women, Adolescents, and Children
- NGR 6350L: Family Nurse Practitioner: Women, Adolescents, and Children Laboratory
- NGR 6360C: Nurse-Midwifery Care I
- NGR 6361C: Nurse-Midwifery Care II
- NGR 6364: Seminar: The Nurse Midwife
- NGR 6371: Pharmacotherapeutics for Advanced Neonatal Nursing
- NGR 6372C: Advanced Pediatric Procedures and Diagnostics
- NGR 6500C: Individual and Family Therapy for Psychiatric-Mental Health Nursing
- NGR 6501C: Group Therapy and Community Interventions for Psychiatric-Mental Health Nursing
- NGR 6538: Psychopharmacology for Psychiatric Nursing
- NGR 6612: Family Nurse Practitioner: Complex Family Health Care (Focus on Gerontology)
- NGR 6612L: Family Nurse Practitioner: Complex Family Health Care (Focus on Gerontology) Laboratory
- NGR 6636: Wellness: Promotion and Disease Prevention
- NGR 6726: Management of the Care Environment II
- NGR 6727: Management of the Care Environment I
- NGR 6740: Role Transition: Issues in Advanced Practice Nursing
- NGR 6770: Leadership/Role of Clinical Nurse Leader
- NGR 6771: Clinical Nurse Leader Role Seminar
- NGR 6773: Clinical Nurse Leader Residency Internship
- NGR 6815: Foundations of Qualitative Research in Nursing
- NGR 6840: Applied Statistical Analysis I
- NGR 6845: Applied Statistical Analysis II
- NGR 6850: Research Methods and Utilization for Nursing
- NGR 6905: Individual Study
- NGR 6911: Practicum in Nursing
- NGR 6930: Special Topics in Nursing
- NGR 6944: Individual Clinical Practice
- NGR 6970: Research for Master's Project
- NGR 6971: Research for Master's Thesis
- NGR 7176: Advanced Topics in Pharmacotherapeutics in Nursing
- NGR 7181: Quantitative Research Design and Measurement in Nursing
- NGR 7003: Advanced Diagnostic Reasoning
- NGR 7115: Philosophy of Nursing Science
- NGR 7124: Theory Development in Nursing
- NGR 7700: Leadership and Role Development in Advanced Nursing Practice
- NGR 7709: Nurse Scientist and Scholar I
- NGR 7814: Field Methods for Health Related Research
- NGR 7827: Outcomes Research and Evaluation
- NGR 7831: Quality Indicators in Nursing Systems
- NGR 7835: Nurse Scientist and Scholar II
- NGR 7871: Nursing Informatics and Data
- NGR 7882: Ethical Theories and Rational Decision Making in Health
- NGR 7891: Health Policy and Finance in Advanced Nursing Practice
- NGR 7940L: Residency in Advanced Nursing Practice
- NGR 7970L: Advanced Nursing Project
- NGR 7979: Advanced Research
NGR 7980: Research for Doctoral Dissertation

Spring 2012 Critical Dates

Spring 2012

2011

December 7, Wednesday, 5:00 p.m

Deadline if requesting transfer of credit (for spring degree candidates).

2012

January 6, Friday, 5:00 p.m.

Registration.

January 9, Monday

Classes start.
Drop/add starts.
Late registration starts (late fee assessed).

January 13, Friday, 11:59 p.m.

Drop/add ends
Late Registration ends (late fee assessed).
Deadline to withdraw with no fee liability.

January 16, Monday, Martin Luther King Jr. Day

No classes.

January 20, Friday, 3:30 p.m.

Fee payment deadline.
Residency reclassification deadline for receiving requests and all documents.

January 27, Friday, 5:00 p.m.

Deadline for Graduate Student Records to review S/U option applications for courses approved with this grading scheme.

February 3, Friday, 5:00 p.m.

Degree application deadline for degree award this term:

graduateschool.ufl.edu/files/graduation-checklist.pdf
http://www.isis.ufl.edu/

Deadline to withdraw with 25% refund (W symbol assigned).

http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall

February 20, Monday, 5:00 p.m.

Last day to submit dissertation for review by Graduate School Editorial Office:

February 28, Tuesday

Midpoint of term
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants.
Late degree application deadline for degree award this term.
March 3-10, Saturday-Saturday, Spring Break

No classes.

March 19, Monday, 5:00 p.m.

Last day to submit successfully defended thesis for review by Graduate School Editorial Office.

Deadline for final exam forms to be posted to GIMS for thesis students.

April 13, Friday, 5:00 p.m.

Last day to withdraw (all courses) without failing grades.

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students.

Deadline for theses and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term.

April 23, Monday, 5:00 p.m.

Deadline for theses and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term. No exceptions can be granted.

April 25, Wednesday

Classes end.

April 25, Wednesday, 5:00 p.m.

Deadline if requesting transfer of credit (for summer degree candidates).

April 26-27, Thursday-Friday

Examination reading days (no classes).

April 28, Saturday, April 30-May 4, Monday-Friday

Final examinations.

May 3-6, Thursday-Sunday

Commencement*

May 4, Friday, 5:00 p.m.

Last day to drop a course and receive W on transcript.

May 7, Monday, 12:00 noon

Final term grades are due.

May 8, Tuesday

Degree certification.

May 9, Wednesday

Unofficial transcripts with grades and remarks available 8:00 a.m. via ISIS.

NOTES: All dates and deadlines are subject to change and will be updated accordingly. Prospective students should contact the appropriate academic unit for admission application deadlines.
Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

Spring 2013 Academic Calendar

2012

December 5, Wednesday, 5:00 p.m
Deadline if requesting transfer of credit (for spring degree candidates)

2013

January 4, Friday, 5:00 p.m
Registration

January 7, Monday

Classes start.
Drop/add starts.
Late registration starts (late fee assessed).

January 11, Friday, 11:59 p.m
Drop/add ends
Late Registration ends (late fee assessed).
Deadline to withdraw with no fee liability

January 18, Friday, 3:30 p.m
Fee payment deadline
Residency reclassification deadline for receiving requests and all documents

January 21, Monday, Martin Luther King Jr. Day
No classes

January 25, Friday, 5:00 p.m
Deadline for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

February 1, Friday, 5:00 p.m
Degree application deadline for degree award this term:
http://www.iss.ufl.edu/graduateschool.ufl.edu/files/graduation-checklist.pdf
Deadline to withdraw with 25% refund (W symbol assigned).
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall

February 15, Friday, 5:00 p.m
Last day to submit dissertation for review by Graduate School Editorial Office:

February 26, Tuesday
Midpoint of term
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants
Late degree application deadline for degree award this term

March 2-9, Saturday-Saturday, Spring Break

No classes

March 15, Friday, 5:00 p.m.

Last day to submit successfully defended thesis for review by Graduate School Editorial Office
graduateschool.ufl.edu/files/checklist-thesis.pdf
Deadline for final exam forms to be posted to GIMS for thesis students

April 15, Monday, 5:00 p.m.

Last day to withdraw (all courses) without failing grades.
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall
Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students
Deadline for theses and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term

April 22, Monday, 5:00 p.m.

Deadline for theses and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term
No exceptions can be granted.

April 24, Wednesday

Classes end.

April 24, Wednesday, 5:00 p.m.

Deadline if requesting transfer of credit (for summer degree candidates)

April 25-26, Thursday-Friday

Examination reading days (no classes)

April 27, Saturday; April 29-May 3, Monday-Friday

Final examinations

May 3, Friday, 5:00 p.m.

Last day to drop a course and receive W on transcript

May 3-5, Friday-Sunday

Commencement

May 6, Monday, 12:00 noon

Final term grades are due.

May 7, Tuesday

Degree certification

May 8, Wednesday

Unofficial transcripts with grades and remarks available 8:00 a.m. via ISIS.
NOTES: All dates and deadlines are subject to change and will be updated accordingly. Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

**Spring 2014 Calendar**

**December 2013**

**December 4, Wednesday, 5:00 p.m.**

Deadline for requesting transfer of credit (for spring degree candidates)

**January 2014**

**January 3, Friday, 5:00 p.m.**

Registration deadline

**January 6, Monday**

Classes start.
Drop/add starts.
Late registration starts (late fee assessed, after 5:00 p.m. on 1/3/14).

**January 10, Friday, 11:59 p.m.**

Drop/add ends
Late Registration ends (late fee assessed).
Deadline to withdraw with no fee liability

**January 17, Friday, 3:30 p.m.**

Fee payment deadline
Residency reclassification deadline for receiving requests and all documents

**January 20, Monday, Martin Luther King Jr. Day**

No classes

**January 24, Friday, 5:00 p.m.**

Deadline for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

**January 31, Friday, 5:00 p.m.**

Degree application deadline for degree award this term
graduateschool.ufl.edu/files/graduation-checklist.pdf
http://www.isis.ufl.edu/
Deadline to withdraw with 25% refund (W symbol assigned)

**February 2014**

**February 10, Monday, 5:00 p.m.**

Last day to submit Transmittal Letter and dissertation for review by Graduate School Editorial Office
graduateschool.ufl.edu/files/checklist-dissertation.pdf
February 14, Friday

Midpoint of term
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants
Late degree application deadline for degree award this term

March 2014

March 1-8, Saturday-Saturday, Spring Break
No classes

March 10, Monday, 5:00 p.m.
Last day to submit successfully defended thesis for review by Graduate School Editorial Office
graduateschool.ufl.edu/files/checklist-thesis.pdf
Deadline for final exam forms to be posted to GIMS for thesis students

April 2014

April 9, Wednesday, 5:00 p.m.
Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students
Deadline for ETD Signature Pages to be posted to GIMS for thesis and dissertation students
Deadline for thesis and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term
No exceptions can be granted.
www.graduateschool.ufl.edu/graduation/checklists

April 11, Friday, 5:00 p.m.
Last day to withdraw (all courses) via ISIS without failing grades
http://www.registrar.ufl.edu/currents/withdraw.html

April 22, Tuesday, 5:00 p.m.
Deadline for thesis and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term
No exceptions can be granted.

April 23, Wednesday, 5:00 p.m.
Deadline for requesting transfer of credit (for summer degree candidates)

April 23, Wednesday
Classes end.

April 24-25, Thursday-Friday
Examination reading days (no classes)

April 25, Friday
Doctoral Degree Commencement Ceremony+

April 26, Saturday; April 28-May 2, Monday-Friday
Final examinations

May 2014
May 2, Friday
Last day to drop a course and receive W on transcript via College petition to the Registrar, Room 222 Criser
Last day to withdraw (all courses) without failing grades via College petition to the Registrar, Room 222 Criser

May 2-4, Friday-Sunday
Commencement Ceremonies (Non-doctoral)+

May 5, Monday, 12:00 noon
Final term grades are due.

May 6, Tuesday
Degree certification

May 7, Wednesday
Unofficial transcripts with grades and remarks available via ISIS

NOTES: All dates and deadlines are subject to change and will be updated accordingly.
Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized.
   Please do not anticipate exact dates and times until notification is received.

Spring 2015 Calendar

December 2014

December 10, Wednesday, 5:00 p.m.
Deadline for requesting transfer of credit (for spring degree candidates)

January 2015

January 5, Monday, 5:00 p.m.
Registration deadline
Last day for thesis and dissertation students to clear prior to the spring semester with the Graduate School Editorial Office

January 6, Tuesday
Classes start.
Drop/add starts.
Late registration starts (late fee assessed, after 5:00 p.m. on 1/5/14).

January 12, Monday, 11:59 p.m.
Drop/add ends
Late Registration ends (late fee assessed).
Deadline to withdraw with no fee liability

January 16, Friday, 3:30 p.m.
Fee payment deadline
Residency reclassification deadline for receiving requests and all documents
January 19, Monday, Martin Luther King Jr. Day
No classes

January 23, Friday, 5:00 p.m.
Deadline for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

January 30, Friday, 5:00 p.m.
Degree application deadline for degree award this term
http://www.isis.ufl.edu/graduation-checklist.pdf
Deadline to withdraw with 25% refund (W symbol assigned)

February 2015

February 11, Wednesday, 5:00 p.m.
Last day to submit Transmittal Letter and dissertation for review by Graduate School Editorial Office
http://www.isis.ufl.edu/graduation-checklist.pdf

February 13, Friday
Midpoint of term
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants
Late degree application deadline for degree award this term

February 28-March 7, Saturday-Saturday, Spring Break
No classes

March 2015

March 11, Wednesday, 5:00 p.m.
Last day to submit successfully defended thesis for review by Graduate School Editorial Office
http://www.isis.ufl.edu/graduation-checklist.pdf
Deadline for final exam forms to be posted to GIMS for thesis students

April 2015

April 8, Wednesday, 5:00 p.m.
Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students
Deadline for ETD Signature Pages to be posted to GIMS for thesis and dissertation students
Deadline for thesis and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term
No exceptions can be granted.
http://www.isis.ufl.edu/graduation-checklist.pdf

April 10, Friday, 5:00 p.m.
Last day to withdraw (all courses) via ISIS without failing grades
http://www.registrar.ufl.edu/currents/withdraw.html

April 22, Wednesday
Classes end.
April 22, Wednesday, 5:00 p.m.

Deadline for thesis and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term. No exceptions can be granted.


Deadline for requesting transfer of credit (for summer degree candidates)

April 23-24, Thursday-Friday

Examination reading days (no classes)

April 24, Friday

Doctoral Degree Commencement Ceremony+

April 25, Saturday; April 27-May 1, Monday-Friday

Final examinations

May 2015

May 1, Friday

Last day to drop a course and receive W on transcript via College petition to the Registrar, Room 222 Crizer

Last day to withdraw (all courses) without failing grades via College petition to the Registrar, Room 222 Crizer

May 1-3, Friday-Sunday

Commencement Ceremonies (Non-doctoral)+

May 4, Monday, 12:00 noon

Final term grades are due.

May 5, Tuesday

Degree certification

May 6, Wednesday

Unofficial transcripts with grades and remarks available via ISIS

NOTES: All dates and deadlines are subject to change and will be updated accordingly. Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

Summer 2012 Critical Dates

Summer 2012

All Summer 2012 graduate-level degrees will be awarded at the end of Summer B/C (August 2012). Applicants will select Summer B/C 2012 on the degree application menu in ISIS. The Summer 2012 degree application will be available through ISIS in mid-March 2012.

Students enrolled only in Summer A courses, still apply for the Summer B/C term, since graduate-level degrees are only awarded at the end of the B/C term. No graduate-level degrees are awarded at the end of Summer A (June). No late degree applications will be approved after the B/C deadline (July 5).

graduateschool.ufl.edu/files/graduation-checklist.pdf

http://www.isis.ufl.edu/
April 25, Wednesday, 5:00 p.m.
Deadline if requesting transfer of credit (for summer degree candidates).

May 11, Friday, 5:00 p.m.
Summer A & C registration.

May 14, Monday
Summer A & C classes start.
Summer A & C drop/add starts.
Summer A & C late registration starts (late fee assessed).

May 15, Tuesday, 11:59 p.m.
Summer A & C late registration ends (late fee assessed).
Summer A & C drop/add ends.
Summer A & C deadline to withdraw with no fee liability.

May 23, Wednesday
Summer A deadline to withdraw with 25% refund (W symbol assigned):
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall

May 23, Wednesday, 5:00 p.m.
Deadline for Summer A courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme.

May 25, Friday, 3:30 p.m.
Summer A & C fee payment deadline.
Summer A & C residency reclassification deadline for receiving the request and all documents.

May 28, Monday, Memorial Day observed
No classes.

June 1, Friday, 5:00 pm
Summer C deadline to withdraw with 25% refund (W symbol assigned):
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall
Deadline for Summer C courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme.

June 15, Friday
Last day to withdraw (all courses) without failing grades for Summer A term:
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall

June 22, Friday
Summer A classes end.
Summer A final examinations during regular class periods.

June 22, Friday, 5:00 p.m.
Last day to drop a course for Summer A and receive W on transcript.
Last day to submit dissertation for review by Graduate School Editorial Office:
graduateschool.ufl.edu/files/checklist-dissertation.pdf

June 25, Monday, 12:00 p.m.
Summer A final term grades are due.

**June 25-29, Monday-Friday, Summer Break**

No classes.

**June 27, Wednesday**

Unofficial transcripts with grades available 8:00 a.m. via ISIS.

**June 29, Friday, 5:00 p.m.**

Summer B Registration.

**July 2, Monday**

Summer B classes start.
Summer B drop/add starts.
Summer B late registration starts (late fee assessed).

**July 3, Tuesday, 11:59 p.m.**

Summer B drop/add ends.
Summer B late registration ends (late fee assessed).
Summer B deadline to withdraw with no fee liability.

**July 4, Wednesday, Independence Day observed**

No classes.

**July 5, Thursday**

Summer B/C Degree application deadline — no exceptions will be granted after this date.
[http://www.isis.ufl.edu/](http://www.isis.ufl.edu/)
Midpoint of Summer term.
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants.

**July 6, Friday, 5:00 p.m.**

Last day to submit successfully defended thesis for review by Graduate School Editorial Office:
Deadline for final exam forms to be posted to GIMS for thesis students.

**July 11, Wednesday, 5:00 p.m.**

Summer B deadline to withdraw with 25% refund (W symbol assigned):
Deadline for Summer B courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme.

**July 13, Friday, 3:30 p.m.**

Summer B fee payment deadline.
Summer B residency reclassification deadline for receiving the request and all documents.

**July 26, Thursday, 5:00 p.m.**

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students.
Deadline for theses and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term.
[graduateschool.ufl.edu/files/editorial-deadlines.pdf](http://graduateschool.ufl.edu/files/editorial-deadlines.pdf)
August 3, Friday

Last day to withdraw (all courses) without failing grades for Summer B or C term:
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Criser Hall

Deadline for theses and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term.
No exceptions can be granted.
graduateschool.ufl.edu/files/editorial-deadlines.pdf

August 10, Friday

Summer B and C classes end.
Final examinations are during regular class periods.

August 10, Friday, 5:00 p.m.

Deadline if requesting transfer of credit (for fall degree candidates).
Last day to drop a course for Summer B and C terms and receive W on transcript.

August 11, Saturday

Commencement

August 13, Monday, 12:00 noon

Summer B and C final term grades are due.

August 14, Tuesday

Degree certification.

August 15, Wednesday

Unofficial transcripts with grades and remarks available 8:00 a.m. via ISIS.

NOTES: All dates and deadlines are subject to change and will be updated accordingly.
Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

Fall 2011 Calendar
Spring 2012 Calendar

Expanded Academic Calendar 2011-2012

Summer 2013 Academic Calendar

All Summer 2013 graduate-level degrees will be awarded at the end of Summer B/C (August 2013).
Applicants will select Summer B/C 2013 on the degree application menu in ISIS.
The Summer 2013 degree application will be available through ISIS in mid-March 2013.
Students enrolled only in Summer A courses, still apply for the Summer B/C term, since graduate-level degrees are only awarded at the end of the B/C term. No graduate-level degrees are awarded at the end of Summer A (June). No late degree applications will be approved after the B/C deadline (July 3).
graduateschool.ufl.edu/files/graduation-checklist.pdf
http://www.isis.ufl.edu/

April 24, Wednesday, 5:00 p.m.

Deadline if requesting transfer of credit (for summer degree candidates).

May 10, Friday, 5:00 p.m.

Summer A & C registration.
May 13, Monday

Summer A & C classes start.
Summer A & C drop/add starts.
Summer A & C late registration starts (late fee assessed).

May 14, Tuesday, 11:59 p.m.

Summer A & C late registration ends (late fee assessed).
Summer A & C drop/add ends.
Summer A & C deadline to withdraw with no fee liability.

May 22, Wednesday

Summer A deadline to withdraw with 25% refund (W symbol assigned):
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall

May 22, Wednesday, 5:00 p.m.

Deadline for Summer A courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme.

May 24, Friday, 3:30 p.m.

Summer A & C fee payment deadline.
Summer A & C residency reclassification deadline for receiving the request and all documents.

May 27, Monday, Memorial Day observed

No classes.

May 31, Friday, 5:00 pm

Summer C deadline to withdraw with 25% refund (W symbol assigned):
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall

Deadline for Summer C courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme.

June 14, Friday

Last day to withdraw (all courses) without failing grades for Summer A term:
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall

June 21, Friday

Summer A classes end.
Summer A final examinations during regular class periods.

June 21, Friday, 5:00 p.m.

Last day to drop a course for Summer A and receive W on transcript.
Last day to submit dissertation for review by Graduate School Editorial Office:
graduateschool.ufl.edu/files/checklist-dissertation.pdf

June 24, Monday, 12:00 p.m.

Summer A final term grades are due.

June 24-28, Monday-Friday, Summer Break

No classes.

June 26, Wednesday
Unofficial transcripts with grades available 8:00 a.m. via ISIS.

**June 28, Friday, 5:00 p.m.**

Summer B Registration.

**July 1, Monday**

Summer B classes start.
Summer B drop/add starts.
Summer B late registration starts (late fee assessed).

**July 2, Tuesday, 11:59 p.m.**

Summer B drop/add ends.
Summer B late registration ends (late fee assessed).
Summer B deadline to withdraw with no fee liability.

**July 3, Wednesday**

Summer B/C Degree application deadline — no exceptions will be granted after this date.
[http://www.isis.ufl.edu/](http://www.isis.ufl.edu/)

Midpoint of Summer term.
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants.

**July 4, Thursday, Independence Day observed**

No classes.

**July 8, Monday, 5:00 p.m.**

Last day to submit successfully defended thesis for review by Graduate School Editorial Office.

Deadline for final exam forms to be posted to GIMS for thesis students.

**July 10, Wednesday, 5:00 p.m.**

Summer B deadline to withdraw with 25% refund (W symbol assigned):

Deadline for Summer B courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme.

**July 12, Friday, 3:30 p.m.**

Summer B fee payment deadline.

Summer B residency reclassification deadline for receiving the request and all documents.

**July 26, Friday, 5:00 p.m.**

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students.

Deadline for theses and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term.
[graduateschool.ufl.edu/files/editorial-deadlines.pdf](http://graduateschool.ufl.edu/files/editorial-deadlines.pdf)

**August 2, Friday**

Last day to withdraw (all courses) without failing grades for Summer B or C term:

Deadline for theses and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term. No exceptions can be granted.
[graduateschool.ufl.edu/files/editorial-deadlines.pdf](http://graduateschool.ufl.edu/files/editorial-deadlines.pdf)
August 9, Friday

Summer B and C classes end.
Final examinations are during regular class periods.

August 9, Friday, 5:00 p.m.
Deadline if requesting transfer of credit (for fall degree candidates).
Last day to drop a course for Summer B and C terms and receive W on transcript.

August 10, Saturday

Commencement +

August 12, Monday, 12:00 noon
Summer B and C final term grades are due.

August 13, Tuesday
Degree certification.

August 14, Wednesday
Unofficial transcripts with grades and remarks available 8:00 a.m. via ISIS.

NOTES: All dates and deadlines are subject to change and will be updated accordingly.
Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

Summer 2014 Calendar

All Summer 2014 graduate-level degrees will be awarded at the end of Summer B/C (August 2014).
Applicants will select Summer B/C 2014 on the degree application menu in ISIS.
The Summer 2014 degree application will be available via ISIS in mid-March 2014.

Students enrolled only in Summer A courses, still apply for the Summer B/C term, since graduate-level degrees are only awarded at the end of the B/C term. No graduate-level degrees are awarded at the end of Summer A (June). No late degree applications will be approved after the B/C deadline (July 2).

graduateschool.ufl.edu/files/graduation-checklist.pdf
http://www.isis.ufl.edu/

April 2014

April 23, Wednesday, 5:00 p.m.
Deadline for requesting transfer of credit (for summer degree candidates)

May 2014

May 9, Friday, 5:00 p.m.
Summer A & C registration

May 12, Monday
Summer A & C classes start.
Summer A & C drop/add starts.
Summer A & C late registration starts (late fee assessed).
May 13, Tuesday, 11:59 p.m.
Summer A & C late registration ends (late fee assessed).
Summer A & C drop/add ends.
Summer A & C deadline to withdraw with no fee liability

May 21, Wednesday, 5:00 p.m.
Summer A deadline to withdraw with 25% refund (W symbol assigned)
Deadline for Summer A courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

May 23, Friday, 3:30 p.m.
Summer A & C fee payment deadline
Summer A & C residency reclassification deadline for receiving the request and all documents

May 26, Monday, Memorial Day observed
No classes

May 30, Friday, 5:00 pm
Summer C deadline to withdraw with 25% refund (W symbol assigned)
Deadline for Summer C courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

June 2014

June 13, Friday, 5:00 p.m.
Last day to withdraw (all courses) via ISIS for Summer A without failing grades
http://www.registrar.ufl.edu/currents/withdraw.html

June 16, Monday, 5:00 p.m.
Last day to submit Transmittal Letters and dissertation for review by Graduate School Editorial Office
graduateschool.ufl.edu/files/checklist-dissertation.pdf

June 20, Friday, 5:00 p.m.
Last day to drop a course and receive W on transcript for Summer A term via College petition to the Registrar, Room 222 Criser
Last day to withdraw (all courses) without failing grades for Summer A term via College petition to the Registrar, Room 222 Criser

June 20, Friday
Summer A classes end.
Summer A final examinations during regular class periods

June 23, Monday, 12:00 p.m.
Summer A final term grades are due.

June 23-27, Monday-Friday, Summer Break
No classes

June 27, Friday, 5:00 p.m.
Summer B Registration
June 30, Monday

Summer B classes start.
Summer B drop/add starts.
Summer B late registration starts (late fee assessed, after 5:00 p.m. on 6/27/14).

July 2014

July 1, Tuesday, 11:59 p.m.

Summer B drop/add ends.
Summer B late registration ends (late fee assessed).
Summer B deadline to withdraw with no fee liability

July 2, Wednesday

Summer B/C Degree application deadline—no exceptions will be granted after this date.
http://www.isis.ufl.edu/
Midpoint of Summer term
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants

July 4, Friday, Independence Day

No classes

July 8, Tuesday, 5:00 p.m.

Last day to submit successfully defended thesis for review by Graduate School Editorial Office
graduateschool.ufl.edu/files/checklist-thesis.pdf
Deadline for final exam forms to be posted to GIMS for thesis students.

July 9, Wednesday, 5:00 p.m.

Summer B deadline to withdraw with 25% refund (W symbol assigned):
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall
Deadline for Summer B courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

July 11, Friday, 3:30 p.m.

Summer B fee payment deadline
Summer B residency reclassification deadline for receiving the request and all documents

July 25, Friday, 5:00 p.m.

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students
Deadline for ETD Signature Pages to be posted to GIMS for thesis and dissertation students
Deadline for thesis and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term
No exceptions can be granted.
graduateschool.ufl.edu/files/editorial-deadlines.pdf
www.graduateschool.ufl.edu/graduation/checklists

August 2014

August 1, Friday, 5:00 p.m.

Last day to withdraw (all courses) for Summer B or Summer C via ISIS without failing grades
http://www.registrar.ufl.edu/currents/withdraw.html

August 5, Tuesday, 5:00 p.m.
Deadline for thesis and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term. No exceptions can be granted.

August 8, Friday, 5:00 p.m.

Last day to drop a course and receive W on transcript for Summer B or Summer C via College petition to the Registrar, Room 222 Criser
Last day to withdraw (all courses) without failing grades for Summer B or Summer C via College petition to the Registrar, Room 222 Criser
Deadline for requesting transfer of credit (for full degree candidates)

August 8, Friday

Summer B and C classes end.
Final examinations are during regular class periods.

August 9, Saturday

Commencement

August 11, Monday, 12:00 noon

Summer B and C final term grades are due.

August 12, Tuesday

Degree certification

August 13, Wednesday

Unofficial transcripts with grades and remarks are available via ISIS.

NOTES: All dates and deadlines are subject to change and will be updated accordingly.
Prospective students should contact the appropriate academic unit for admission application deadlines.

Summer 2015 Calendar

All Summer 2015 graduate-level degrees will be awarded at the end of Summer B/C (August 2015).
Applicants will select Summer B/C 2015 on the degree application menu in ISIS.
The Summer 2015 degree application will be available via ISIS in mid-March 2015.
Students enrolled only in Summer A courses, still apply for the Summer B/C term, since graduate-level degrees are only awarded at the end of the B/C term. No graduate-level degrees are awarded at the end of Summer A (June). No late degree applications will be approved after the B/C deadline (July 1).

April 2015

April 22, Wednesday, 5:00 p.m.
Deadline for requesting transfer of credit (for summer degree candidates)

May 2015

May 8, Friday, 5:00 p.m.
Summer A & C registration

Last day for thesis and dissertation students to clear prior to the summer semester with the Graduate School Editorial Office

NOTES: All dates and deadlines are subject to change and will be updated accordingly. Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.
May 11, Monday

Summer A & C classes start.
Summer A & C drop/add starts.
Summer A & C late registration starts (late fee assessed).

May 12, Tuesday, 11:59 p.m.

Summer A & C late registration ends (late fee assessed).
Summer A & C drop/add ends.
Summer A & C deadline to withdraw with no fee liability

May 20, Wednesday, 5:00 p.m.

Summer A deadline to withdraw with 25% refund (W symbol assigned)
Deadline for Summer A courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

May 22, Friday, 3:30 p.m.

Summer A & C fee payment deadline
Summer A & C residency reclassification deadline for receiving the request and all documents

May 25, Monday, Memorial Day observed

No classes

May 29, Friday, 5:00 pm

Summer C deadline to withdraw with 25% refund (W symbol assigned)
Deadline for Summer C courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

June 2015

June 12, Friday, 5:00 p.m.

Last day to withdraw (all courses) via ISIS for Summer A without failing grades
http://www.registrar.ufl.edu/currents/withdraw.html

June 15, Monday, 5:00 p.m.

Last day to submit Transmittal Letters and dissertation for initial review by Graduate School Editorial Office
graduateschool.ufl.edu/files/checklist-dissertation.pdf

June 19, Friday

Summer A classes end.
Summer A final examinations during regular class periods

June 19, Friday, 5:00 p.m.

Last day to drop a course and receive W on transcript for Summer A term via College petition to the Registrar, Room 222 Criser
Last day to withdraw (all courses) without failing grades for Summer A term via College petition to the Registrar, Room 222 Criser

June 22, Monday, 12:00 p.m.

Summer A final term grades are due.

June 22-26, Monday-Friday, Summer Break
No classes

June 26, Friday, 5:00 p.m.

Summer B Registration

June 29, Monday

Summer B classes start.
Summer B drop/add starts.
Summer B late registration starts (late fee assessed, after 5:00 p.m. on 6/26/14).

June 30, Tuesday, 11:59 p.m.

Summer B drop/add ends.
Summer B late registration ends (late fee assessed).
Summer B deadline to withdraw with no fee liability

July 2015

July 1, Wednesday

Summer B/C Degree application deadline—no exceptions will be granted after this date.
http://www.isis.ufl.edu/
Midpoint of Summer term
Deadline to finalize all data (except Final Exam) in GIMS for all degree applicants

July 3, Friday, Independence Day, observed

No classes

July 7, Tuesday, 5:00 p.m.

Last day to submit successfully defended thesis for review by Graduate School Editorial Office
Deadline for final exam forms to be posted to GIMS for thesis students.

July 8, Wednesday, 5:00 p.m.

Summer B deadline to withdraw with 25% refund (W symbol assigned):
http://www.registrar.ufl.edu/pdf/withdrawal.pdf or 222 Criser Hall
Deadline for Summer B courses for Graduate Student Records to review S/U option applications for courses approved with this grading scheme

July 10, Friday, 3:30 p.m.

Summer B fee payment deadline
Summer B residency reclassification deadline for receiving the request and all documents

July 27, Monday, 5:00 p.m.

Deadline for final exam forms to be posted to GIMS for dissertation, non-thesis, project, and project-in-lieu of thesis students
Deadline for ETD Signature Pages to be posted to GIMS for thesis and dissertation students
Deadline for thesis and dissertation students to submit final pdf document for review by the Graduate School Editorial Office in order to qualify for degree award this term
No exceptions can be granted.
http://graduateschool.ufl.edu/files/editorial-deadlines.pdf
www.graduateschool.ufl.edu/graduation/checklists

July 31, Friday, 5:00 p.m.
Last day to withdraw (all courses) for Summer B or Summer C via ISIS without failing grades
http://www.registrar.ufl.edu/currents/withdraw.html

August 2015

August 4, Tuesday, 5:00 p.m.
Deadline for thesis and dissertation students to receive an e-mail confirming Final Clearance status with the Graduate School Editorial Office to remain eligible for a degree award this term
No exceptions can be granted.
graduateschool.ufl.edu/files/editorial-deadlines.pdf

August 7, Friday
Summer B and C classes end.
Final examinations are during regular class periods.

August 7, Friday, 5:00 p.m.
Last day to drop a course and receive W on transcript for Summer B or Summer C via College petition to the Registrar, Room 222 Criser
Last day to withdraw (all courses) without failing grades for Summer B or Summer C via College petition to the Registrar, Room 222 Criser
Deadline for requesting transfer of credit (for full degree candidates)

August 8, Saturday
Commencement+

August 10, Monday, 12:00 noon
Summer B and C final term grades are due.

August 11, Tuesday
Degree certification

August 12, Wednesday
Unofficial transcripts with grades and remarks are available via ISIS.

NOTES: All dates and deadlines are subject to change and will be updated accordingly.
Prospective students should contact the appropriate academic unit for admission application deadlines.

+ Projected dates. Notification of dates and times of ceremonies for colleges and schools will be sent to degree candidates as soon as plans are finalized. Please do not anticipate exact dates and times until notification is received.

University of Florida Graduate Majors

The information in this catalog is current as of July 2012. Please contact individual programs for any additional information or changes.
Click here for the homepages of the individual units.

The following graduate programs (majors)* are offered by the University of Florida. Additional graduate concentrations offered by UF appear in parentheses.

College of Agricultural and Life Sciences

Dean: Elaine Turner
Complete faculty listings: Follow this link.
The College of Agricultural and Life Sciences offers academic programs and grants advanced degrees in 17 departments and the Schools of Forest Resources and Conservation, and Natural Resources and Environment. These academic units are all a part of the Institute of Food and Agricultural Sciences (IFAS). Additional components of IFAS include 16 research centers located throughout the state and cooperative extension offices in each of the 67 counties of the state.
The following courses are offered under the supervision of the office of the dean by an interdisciplinary faculty and deal with material of concern to two or more IFAS academic units. The courses are also open to students of other colleges, with the permission of the course instructor.
For more information, please see our website: http://cals.ufl.edu

Departments and Programs within the College of Agricultural and Life Sciences

Agricultural and Biological Engineering (CALS)

College

- College of Agricultural and Life Sciences
- College of Engineering

Department/School

Agricultural and Biological Engineering Department

Agricultural and Biological Engineering Program

The degrees of Master of Science, Master of Engineering, and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences.

Requirements for these degrees are given in the Graduate Degrees section of this catalog. Additional information can also be found on the graduate studies pages on the department website at www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

- **Agricultural production** includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.

- **Biological engineering** includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.

- **Information systems** includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

- **Land and water resources** includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an interdisciplinary experience in research at the doctoral level.

The requirements for a master's degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Degrees Offered with a Major in Agricultural and Biological Engineering

Doctor of Philosophy

without a concentration
concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Agricultural and Biological Engineering Courses

- ABE 5015: Empirical Models of Crop Growth and Yield Response
- ABE 5038: Recent Developments and Applications in Biosensors
- ABE 5152: Electro-Hydraulic Circuits and Controls
- ABE 5332: Advanced Agricultural Structures
- ABE 5442: Advanced Agricultural Process Engineering
- ABE 5643C: Biological Systems Modeling
- ABE 5646: Biological and Agricultural Systems Simulation
- ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials
- ABE 5663: Advanced Applied Microbial Biotechnology
- ABE 5707C: Agricultural Waste Management
- ABE 5815C: Food and Bioprocess Engineering Design
- ABE 6005: Applied Control for Automation and Robots
- ABE 6031: Instrumentation in Agricultural Engineering Research
- ABE 6035: Advanced Remote Sensing: Science and Sensors
- ABE 6037C: Remote Sensing in Hydrology
- ABE 6252: Advanced Soil and Water Management Engineering
- ABE 6254: Simulation of Agricultural Watershed Systems
- ABE 6265: Vadose Zone Modeling
- ABE 6266: Nanotechnology in Water Research
- ABE 6615: Advanced Heat and Mass Transfer in Biological Systems
- ABE 6644: Agricultural Decision Systems
- ABE 6816: Food and Bioprocess Sterilization
- ABE 6905: Individual Work in Agricultural and Biological Engineering
- ABE 6910: Supervised Research
- ABE 6931: Seminar
- ABE 6933: Special Topics in Agricultural and Biological Engineering
- ABE 6940: Supervised Teaching
- ABE 6971: Research for Master's Thesis
- ABE 6972: Research for Engineer's Thesis
- ABE 6974: Nonthesis Project
- ABE 6986: Applied Mathematics in Agricultural and Biological Engineering
University of Florida » 2014-2015 Graduate Catalog

Agricultural Education and Communication Program

The Master of Science program is designed to prepare graduates for domestic and international teaching, research, extension, administrative and leadership positions in both the public and private sectors. Courses are taught in agricultural and natural resources context and are broadly applicable in educational, business, government, and agency settings. The Master of Science program is delivered on-campus and online via the AEC e-Learning Institute (eLI). The Doctor of Philosophy degree program is primarily designed to prepare graduates for academic positions in teaching, research, and extension within the realm of Agricultural Education and Communication. In addition, graduates may obtain positions in administration, human resource management, or training and development.

The Agricultural Communication specialization prepares students for professional communication careers in or dealing with agriculture and agribusiness. It is intended primarily for students who enter with a bachelor's degree in journalism, agricultural communication/journalism, advertising, broadcasting, public relations, or related fields. Graduates of this option are employed in: (1) communication or management positions with the numerous commodity or special-interest associations in agriculture and related fields; (2) communication support positions in agricultural extension and research information departments of land-grant universities, agencies of USDA, state Departments of Agriculture, and agricultural development projects overseas; (3) advertising and public relations positions with agriculture businesses or commodity associations; and (4) media positions involved in reporting on agriculture, agribusiness, and natural resource issues. Students in Agricultural Communication also develop strong skills/application in media writing, production, campaign strategies and/or Web design/desktop publishing. Graduates become prepared for positions in both public and private sectors in both industry and educational settings.

The Agricultural Education specialization is designed to enhance the careers of those employed in the educational professions in agriculture and natural resources. Regardless if one is employed in public school teaching, community college instruction, or training and development in agribusiness, students gain valuable knowledge and experience in designing, implementing, and evaluating educational programs. In addition, graduates of the program command added depth in the understanding of the teaching and learning process. This specialization may be designed to allow students to complete the requirements of teacher certification while completing their master's degree program. The PhD is a research-oriented degree that has a primary focus of preparing candidates to assume faculty positions in colleges or university teacher education programs. Candidates develop an individual program of study that provides a comprehensive knowledge of teaching and learning processes. The degree also seeks to extend the candidate's development by providing instruction, research opportunities, and experiences that enhance the depth and breadth of the candidate's prior learning opportunities.

The Extension Education specialization is designed to prepare students for careers in the Cooperative Extension service, outreach education, and/or other international agencies. Through coursework and research, students will gain valuable knowledge and experience in designing, implementing, and evaluating educational programs. Extension graduate students choose between a domestic or international focus in regards to coursework and/or research. In addition, graduates of the program command tremendous depth of the teaching and learning process. Candidates who select the Extension Education specialization develop an individual program of study that focuses on such topics as program development, experiential education, the change process, educational technologies and extension, program evaluation and organizational accountability, administration and leadership, and international extension. Graduates become prepared for a variety of positions including extension specialists, county and district extension directors, outreach education coordinators for private and public agencies, 4-H Extension agents and specialists, and educator specialists with international agencies.
The **Leadership Development** specialization is designed to prepare students for educational leadership, training, and outreach positions in agricultural, extension, community and governmental agencies. Course work in the major will focus on a core of agricultural courses along with emphasis in designing educational/training programs, professional presentation enhancement, leadership development, teaching/training methods, and interpersonal communication. Candidates who select the **Leadership Development** specialization develop an individual program that focuses on leadership theory and measurement, critical and creative thinking, and leadership in cross-cultural settings. Students will encompass a strong research and theory-based program with a strong knowledge of training and development, and human resource management. Graduates become prepared for positions in both public and private sectors in both industry and educational settings.

 Degrees Offered with a Major in Agricultural Education and Communication

 **Doctor of Philosophy**

 without a concentration

 concentration in Tropical Conservation and Development

 **Master of Science**

 without a concentration

 concentration in Tropical Conservation and Development

 **Agricultural Education and Communication Courses**

 - AEC 5032: Agricultural Media Writing
 - AEC 5037: Agricultural Media Production
 - AEC 5060: Public Opinion and Agricultural and Natural Resource Issues
 - AEC 5074: Agriculture, Resources, People, and the Environment: A Global Perspective
 - AEC 5201: Teaching in Colleges of Agricultural and Life Sciences
 - AEC 5203: Advanced Teaching in Colleges of Agricultural and Life Sciences
 - AEC 5206: Teaching Methods in Agricultural Education
 - AEC 5227: Teaching in Agricultural Education Laboratory Facilities
 - AEC 5302: Professional Skill Development in Agriscience Education I
 - AEC 5324: Philosophy and Development of Agricultural Education
 - AEC 5454: Leadership Development for Extension and Community Nonprofit Organizations
 - AEC 5501: Professional Skill Development in Agriscience Education II
 - AEC 5541: Communication and Instructional Technologies in Agricultural and Life Sciences
 - AEC 5544: Curriculum Development and Assessment Techniques in Emerging Agricultural Technologies
 - AEC 5545: Special Methods in Teaching Agriculture
 - AEC 5546: Program Planning in Agricultural Education
 - AEC 6205: Advanced Curriculum and Teaching Methods
 - AEC 6210: Designing Educational Programs in Agricultural Settings
 - AEC 6211: Delivering Educational Programs in Agricultural Settings
 - AEC 6212: Teacher Education in Agriculture
 - AEC 6229: Laboratory Instruction: Theory and Practice
 - AEC 6300: Methodology of Planned Change
 - AEC 6316: From America to Zimbabwe: An Overview of International Extension Systems
 - AEC 6321: The Land Grant University and University Governance
 - AEC 6326: History and Philosophy of Agricultural Education
 - AEC 6419: Communication and Competencies for Global Leadership
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Agronomy

College

College of Agricultural and Life Sciences

Department/School

Agronomy Department

Agronomy Program Information

The Agronomy Department offers the degrees of Doctor of Philosophy and Master of Science (thesis and non-thesis option) in agronomy with specializations in plant physiology, ecology, management and nutrition, weed science (terrestrial and aquatic), and plant breeding and genetics. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Graduate programs emphasize the development and subsequent application of basic principles in each specialization to the management of agronomic plants in Florida and throughout the world. The continuing need for increased plant production for food, fiber and energy to meet the demands of a rapidly escalating population is reflected in departmental research programs. When compatible with a student's program and permitted by prevailing circumstances, some thesis and dissertation research may be conducted wholly or in part in one or more of several countries.

Students seeking a graduate program in the Agronomy Department should hold a Bachelor of Science degree from an accredited college or university with a major in an area of plant science, or closely related discipline. A science background with basic courses in biology, botany, mathematics, chemistry, and physics is required of new graduate students.

Degrees Offered with a Major in Agronomy

Doctor of Philosophy
without a concentration

concentration in Toxicology

concentration in Tropical Conservation and Development

Master of Science

without a concentration

concentration in Agroecology

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

Agronomy Departmental Courses

- AGR 5215C: Integrated Field Crop Science
- AGR 5230C: Florida Grassland Agroecosystems
- AGR 5266C: Field Plot Techniques
- AGR 5277C: Tropical Crop Production
- AGR 5307: Molecular Genetics for Crop Improvement
- AGR 5321C: Genetic Improvement of Plants
- AGR 5444: Ecophysiology of Crop Production
- AGR 5511: Crop Ecology
- AGR 6233: Tropical Grassland Agroecosystems
- AGR 6237C: Research Techniques in Forage Evaluation
- AGR 6311: Population Genetics
- AGR 6322: Advanced Plant Breeding
- AGR 6325L: Plant Breeding Techniques
- AGR 6353: Cytogenetics
- AGR 6422C: Environmental Crop Nutrition
- AGR 6442C: Physiology of Agronomic Plants
- AGR 6905: Agronomic Problems
- AGR 6910: Supervised Research
- AGR 6932: Topics in Agronomy
- AGR 6933: Graduate Agronomy Seminar
- AGR 6940: Supervised Teaching
- AGR 6971: Research for Master's Thesis
- AGR 7979: Advanced Research
- AGR 7980: Research for Doctoral Dissertation
- ALS 5155: Global Agroecosystems
- IPM 5305: Principles of Pesticides
- PLS 5632C: Integrated Weed Management
- PLS 5652: Advanced Weed Science
- PLS 6623: Weed Ecology
- PLS 6626: Invasive Plant Ecology
- PLS 6955: Plant/Herbicide Interaction

College of Agricultural and Life Sciences Courses
Animal Molecular and Cellular Biology

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine

Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
- Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program's website at http://www.animal.ufl.edu/amcb/.

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
- ANS 6666L: Molecular and Cellular Research Methods
- ANS 6702: Lactation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
- PCB 6816: Thermal Physiology
- ANS 6707: Growth Physiology in Farm Animals
### College of Agricultural and Life Sciences Courses

- **ALS 5106**: Food and the Environment
- **ALS 5364C**: Molecular Techniques Laboratory
- **ALS 5905**: Individual Study
- **ALS 5932**: Special Topics
- **ALS 6046**: Grant Writing
- **ALS 6921**: Colloquium on Plant Pests of Regulatory Significance
- **ALS 6925**: Integrated Plant Medicine
- **ALS 6930**: Graduate Seminar
- **ALS 6931**: Plant Medicine Program Seminar
- **ALS 6942**: Principles of Plant Pest Risk Assessment and Management
- **ALS 6943**: Internship in Plant Pest Risk Assessment and Management
- **BCH 5045**: Graduate Survey of Biochemistry

### Animal Sciences

**College**
The Department of Animal Sciences offers the degrees of Master of Science and Doctor of Philosophy in animal sciences with emphasis in beef or dairy cattle, swine, or equine. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The following specializations are available:

- Breeding and genetics
- Management
- Nutrition (nutritional physiology, nutrient metabolism, and feedstuff utilization)
- Physiology (environmental, lactational, and reproductive)
- Molecular biology (embryology, endocrinology, and genetics)
- Meat science (meat processing, meat quality, muscle biology, and food safety)

A student may work on a problem covering more than one area of study. Animal resources (beef cattle, dairy cattle, horses, swine, sheep, and laboratory animals) are available for use in various research programs. Nutrition, physiology, and meats laboratories are available for detailed chemical and carcass quality evaluations, and excellent computer facilities are available. Special arrangements may be made to conduct research at the various branch agricultural experiment stations throughout Florida.

Departmental and program prerequisites for admission to graduate study include a sound science background, with basic courses in microbiology, biology, mathematics, and chemistry. All courses in the animal sciences program area are acceptable for graduate credit as part of the candidate's major.

The Graduate School restricts graduate students from pursuing minors in academic units that contribute major credit toward their degree program. Therefore, graduate students majoring in Animal Sciences cannot pursue a minor in Food and Resource Economics, Food Science and Human Nutrition, Medicine-Biochemistry, and Veterinary Medical Sciences. In addition, undergraduate credits at the 3000–4000 level in the major of any of these listed academic units are not eligible to count toward degree requirements.

Degrees Offered with a Major in Animal Sciences

Doctor of Philosophy

without a concentration

concentration in Animal Molecular and Cellular Biology

Master of Science

without a concentration

Animal Sciences Departmental Courses

- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6314: Experimental Embryology
- ANS 6447: Ruminant Nutrition
- ANS 6449: Vitamins
• ANS 6452: Principles of Forage Quality Evaluation
• ANS 6458: Advanced Methods in Nutrition Technology
• ANS 6636: Meat Technology
• ANS 6638: Advanced Methods in Nutrition Technology
• ANS 6702: Lactation Physiology of Farm Animals
• ANS 6704: Mammalian Endocrinology
• ANS 6705: Muscle Physiology
• ANS 6707: Growth Physiology in Farm Animals
• ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
• ANS 6715: Gastrointestinal and Feed Microbiology
• ANS 6716: Physiology in Farm Animals
• ANS 6718: Nutritional Physiology of Domestic Animals
• ANS 6723: Mineral Nutrition and Metabolism
• ANS 6750: Reproductive Physiology in Farm Animals
• ANS 6751: Physiology of Reproduction
• ANS 6767: Mammalian Endocrinology
• ANS 6775: Essentials of Livestock Immunology
• ANS 6905: Problems in Animal Science
• ANS 6910: Supervised Research
• ANS 6932: Special Topics in Animal Science
• ANS 6933: Graduate Seminar in Animal Science
• ANS 6936: Graduate Seminar in Animal Molecular and Cell Biology
• ANS 6939: Animal Molecular and Cellular Biology Journal Colloquy
• ANS 6940: Supervised Teaching
• ANS 6971: Research for Master's Thesis
• ANS 7979: Advanced Research
• ANS 7980: Research for Doctoral Dissertation
• PCB 6816: Thermal Physiology

Additional Courses for Major Credit in Animal Sciences

• AEB 5326: Agribusiness Financial Management
• AEB 6385: Management Strategies for Agribusiness Firms
• AEB 7182: Agricultural Risk Analysis and Decision Making
• FOS 5205: Current Issues in Food Safety and Sanitation
• FOS 5225C: Principles in Food Microbiology
• FOS 5437C: Food Product Development
• FOS 5732: Current Issues in Food Regulations
• FOS 5186C: Psychophysical Aspects of Foods
• FOS 6226C: Advanced Food Microbiology
• FOS 6315C: Advanced Food Chemistry
• FOS 6317C: Flavor Chemistry and Technology
• FOS 6355C: Instrumental Analysis and Separations
• FOS 6428C: Advanced Food Processing
• FOS 6455C: Industrial Food Fermentations
• HUN 5447: Nutrition and Immunity
• HUN 6245: Advanced Human Nutrition
• HUN 6301: Nutritional Aspects of Lipid Metabolism
• HUN 6305: Nutritional Aspects of Carbohydrates
• HUN 6321: Proteins and Amino Acids in Nutrition
• VME 5162C: Avian Diseases
• VME 5244: Physiology Organ Systems

College of Agricultural and Life Sciences Courses

• ALS 5106: Food and the Environment
• ALS 5364C: Molecular Techniques Laboratory
• ALS 5905: Individual Study
• ALS 5932: Special Topics
• ALS 6046: Grant Writing
• ALS 6921: Colloquium on Plant Pests of Regulatory Significance
• ALS 6925: Integrated Plant Medicine
• ALS 6930: Graduate Seminar
• ALS 6931: Plant Medicine Program Seminar
• ALS 6942: Principles of Plant Pest Risk Assessment and Management
• ALS 6943: Internship in Plant Pest Risk Assessment and Management
• BCH 5045: Graduate Survey of Biochemistry

Entomology and Nematology

College of Agricultural and Life Sciences
Entomology and Nematology Program Information

The Entomology and Nematology department offers research-based M.S. (thesis) and PhD degrees in entomology and in nematology. Our large faculty in Gainesville and at Research and Education Centers around the state allow for study in many important areas, including behavior, ecology, systematics, biological control, nematology, pest management, and medical, veterinary, and urban entomology. Molecular, whole organism and population ecology studies are all within the range of supported research in the Entomology and Nematology department, and our nematology program is one of the most comprehensive in the nation.

The M.S. degree can be taken in a non-thesis format, in Gainesville or entirely online, with a specialization in either entomology or pest management. Online M.S. degrees are designed to accommodate place-bound students interested in biological science with emphasis on insects and other arthropods, including extension faculty and other educators; state and federal employees in agricultural, environmental and regulatory positions; consultants; pest control industry personnel; and others who want to further their education.

Certificates, comprising 15 credit hours of specific coursework, are available online or to residential students with concentrations in urban pest management, landscape pest management or medical entomology. These certificates document specialization and proficiency in sub-disciplines within entomology for enrolled graduate students and provide evidence of expertise for non-degree seeking students.

Students entering graduate programs in entomology and nematology should have a strong science background, including biology, chemistry, and algebra. Physics and statistics are recommended. Admissions criteria can be found on the Graduate School’s [Admission page](http://example.com/admission).

Degrees Offered with a Major in Entomology and Nematology

**Doctor of Philosophy**

**Master of Science**

Entomology and Nematology Departmental Courses

- ALS 5156: Agricultural Ecology Principles and Applications
- ALS 6046: Grant Writing
- ALS 6166: Exotic Species and Biosecurity Issues
- ALS 6935: Topics in Biological Invasions
- ENY 5006: Graduate Survey of Entomology
- ENY 5006L: Graduate Survey of Entomology Laboratory
- ENY 5031C: Insect Field Biology
- ENY 5151C: Techniques in Insect Systematics
- ENY 5160C: Survey of Science with Insects
- ENY 5164: Graduate Survey of Invertebrate Field Biology
- ENY 5212: Insects and Wildlife
- ENY 5223C: Biology and Identification of Urban Pests
- ENY 5226C: Principles of Urban Pest Management
- ENY 5332: Graduate Survey of Urban Vertebrate Pest Management
- ENY 5236: Insect Pest and Vector Management
- ENY 5241: Biological Control
- ENY 5245: Agricultural Acarology
- ENY 5405: Insects as Vectors of Plant Pathogens
- ENY 5516: Turf and Ornamental Entomology
- ENY 5566: Tropical Entomology
- ENY 5567: Tropical Entomology Field Laboratory
- ENY 5572: Advanced Apiiculture
- ENY 5611: Immature Insects
- ENY 5820: Insect Molecular Genetics
- ENY 6166: Insect Classification
- ENY 6203: Insect Ecology
- ENY 6203L: Insect Ecology Laboratory
- ENY 6248: Termite Biology and Control
- ENY 6401: Insect Physiology
- ENY 6401L: Insect Physiology Laboratory
- ENY 6454: Behavioral Ecology and Systematics of Insects
- ENY 6591C: Advanced Mosquito Identification
- ENY 6593: Advanced Mosquito Biology
- ENY 6651C: Insect Toxicology
Family, Youth, and Community Sciences

College

College of Agricultural and Life Sciences

Department/School

Family, Youth, and Community Sciences Department

Master of Science in Family, Youth and Community Sciences

The Master of Science in FYCS offers two degree options—a thesis and a non-thesis. Both options prepare students for advanced professional positions. FYCS students in either option may complete the FYCS Concentration in Nonprofit Organizational Development, the Certificate in Nonprofit Organizational Development, or the Certificate in Personal & Family Financial Planning.
Thesis Option prepares students to conduct independent research needed to develop science-based solutions to problems, issues and policies that affect families, youth and communities. Students develop expertise in a subject matter area directly relevant to the problem or need they want to address with the thesis research.

Non-Thesis Project Option provides the student with a broad base of knowledge and skills in the discipline. Students complete a non-thesis project determined in consultation with the supervisory committee. Projects vary in nature and may include directed research, program evaluation, or other empirically-based projects.

The Minor in Family, Youth and Community Sciences provides students with knowledge about the theories and body of research that explain how families, youth and communities develop and interact. The minor consists of nine hours of study.

The Minor in Organizational Leadership for Nonprofits provides students with an understanding of how to develop not-for-profit organizations to address problems facing families, youth and communities. The minor consists of six hours of study (nine hours for doctoral students).

Concentration in Nonprofit Organizational Development The nonprofit organizational development concentration will prepare students to work with tax exempt nonprofit organizations and informal community based groups that serve a charitable purpose for the public good. The concentration includes the study of the historical development of nonprofits in the US that enable students to understand the unique aspects of nonprofits and their growing importance and impact on our society. It provides students with a knowledge base for aspiring nonprofit organizational leaders and proven competencies for practicing professionals in the nonprofit sector.

The Graduate Certificate in Nonprofit Leadership will prepare students to work with all 501 (c) nonprofit organizations, tax exempt and others. Courses provide an in depth understanding for developing and sustaining and efficient and effective nonprofit organization. Core competencies in governance, strategic planning, fund raising, and risk management are included as well as other tools.

The Graduate Certificate in Personal and Family Financial Planning The certificate addresses the Certified Financial Planner™ (CFP) Board of Standards education requirement for sitting for the CFP examination, including insurance, personal investing, retirement planning, tax planning, behavioral finance, financial planning practice management and foundational family economic theories. The CFP designation is the leading standard in financial planning and our program is registered with the CFP Board of Standards enabling students to sit for the exam upon completion of the certificate.

Degrees Offered with a Major in Family, Youth, and Community Sciences

Master of Science

without a concentration

concentration in Community Studies

concentration in Family and Youth Development

concentration in Nonprofit Organization Development

Courses

- PYC 5008: Personal and Family Tax Planning
- PYC 5009: Personal and Family Insurance Planning
- PYC 5106: Personal and Family Retirement and Estate Planning
- PYC 5935: Personal and Family Financial Planning Capstone
- PYC 6020: Principles of Family, Youth, and Community Sciences
- PYC 6111: Families and Violence
- PYC 6117: Military Families in Community Context
- PYC 6131: Ethics for PYCS Practitioners
- PYC 6207: Adolescent Problematic Behavior
- PYC 6221: Grant Proposals for Community-Based Organizations
- PYC 6222: Parenting and Child Relationships
- PYC 6223: Promoting Positive Youth Development
- PYC 6224: Resilience and Positive Youth Development
- PYC 6230: Theories of Youth and Family Development
- FYC 6232
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Fisheries and Aquatic Sciences

College

College of Agricultural and Life Sciences

Department/School

School of Forest Resources and Conservation

Fisheries and Aquatic Sciences Program

Director: T. L. White
Graduate Coordinator: William J. Lindberg

Complete faculty listing by department: Follow this link.

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas.

The School's program in Fisheries and Aquatic Sciences leads to the Master of Science, Master of Fisheries and Aquatic Sciences (nonthesis), and Doctor of Philosophy degrees with a program in Fisheries and Aquatic Sciences. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Fisheries and Aquatic Sciences program also offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

The School of Forest Resources and Conservation's program in Fisheries and Aquatic Sciences conducts research, teaching, and extension programs in four broad areas:

- Sustainable fisheries
- Aquaculture
- Aquatic animal health
- Conservation and management of aquatic environments

Faculty encompass both freshwater and marine environments, as well as managed aquaculture systems. Collaborators include the UF College of Veterinary Medicine, National Biological Survey, National Marine Fisheries Service, Harbor Branch Oceanographic Institute, Mote Marine Laboratory, the US Geologic Survey, the Florida Fish and Wildlife Conservation
Commission, and others. Academic programs are structured to emphasize direct engagement of students with faculty. Further information, including specific degree options, faculty biographies, and information on the admissions process, is available at: http://sfrc.ufl.edu.

Degrees Offered with a Major in Fisheries and Aquatic Sciences

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

Master of Fisheries and Aquatic Sciences

without a concentration

concentration in Geographic Information Systems

concentration in Natural Resource Policy and Administration

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Natural Resource Policy and Administration
concentration in Wetland Sciences

School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mapping
- SUR 5385: Remote Sensing Applications
- SUR 5386: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
- SUR 5425: Cadastral Information Systems
- SUR 5525: Least Squares Adjustment Computations
- SUR 6375: Terrain Analysis and Mapping
- SUR 6395: Topics in Geographic Information Systems
- SUR 6427: Land Tenure and Administration
- SUR 6535: GPS-INS Integration
- SUR 6905: Special Problems in Geomatics
- SUR 6934: Topics in Geomatics

Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5276C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5901: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Phyology
- FAS 6256: Fish and Aquatic Invertebrate Histology
- FAS 6272: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6932: Special Topics in Fisheries and Aquatic Sciences
- FAS 6933: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
- FAS 6940: Supervised Teaching
- FAS 6971: Research for Master's Thesis
- FAS 7979: Advanced Research
- FAS 7980: Research for Doctoral Dissertation

Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5908: Research Planning
- FNR 6564: Ecosystem Restoration Principles and Practice
- FOR 5157: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6628: Community Forest Management
- FOR 6665: Landscape Planning for Ecotourism
- FOR 6905: Research Problems in Forest Resources and Conservation
College of Agricultural and Life Sciences Courses

- FOR 6910: Supervised Research
- FOR 6933: Seminar
- FOR 6934: Topics in Forest Resources and Consenstion
- FOR 6940: Supervised Teaching
- FOR 6971: Research for Master's Thesis
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6555: Introduction to Quantitative Genetics

Food and Resource Economics

College

College of Agricultural and Life Sciences

Department/School

Food and Resource Economics

Food and Resource Economics Program Information

The Food and Resource Economics Department offers the Master of Agribusiness (M.AB.) (non-thesis), Master of Science with Concentration in Agribusiness (M.S.AB.) (non-thesis), Master of Science (thesis), and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Ph.D. in Food and Resource Economics is designed to provide the student with rigorous training in economics, statistics, and applied quantitative techniques. Each student is exposed to core theory and to fields of specialization with the purpose to prepare the candidate for a professional career in post-secondary education, government, non-governmental organizations, private business, and international agencies.

The Master of Agribusiness is designed specifically for students with no academic background in economics or agricultural economics. The program is made up of students from diverse backgrounds including Accounting, Agricultural Education and Communication, Agricultural Operations Management, Animal Science, Business Administration, Finance, Food Science, Agriculture, Management, Turfgrass, and Wildlife Ecology and Conservation. The graduate coursework complements the student’s undergraduate background and prepare them for careers in financial analysis, sales, management, human resources, policy, production, and entrepreneurial pursuits working in private industry, international firms, non-profit organizations and government.

The Master of Science in the Food and Resource Economics Department provides broad training in applied economics as it relates to food production, marketing and trade, regional economics, and natural resource issues. Students are taught to use basic economic principles and quantitative methods to address empirical problems. The core consists of graduate level courses in microeconomics, policy, econometrics, statistics and survey research methods. Many students elect to continue their education with a Ph.D. degree while others opt for employment with government agencies, non-governmental organizations, foreign agencies, private consulting firms, or corporations.

The Master of Science with Concentration in Agribusiness is designed specifically for students with an educational background in economics and agricultural economics. The quantitative courses include microeconomics, policy, econometrics and survey research methods and provide solid economic theory to prepare students for careers in financial analysis, sales, management, marketing, human resources, policy, production, and entrepreneurial pursuits working in private industry, international firms, non-profit organizations and government.

For more information, please see our website: http://www.fred.ifa.ufl.edu.

Degrees Offered with a Major in Food and Resource Economics

Doctor of Philosophy
without a concentration

with a concentration in Hydrologic Sciences

with a concentration in Toxicology

with a concentration in Tropical Conservation and Development

Master of Agribusiness

without a concentration

with a concentration in Tropical Conservation and Development

Master of Science

without a concentration

with a concentration in Agribusiness

with a concentration in Hydrologic Sciences

with a concentration in Toxicology

with a concentration in Tropical Conservation and Development

Courses
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Food Science

College

College of Agricultural and Life Sciences

Department/School

Food Science and Human Nutrition Department

Food Science Program Information

The Ph.D. program in Food Science is a multidisciplinary program consisting of Food Chemistry, Food Processing and Engineering, and Food Microbiology and Safety. Students are expected to obtain a breadth of food science knowledge by taking courses in all program areas with the majority of courses stressing one of the three areas of emphasis.

For further information, please see our website at: http://fshn.ifas.ufl.edu.
Doctor of Philosophy

without a concentration

concentration in Toxicology

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6938: Advanced Diabetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II
- DIE 6949: Dietetic Internship in Sports Nutrition
- FOS 5205: Current Issues in Food Safety and Sanitation
- FOS 5225C: Principles in Food Microbiology
- FOS 5437C: Food Product Development
- FOS 5561C: Citrus Processing Technology
- FOS 5645: Functional Foods and Nutraceuticals
- FOS 5732: Current Issues in Food Regulations
- FOS 6125C: Sensory Evaluation of Food
- FOS 5126C: Psychophysical Aspects of Foods
- FOS 6215: Principles of Food Safety
- FOS 6216: Food Safety Systems
- FOS 6217: Food Safety, Sanitation, and Microbiology
- FOS 6228C: Advanced Food Microbiology
- FOS 6315C: Advanced Food Chemistry
- FOS 6317C: Flavor Chemistry and Technology
- FOS 6355C: Instrumental Analysis and Separations
- FOS 6428C: Advanced Food Processing
- FOS 6455C: Industrial Food Fermentations
- FOS 6736: Food Regulations
- FOS 6905: Problems in Food Science
- FOS 6910: Supervised Research
- FOS 6915: Research Planning
- FOS 6936: Topics in Food Science
- FOS 6938: Food Science Seminar
- FOS 6940: Supervised Teaching
- FOS 6971: Research for Master's Thesis
- FOS 7979: Advanced Research
- FOS 7980: Research for Doctoral Dissertation
- HUN 5246: Current Issues in Dietary Supplements
- HUN 5441: Metabolic Response to Enteral and Parenteral Nutrition
- HUN 5447: Nutrition and Immunity
- HUN 6245: Advanced Human Nutrition
- HUN 6255: Clinical Nutrition
- HUN 6301: Nutritional Aspects of Lipid Metabolism
- HUN 6305: Nutritional Aspects of Carbohydrates
- HUN 6321: Proteins and Amino Acids in Nutrition
- HUN 6331: Vitamins in Human Nutrition
- HUN 6356: Minerals in Nutrition
- HUN 6812C: Analytical Techniques in Nutritional Biochemistry
- HUN 6905: Problems in Nutritional Sciences
- HUN 6910: Supervised Research
- HUN 6936: Topics in Nutritional Sciences
- HUN 6938: Nutritional Sciences Seminar
- HUN 6939: Advanced Clinical Nutrition
- HUN 6940: Supervised Teaching
- HUN 6971: Research for Master's Thesis
- HUN 7979: Advanced Research
- HUN 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses
The M.S. program offers tracks in food science and in nutritional sciences. The Institute of Food Technologists and the American Society for Nutrition recognize these concentrations. The department also offers a combined Master of Science-Dietetics Internship (MS-DI) program accredited by the Commission on Accreditation for Dietetic Education (CADE). Students who complete this program are eligible to take the national registration examination to become a registered dietitian. Only graduates from a CADE accredited/approved Didactic Program in Dietetics are eligible for the MS-DI program.

Specific areas of study include nutritional biochemistry/molecular biology, nutrient function/metabolism, medical nutrition therapy/dietetics, nutritional immunology, food processing/engineering, food chemistry/biochemistry, and food safety/microbiology/quality.

Applicants must have an adequate background in physical and biological sciences and food science or nutritional sciences. Students with specific deficiencies will be required to take prerequisite courses.

For further information, please see our website at: http://fshn.ifas.ufl.edu.

Degrees Offered with a Major in Food Science and Human Nutrition

Master of Science

without a concentration

concentration in Nutritional Sciences

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
- DIE 6516: Professional Development in Dietetics
- DIE 6905: Problems in Dietetics
- DIE 6938: Advanced Dietetic Seminar
- DIE 6942: Dietetic Internship I
- DIE 6944: Dietetic Internship II

Food Science and Human Nutrition
DIE 6949: Dietetic Internship in Sports Nutrition
FOS 5205: Current Issues in Food Safety and Sanitation
FOS 5225C: Principles in Food Microbiology
FOS 5437C: Food Product Development
FOS 5551C: Citrus Processing Technology
FOS 5645: Functional Foods and Nutraceuticals
FOS 5732: Current Issues in Food Regulations
FOS 6125C: Sensory Evaluation of Food
FOS 5126C: Psychophysical Aspects of Foods
FOS 6215: Principles of Food Safety
FOS 6216: Food Safety Systems
FOS 6217: Food Safety, Sanitation, and Microbiology
FOS 6226C: Advanced Food Microbiology
FOS 6315C: Advanced Food Chemistry
FOS 6317C: Flavors Chemistry and Technology
FOS 6355C: Instrumental Analysis and Separations
FOS 6428C: Advanced Food Processing
FOS 6455C: Industrial Food Fermentations
FOS 6736: Food Regulations
FOS 6905: Problems in Food Science
FOS 6910: Supervised Research
FOS 6915: Research Planning
FOS 6936: Topics in Food Science
FOS 6938: Food Science Seminar
FOS 6940: Supervised Teaching
FOS 6971: Research for Master's Thesis
FOS 7979: Advanced Research
FOS 7980: Research for Doctoral Dissertation
HUN 5246: Current Issues in Dietary Supplements
HUN 5441: Metabolic Response to Enteral and Parenteral Nutrition
HUN 5447: Nutrition and Immunity
HUN 6245: Advanced Human Nutrition
HUN 6255: Clinical Nutrition
HUN 6301: Nutritional Aspects of Lipid Metabolism
HUN 6305: Nutritional Aspects of Carbohydrates
HUN 6321: Proteins and Amino Acids in Nutrition
HUN 6331: Vitamins in Human Nutrition
HUN 6355: Minerals in Nutrition
HUN 6812C: Analytical Techniques in Nutritional Biochemistry
HUN 6805: Problems in Nutritional Sciences
HUN 6810: Supervised Research
HUN 6838: Topics in Nutritional Sciences
HUN 6838: Nutritional Sciences Seminar
HUN 6839: Advanced Clinical Nutrition
HUN 6840: Supervised Teaching
HUN 6971: Research for Master's Thesis
HUN 7979: Advanced Research
HUN 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Forest Resources and Conservation

College

Forest Resources and Conservation

Department/School

Forest Resources and Conservation
Forest Resources and Conservation Program Information

Since 1937 the School of Forest Resources & Conservation has prepared students for professional careers caring for natural resources. We emphasize the role of people in managing both terrestrial and aquatic systems, to produce the myriad of benefits and services they provide. Our faculty have a broad range of interests, including ecology, economics/policy, and recreation/education, and are united by an interest in environmental resources, rather than by traditional academic discipline. The School is composed of three programmatic areas: Fisheries and Aquatic Sciences, Forest Resources and Conservation, and Geomatics. Combined, these programs offer seven different degree options (including two professional masters degrees), as well as concentrations and certificates in a diversity of specific areas.

The SFRC offers graduate programs leading to the Master of Forest Resources and Conservation (professional, non-thesis), Master of Science (thesis and non-thesis), and Doctor of Philosophy degrees in Forest Resources and Conservation. The Master of Science non-thesis degree may be taken entirely online. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Forest Resources and Conservation program prepares students to work with the ecological, economic, and social aspects of natural resources, including the management of spatial information gathered through traditional surveying as well as remote sensing. Faculty have a wide variety of specializations, including fire ecology, land tenure, tree genetics, recreation management, environmental education, geographic information systems, silviculture, forest economics, and environmental policy. Further information, including specific degree options, faculty biographies, and information on the admissions process, is available at: http://sfrc.ufl.edu.

Degrees Offered with a Major in Forest Resources and Conservation

Doctor of Philosophy

without a concentration

concentration in Agroforestry

concentration in Geographic Information Systems

concentration in Geomatics

concentration in Hydrologic Sciences

concentration in Natural Resource Policy and Administration

concentration in Tropical Conservation and Development

concentration in Toxicology

concentration in Wetland Sciences

Master of Forest Resources and Conservation
without a concentration

concentration in Agroforestry

concentration in Geographic Information Systems

concentration in Geomatics

concentration in Natural Resource Policy and Administration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Agroforestry

concentration in Ecological Restoration

concentration in Geographic Information Systems

concentration in Geomatics

concentration in Hydrologic Sciences

concentration in Natural Resource Policy and Administration
concentration in Tropical Conservation and Development

concentration in Wetland Sciences

School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mapping
- SUR 5385: Remote Sensing Applications
- SUR 5396: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
- SUR 5425: Cadastral Information Systems
- SUR 5525: Least Squares Adjustment Computations
- SUR 6375: Terrain Analysis and Mapping
- SUR 6395: Topics in Geographic Information Systems
- SUR 6427: Land Tenure and Administration
- SUR 6535: GPS-INS Integration
- SUR 6905: Special Problems in Geomatics
- SUR 6934: Topics in Geomatics

Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5276C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5901: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Physiology
- FAS 6256: Fish and Aquatic Invertebrate Histology
- FAS 6272: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6932: Special Topics in Fisheries and Aquatic Sciences
- FAS 6933: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
- FAS 6940: Supervised Teaching
- FAS 6971: Research for Master's Thesis
- FAS 7979: Advanced Research
- FAS 7980: Research for Doctoral Dissertation

Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6564: Ecolhydrology
- FOR 5157: Ecosystem Restoration Principles and Practice
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5436: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5906: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6931: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Genetics and Genomics

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Medicine

Genetics and Genomics Program

Chair: C. Mulligan
Graduate Coordinator: J. Bungert

Complete faculty listing: Follow this link
or visit media.news.health.ufl.edu/misc/mgm/UFGI/search/members-list4.php

The University of Florida Genetics Institute is a multi-college, multi-faceted research center. Good geneticists are integrative geneticists, who incorporate many different subfields of genetics into their work. The core mission is to improve the quality of life of people throughout the world via integrative, genetics-based research. Accordingly, faculty interests and graduate research opportunities include a wide range of areas from advances in gene therapy to understanding the maintenance of genetic variation, from understanding plant immune responses to developing improved algorithms for identifying regulatory motifs in DNA sequences, and from the challenges of bioethics to strategies for controlling malaria.

The highlight of the first year core training is the research rotations program. Student laboratory rotations are a particularly exciting feature of the genetics and genomics doctoral program, and epitomize the philosophy that good geneticists are broadly trained and integrative. Many current Graduate Faculty members still vividly recall the transforming effects of their rotations during graduate school—they didn’t always end up where they expected! Rotations can open students’ eyes to areas of genetics that they had never considered and entice them into considering brand new career opportunities. Each student will sample the breadth and depth of genetics research at UF by carrying out three 8-week modules consisting of design, implementation, and analysis of genetics experiments. Each rotation is conducted in close association with a Graduate Faculty member. To ensure that students fully experience the impressive breadth of genetics research at UF, their rotations are hosted by Graduate Faculty in at least two different colleges. Students will also take PCB 5065, Advanced Genetics; GMS 6181, Special Topics in Microbiology (among the topics are genomics and bioinformatics, and ethics for genetics research); STA 6166, Statistical Methods I; and other electives as desired. In addition, throughout their tenure in the program, students participate in the Genetics Seminar, which is an opportunity to present their rotation plans and results of research to faculty and other students.

Prospective students should have strong backgrounds in biology and other hard sciences. Exceptional students with other backgrounds will also be considered. The research statement required as part of the application has a particularly important part in the admissions decision. Each applicant must describe his/her research interests, so that Graduate Faculty can evaluate knowledge of the discipline, fit to the program, and ability to articulate and motivate an interesting research problem. The required letters of recommendation are also extremely important in helping identify applicants with exceptional aptitude for genetics, and with research experience and promise.

For more information, write to the Genetics and Genomics Graduate Program, Attn: Graduate Secretary, Genetics Institute, University of Florida, PO Box 100196, Gainesville, FL 32610-0196.

Expanded information can be found at http://www.ufgi.ufl.edu.

Degrees Offered with a Major in Genetics and Genomics
Doctor of Philosophy

Doctor of Philosophy - Clinical and Translational Science

Courses

- AGR 6322: Advanced Plant Breeding
- ANG 6532: Molecular Genetics of Disease
- ANG 7979: Advanced Research
- ANG 7980: Research for Doctoral Dissertation
- BCH 6415: Advanced Molecular and Cell Biology
- BCH 7410: Advanced Gene Regulation
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5805: Computer Simulation Concepts
- CIS 6930: Special Topics in CIS
- COT 5405: Analysis of Algorithms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6920: Genetics Journal Colloquy
- GMS 7979: Advanced Research
- GMS 7980: Research for Doctoral Dissertation
- HOS 6201: Breeding Perennial Cultivars
- PCB 5065: Advanced Genetics
- PCB 5235L: Experiments in Immunology
- PCB 5615: Molecular Evolution and Systematics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 6166: Statistical Methods in Research I
- STA 6167: Statistical Methods in Research II
- STA 6178: Genetic Data Analysis
- STA 6208: Basic Design and Analysis of Experiments
- STA 6329: Matrix Algebra and Statistical Computing
- STA 6934: Special Topics in Statistics
- STA 7979: Advanced Research
- STA 7980: Research for Doctoral Dissertation
- ZOO 6927: Special Topics in Zoology
- ZOO 7979: Advanced Research
- ZOO 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Horticultural Sciences

College

College of Agricultural and Life Sciences
Horticultural Sciences Program Information

The Horticultural Sciences (HOS) graduate program is administered jointly by the Environmental Horticulture (HS) and Horticultural Sciences (HS) departments and offers graduate programs leading to the Master of Science (thesis or non-thesis options) and the Doctor of Philosophy degrees. The Department offers a combined bachelor’s/master’s degree program. Contact the graduate coordinator for information. Members of the program's Graduate Faculty include department resident faculty and faculty at University of Florida Research and Education Centers located throughout Florida.

For admission to the HOS graduate program, apply to either the HS or HSE departments, depending on your career/research interest.

Requirements:
A strong undergraduate or graduate background in horticultural, biological, agronomic, or other disciplines in the life sciences and undergraduate coursework in chemistry, physics, and mathematics. A prospective graduate student need not have majored in horticulture as an undergraduate or master's student; however, students with curriculum deficiencies are required to take prerequisite subjects during the first year of graduate study. Undergraduate courses taken to correct curriculum deficiencies do not count for graduate program credit.

Specializations in the HS department focus on vegetable and fruit crops and include:
- Plant Breeding and Genetics
- Crop Production and Nutrient Management
- Postharvest Biology
- Organic Sustainable Agriculture
- Weed Science
- Physiology and Biochemistry
- Plant Molecular Biology
- Protected Agriculture

Numerous HS and HSE faculty participate in the interdisciplinary Plant Molecular and Cellular Biology Program. Students interested in molecular biology/biotechnology may pursue molecular-oriented studies in any listed specialization. Students interested in full specialization in molecular and related disciplines should contact the Plant Molecular and Cellular Biology interdisciplinary program for specific requirements.

Graduate School Degree Program Requirements Master of Science (thesis option):

Students must earn at least 30 credits as a graduate student at UF. No more than 9 of the 30 credits (earned with a grade of A, B+, or B) may be transferred from institutions approved for this purpose by the Dean of the Graduate School. A minimum of 12 credits is required in the Horticultural Sciences major; additionally, a minimum of 6 credits in HOS 6971- Master's Research - may be counted toward the total credits. See here for information on M.S. graduate degrees.

A minor may be chosen in an academic unit other than the major. If a minor is chosen, at least 6 credits of course work are required in the minor field. Two 6-credit minors may be taken with the major academic unit's permission. A 3.00 (truncated) GPA is required for minor credit. In addition, a representative from the department in which the minor is being received must be on the supervisory committee.

Master of Science non-thesis option:

This option offers additional training beyond the bachelor's degree in a horticultural specialization. Essential elements of this program include a program of courses and a comprehensive written and/or final oral qualifying examination. There is no thesis requirement. A minimum of 30 credit hours of course work is required. Courses taken for program credit must be numbered 5000 or higher with at least 15 of these credits in the Horticultural Sciences major. With supervisory committee and college dean approval, 6 hours of 3000- or 4000-level undergraduate courses, taught outside the major department, may count toward the minimum requirements for the degree. Click for information on all graduate degrees.

A minor may be chosen in an academic unit other than the major. If a minor is chosen, at least 6 credits of course work are required in the minor field. Two 6-credit minors may be taken with the major academic unit's permission. A 3.00 (truncated) GPA is required for minor credit. In addition, a representative from the department in which the minor is being received must be on the supervisory committee.

Doctor of Philosophy:
The Doctor of Philosophy is a research degree and is granted on evidence of general proficiency, distinctive attainment in a special field, and ability to conduct independent investigation as demonstrated in a dissertation presenting original research with a high degree of literary skill. Consequently, doctoral programs are more flexible and varied than those leading to M.S. degree programs. The Ph.D. degree requires at least 90 credits beyond the bachelor's degree, although specific course requirements vary from field to field and from student to student. Up to 30 credits of master's degree may be transferred to a doctoral program. Any credits counted from an M.S. degree program must have been earned within the previous seven years (or by petition). The Graduate Council does not specify the courses required for the Ph.D. degree.

General requirements for the program include:
- a clear objective for research
- approval of the student's entire supervisory committee
- an appropriate number of credits of doctoral research

Click for information on all graduate degrees.

Minor: With the supervisory committee's approval, the student may choose one or more minor fields. Minor work may be completed in any academic unit outside the major, if approved for M.S. or doctoral programs listed in this catalog. The collective grade for courses included in a minor must be “B” (3.00) or higher. If one minor is chosen, the supervisory committee member representing the minor suggests 12 to 24 credits of courses numbered 5000 or higher as preparation for a qualifying examination. Part of this credit may have been earned in the M.S. degree program. If two minors are chosen, each must include at least 8 credits. Competence in the minor area is demonstrated by written examination by the minor academic unit, or by the oral
Degrees Offered with a Major in Horticultural Sciences

Doctor of Philosophy

without a concentration

concentration in Environmental Horticulture

concentration in Horticultural Sciences

concentration in Toxicology

Master of Science

without a concentration

concentration in Environmental Horticulture

concentration in Horticultural Sciences

Horticultural Sciences Program Courses

- ALS 6935: Topics in Biological Invasions
- BCH 5045: Graduate Survey of Biochemistry
- BOT 6936: Special Topics
- HOS 6934: Professional Seminar Preparation
- PLS 5222C: Propagation of Horticultural Crops
- PLS 5241C: Advanced Plant Micropropagation
- PLS 5405: Advanced Composting Technology

Additional Course Offerings
The following courses may be taken to contribute to the overall degree award requirements.

Horticultural Sciences Departmental Courses

- ALS 5934: Graduate Professional Development Seminar
- HOS 5085C: Principles of Postharvest Horticulture
- HOS 5115C: Horticultural Plant Morphology and Identification
- HOS 5242: Genetics & Breeding of Vegetable Crops
- HOS 5306: Molecular Biology of Plant Hormones
- HOS 5330: Postharvest Technologies for Horticultural Crops
- HOS 5432: Advanced Nutritional Management of Ornamental Crops
- HOS 5515C: Greenhouse and Nursery Operations
- HOS 5516C: Advanced Production of Greenhouse and Nursery Crops
- HOS 5555: Tropical Fruit Production and Research in Florida
- HOS 5711: Phytochemicals in Food & Health
- HOS 6201: Breeding Perennial Cultivars
- HOS 6236: Molecular Marker Assisted Plant Breeding
- HOS 6331: Postharvest Biology
- HOS 6345: Environmental Physiology
- HOS 6412: Nutrition of Horticultural Crops
- HOS 6523: Research and Development in Turfgrass Science
- HOS 6545: Advanced Citiculture I
- HOS 6546: Advanced Citiculture II
- HOS 6905: Problems in Horticultural Science
- HOS 6910: Supervised Research
- HOS 6931: Horticultural Science Seminar
- HOS 6932: Special Topics
- HOS 6940: Supervised Teaching
- HOS 6941: Practicum in Horticultural Science
- HOS 6971: Research for Master's Thesis
- HOS 7979: Advanced Research
- HOS 7980: Research for Doctoral Dissertation
- ORH 5026C: Advanced Annual and Perennial Gardening
- ORH 5086: Advanced Golf and Sports Turf Management
- ORH 5282: Orchid Biology and Culture
- ORH 5322C: Palm Biology and Culture
- ORH 5817C: Advanced Florida Native Landscaping
- ORH 7941: Doctor of Plant Medicine: Internship in Environmental Horticulture
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PLS 5222C: Propagation of Horticultural Crops
- PLS 5241C: Advanced Plant Micropropagation
- PLS 5405: Advanced Composting Technology

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
- BOT 5725C: Taxonomy of Vascular Plants
- BOT 6080C: Proteomics Theory and Practice
- BOT 6516: Plant Metabolism
- BOT 6568: Plant Growth and Development
- BOT 6716C: Advanced Taxonomy
- BOT 6726C: Principles of Systematic Biology
- BOT 6905: Individual Studies in Botany
Interdisciplinary Ecology

College

College of Agricultural and Life Sciences

Department/School

School of Natural Resources and Environment

Interdisciplinary Ecology Program

Director of Academic Programs and Graduate Coordinator: T. Frazer

Graduate students are advised by one of the 280 members of the School's affiliate faculty and have a supervisory committee with interdisciplinary composition. For the list of Graduate Faculty, see [http://sfrc.ufl.edu/fish/people/](http://sfrc.ufl.edu/fish/people/). Graduate students are hosted in one of 44 participating academic units.

The School offers a program of study leading to the Master of Science (thesis and non-thesis options), and Doctor of Philosophy degrees in interdisciplinary ecology. Minimum requirements for these degrees are given in the [Graduate Degrees](http://www.snre.ufl.edu/) section of this catalog. The course work requirements and curriculum are described in more detail at [http://www.snre.ufl.edu/](http://www.snre.ufl.edu/). Choices among 450 courses are custom-fitted by the student and the supervisory committee to meet the student's specific needs and interests.

The Interdisciplinary Ecology program views the social-ecological system as the proper framework for addressing the full scope of complex, adaptive systems comprising humans in the natural world. The degree program challenges students to understand both natural and human dynamics to obtain a holistic view and to foster integration of human activities with natural resources and the environment. The learning outcomes of the program are to develop a thorough understanding of the components, processes, and interactions of the social-ecological system, competence in scientific research methodologies, and experience in professional interaction with peers.

The degree programs combine 1) course work in the science of ecology and additional natural and social sciences; and 2) competence in a recognized discipline in one of these fields of study. The former is achieved with a core-course and distribution requirement and the latter by extra course work for the master's and a concentration for the doctoral degree. A thesis or dissertation provides first-hand experience creating scientific knowledge. The non-thesis master's option provides rapid, advanced preparation for the job market in 3 to 4 semesters, without research experience. Course requirements are 36 semester hours for the thesis option, 38 hours for the non-thesis option, and 60 hours beyond the master's degree for the doctoral degree.

Degrees Offered with a Major in Interdisciplinary Ecology

Doctor of Philosophy

without a concentration

concentration in Agricultural and Biological Engineering

concentration in Agricultural Education and Communication
concentration in Agronomy

concentration in Anthropology

concentration in Architecture

concentration in Biochemistry and Molecular Biology

concentration in Botany

concentration in Business Administration

concentration in Chemistry

concentration in Civil Engineering

concentration in Climate Science

concentration in Coastal and Oceanographic Engineering

concentration in Economics

concentration in English

concentration in Entomology and Nematology

concentration in Environmental Engineering Sciences

concentration in Family, Youth and Community Sciences
concentration in Farming Systems

concentration in Fisheries and Aquatic Sciences

concentration in Food and Resource Economics

concentration in Food Science

concentration in Forest Resources and Conservation

concentration in Foundations of Education

concentration in Geographic Information Systems

concentration in Geography

concentration in Geology

concentration in Health and Human Performance

concentration in Horticultural Sciences

concentration in Hydrologic Sciences

concentration in Landscape Architecture

concentration in Mathematics

concentration in Microbiology and Cell Science
concentration in Nuclear and Radiological Engineering

concentration in Philosophy

concentration in Political Science

concentration in Religion

concentration in Sociology

concentration in Soil and Water Science

concentration in Statistics

concentration in Tropical Conservation and Development

concentration in Urban and Regional Planning

concentration in Veterinary Medical Sciences

concentration in Wetland Sciences

concentration in Wildlife Ecology And Conservation

concentration in Women's/Gender Studies

concentration in Zoology
Master of Science

without a concentration

concentration in Agricultural and Biological Engineering

concentration in Agricultural Education and Communication

concentration in Agronomy

concentration in Anthropology

concentration in Architecture

concentration in Biochemistry and Molecular Biology

concentration in Botany

concentration in Business Administration

concentration in Chemistry

concentration in Civil Engineering

concentration in Climate Science

concentration in Coastal and Oceanographic Engineering

concentration in Economics
concentration in English

concentration in Entomology and Nematology

concentration in Environmental Engineering Sciences

concentration in Family, Youth and Community Sciences

concentration in Farming Systems

concentration in Fisheries and Aquatic Sciences

concentration in Food and Resource Economics

concentration in Food Science

concentration in Forest Resources and Conservation

concentration in Foundations of Education

concentration in Geographic Information Systems

concentration in Geography

concentration in Geology

concentration in Health and Human Performance

concentration in Horticultural Sciences
concentration in Hydrologic Sciences

concentration in Landscape Architecture

concentration in Mathematics

concentration in Microbiology and Cell Science

concentration in Nuclear and Radiological Engineering

concentration in Philosophy

concentration in Political Science

concentration in Religion

concentration in Sociology

concentration in Soil and Water Science

concentration in Statistics

concentration in Tropical Conservation and Development

concentration in Urban and Regional Planning

concentration in Veterinary Medical Sciences
concentration in Wetland Sciences

concentration in Wildlife Ecology And Conservation

concentration in Women's/Gender Studies

concentration in Zoology

Courses

- [www.snre.ufl.edu/graduate/curriculum.htm](http://www.snre.ufl.edu/graduate/curriculum.htm)
- EVR 5322: Scientific Processes in Conservation and Development
- EVR 5705: Natural Resources and Innovation Systems
- EVR 6320: Sustainable Natural Resource Management
- EVR 6933: Seminar
- EVR 6934: Internship
- EVR 6979: Nonthesis Master's Project
- PCB 6971: Research for Master's Thesis
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6926: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Microbiology and Cell Science

College

College of Agricultural and Life Sciences

Department/School

Microbiology and Cell Science Department

Degrees Offered with a Major in Microbiology and Cell Science

Doctor of Philosophy
without a concentration

concentration in Medical Microbiology and Biochemistry

concentration in Toxicology

Master of Science

without a concentration

concentration in Medical Microbiology and Biochemistry

Courses

- MCB 5205: Microbiology of Human Pathogens
- MCB 5252: Microbiology, Immunology, and Immunotherapeutics
- MCB 5305L: Microbial Genetics and Biotechnology Laboratory
- MCB 5408: Anaerobic Microbiology and Biotechnology
- MCB 5458: Energy Transformation in Microorganisms
- MCB 5505: General Virology
- MCB 6317: Molecular Biology of Gene Expression
- MCB 6318: Comparative Microbial Genomics
- MCB 6355: Microbial/Host Defense
  - MCB 6358
- MCB 6409: Microbial Cell Structure and Function
- MCB 6417: Microbial Metabolism and Energetics
- MCB 6457: Metabolic Regulation
- MCB 6458: Microbial Metabolic Engineering
- MCB 6485: Advanced Techniques in Microbiology and Cell Science
- MCB 6772: Advanced Topics in Cell Biology
- MCB 6905: Experimental Microbiology
- MCB 6910: Supervised Research
- MCB 6930: Seminar
- MCB 6937: Special Topics in Microbiology
- MCB 6940: Supervised Teaching
- MCB 6971: Research for Master's Thesis
  - MCB 6xxx
- MCB 7922: Journal Colloquy
- MCB 7979: Advanced Research
- MCB 7980: Research for Doctoral Dissertation
- PCB 5136L: Techniques in Microbial and Cell Biology
- PCB 5235: Immunology

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry
Nutritional Sciences

College

College of Agricultural and Life Sciences

Department/School

Food Science and Human Nutrition Department

Nutritional Sciences Program

The field of nutritional science has unprecedented public interest. This is fostered by evolving links between diet and health, and the impact of one's individual genetic makeup on nutrient utilization. The Ph.D. degree program in Nutritional Sciences is interdisciplinary, with participating CALS, COM, CLAS, and CVM faculty directing research of doctoral students, where the full spectrum of Nutritional Sciences is available. Emphasis areas include basic nutritional sciences, biochemistry and molecular biology, genetics, immunology, physiology, clinical nutrition, microbiology, and biostatistics.

Students are admitted to the program after the bachelor's degree or a master's degree in nutritional sciences or a related field. Applicants should have a strong undergraduate background in biological sciences and chemistry. Deficiencies may be made up during the first year of graduate study.

Additional information can be found at http://nutritionalsciences.centers.ufl.edu.

For additional information, e-mail Dr. Mitchell D. Knutson, Director at mknutson@ufl.edu or Dr. James F. Collins, Graduate Coordinator at jfcollins@ufl.edu.

Degrees Offered with a Major in Nutritional Sciences

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Nutritional Sciences Program Core Courses

BCH 6206: Advanced Metabolism
HUN 6938: Nutritional Sciences Seminar
STA 6166: Statistical Methods in Research I
HUN 6301: Nutritional Aspects of Lipid Metabolism
HUN 6305: Nutritional Aspects of Carbohydrates
HUN 6321: Proteins and Amino Acids in Nutrition
HUN 6331: Vitamins in Human Nutrition
HUN 6356: Minerals in Nutrition

Additional Course Offerings

The following courses may be taken to contribute to the overall degree award requirements.

Food Science and Human Nutrition Departmental Courses

- DIE 6241: Advanced Medical Nutrition Therapy
- DIE 6242: Advanced Medical Nutrition Therapy II
College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5902: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Plant Medicine

College

College of Agricultural and Life Sciences

Department/School
Entomology and Nematology Department

Plant Medicine Program Information

Coordinator: Amanda C. Hodges

The Doctor of Plant Medicine (DPM) program is an intensive doctorate-level graduate level training program for students interested in plant health diagnosis and management. Requirements for the degree can be found in the Graduate Degrees section of this catalog.

DPM students complete rigorous coursework and intensive internships. Only DPM students jointly enrolled in one of our discipline department M.S. or Ph.D. programs complete a thesis or dissertation. DPM students often participate in applied research within laboratory programs, and may participate in the publication of peer-reviewed scientific and extension papers. More information regarding the latest policies for the DPM program is available in the DPM graduate handbook.

The DPM program is a partnership among faculty mentors and teaching faculty within the following primary departments:

- Entomology and Nematology Department
- Department of Plant Pathology
- Agronomy Department
- Horticulture Sciences Department
- Environmental Horticulture Department
- Soil and Water Sciences Department
- Food Science and Human Nutrition Department

For more information, please see the DPM website: http://dpm.ifas.ufl.edu

Degrees Offered with a Major in Plant Medicine

Doctor of Plant Medicine

without a concentration

concentration in Tropical Conservation and Development

Agronomy Departmental Courses

- AGR 5215C: Integrated Field Crop Science
- AGR 5230C: Florida Grassland Agroecosystems
- AGR 5266C: Field Plot Techniques
- AGR 5277C: Tropical Crop Production
- AGR 5307: Molecular Genetics for Crop Improvement
- AGR 5321C: Genetic Improvement of Plants
- AGR 5444: Ecophysiology of Crop Production
- AGR 5511: Crop Ecology
- AGR 6233: Tropical Grassland Agroecosystems
- AGR 6237C: Research Techniques in Forage Evaluation
- AGR 6311: Population Genetics
- AGR 6322: Advanced Plant Breeding
- AGR 6325L: Plant Breeding Techniques
- AGR 6335: Cytogenetics
- AGR 6422C: Environmental Crop Nutrition
- AGR 6442C: Physiology of Agronomic Plants
- AGR 6905: Agronomic Problems
- AGR 6910: Supervised Research
- AGR 6932: Topics in Agronomy
- AGR 6933: Graduate Agronomy Seminar
- AGR 6940: Supervised Teaching
- AGR 6971: Research for Master's Thesis
- AGR 7979: Advanced Research
- AGR 7980: Research for Doctoral Dissertation
- ALS 5155: Global Agroecosystems
- IPM 5306: Principles of Pesticides
- PLS 5622C: Integrated Weed Management
Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
- BOT 5725C: Taxonomy of Vascular Plants
- BOT 6508C: Proteomics Theory and Practice
- BOT 6516: Plant Metabolism
- BOT 6566: Plant Growth and Development
- BOT 6716C: Advanced Taxonomy
- BOT 6726C: Principles of Systematic Biology
- BOT 6905: Individual Studies in Botany
- BOT 6910: Supervised Research
- BOT 6927: Advances in Botany
- BOT 6935: Special Topics
- BOT 6936: Graduate Student Seminar
- BOT 6940: Supervised Teaching
- BOT 6943: Internship in College Teaching
- BOT 6971: Research for Master's Thesis
- BOT 7979: Advanced Research
- BOT 7980: Research for Doctoral Dissertation
- PCB 5046C: Advanced Ecology
- PCB 5338: Principles of Ecosystem Ecology
- PCB 5356: Tropical Ecology
- PCB 6675C: Evolutionary Biogeography
- PLP 6656C: Fungal Biology

Entomology and Nematology Departmental Courses

- ALS 5156: Agricultural Ecology Principles and Applications
- ALS 6046: Grant Writing
- ALS 6166: Exotic Species and Biosecurity Issues
- ALS 6935: Topics in Biological Invasions
- ENY 5006: Graduate Survey of Entomology
- ENY 5006L: Graduate Survey of Entomology Laboratory
- ENY 5031C: Insect Field Biology
- ENY 5151C: Techniques in Insect Systematics
- ENY 5160C: Survey of Science with Insects
- ENY 5164: Graduate Survey of Invertebrate Field Biology
- ENY 5212: Insects and Wildlife
- ENY 5223C: Biology and Identification of Urban Pests
- ENY 5226C: Principles of Urban Pest Management
- ENY 5332: Graduate Survey of Urban Vertebrate Pest Management
- ENY 5236: Insect Pest and Vector Management
- ENY 5241: Biological Control
- ENY 5245: Agricultural Acarology
- ENY 5405: Insects as Vectors of Plant Pathogens
- ENY 5516: Turf and Ornamental Entomology
- ENY 5566: Tropical Entomology
- ENY 5567: Tropical Entomology Field Laboratory
- ENY 5572: Advanced Apiculture
- ENY 5611: Immature Insects
- ENY 5820: Insect Molecular Genetics
- ENY 6166: Insect Classification
- ENY 6203: Insect Ecology
- ENY 6203L: Insect Ecology Laboratory
- ENY 6248: Termite Biology and Control
- ENY 6401: Insect Physiology
- ENY 6401L: Insect Physiology Laboratory
- ENY 6454: Behavioral Ecology and Systematics of Insects
- ENY 6591C: Advanced Mosquito Identification
- ENY 6593: Advanced Mosquito Biology
- ENY 6651C: Insect Toxicology
- ENY 6665: Advanced Medical and Veterinary Entomology I
- ENY 6665L: Advanced Medical and Veterinary Entomology Laboratory
- ENY 6706: Forensic Entomology
- ENY 6706L: Forensic Entomology Laboratory
- ENY 6821: Insect Microbiology
- ENY 6822C: Molecular Biology Techniques with Invertebrates and Their Pathogens
- ENY 6905: Problems in Entomology
School of Forest Resources and Conservation Courses

Geomatics Concentration Courses

- GIS 6103: GIS Programming and Customization
- GIS 6116: Geographic Information Systems Analysis
- SUR 5365: Digital Mapping
- SUR 5385: Remote Sensing Applications
- SUR 5386: Image Processing for Remote Sensing
- SUR 5391C: Geomatics: Spatial Foundations of GIS
- SUR 5425: Cadastral Information Systems
- SUR 5525: Least Squares Adjustment Computations
- SUR 6375: Terrain Analysis and Mapping
- SUR 6395: Topics in Geographic Information Systems
- SUR 6427: Land Tenure and Administration
- SUR 6535: GPS-INS Integration
- SUR 6905: Special Problems in Geomatics
- SUR 6934: Topics in Geomatics

Fisheries and Aquatic Sciences Program Courses

- FAS 5203C: Biology of Fishes
- FAS 5255C: Diseases of Warmwater Fish
- FAS 5276C: Field Ecology of Aquatic Organisms
- FAS 5335C: Applied Fisheries Statistics
- FAS 5901: Scientific Thinking in Ecology
- FAS 6154: Aquatic Invertebrate Ecological Physiology
- FAS 6171: Applied Phycology
- FAS 6258: Fish and Aquatic Invertebrate Histology
- FAS 6272: Marine Ecological Processes
- FAS 6337C: Fish Population Dynamics
- FAS 6339C: Advanced Quantitative Fisheries Assessment
- FAS 6355C: Fisheries Management
- FAS 6905: Individual Study
- FAS 6910: Supervised Research
- FAS 6932: Special Topics in Fisheries and Aquatic Sciences
- FAS 6933: Graduate Symposium
- FAS 6935: Contemporary Problems in Fisheries and Aquatic Sciences
- FAS 6940: Supervised Teaching
- FAS 6971: Research for Master's Thesis
- FAS 7979: Advanced Research
- FAS 7980: Research for Doctoral Dissertation
Forest Resources and Conservation Program Courses

- FNR 5072C: Environmental Education Program Development
- FNR 5335: Agroforestry
- FNR 5462: Spatial Models and Decision Analysis
- FNR 5608: Research Planning
- FNR 6564: Ecohydrology
- FOR 5157: Ecosystem Restoration Principles and Practice
- FOR 5159: Ecology and Restoration of Longleaf Pine Ecosystems
- FOR 5161: Forest Productivity and Health
- FOR 5435: Forest Information Systems
- FOR 5615: Forest Conservation and Management Policies and Issues
- FOR 5625: Forest Water Resources Management
- FOR 5756: Non-Timber Forest Products
- FOR 6005: Conservation Behavior
- FOR 6154: Analysis of Forest Ecosystems
- FOR 6156: Simulation Analysis of Forest Ecosystems
- FOR 6164: Silviculture: Concepts and Application
- FOR 6170: Tropical Forestry
- FOR 6172C: Tropical Forestry Field Course
- FOR 6215: Fire Paradigms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6340: Physiology of Forest Trees
- FOR 6345C: Plant Water Relations Techniques
- FOR 6543: Natural Resource Economics and Valuation
- FOR 6628: Community Forest Management
- FOR 6665: Landscape Planning for Ecotourism
- FOR 6905: Research Problems in Forest Resources and Conservation
- FOR 6910: Supervised Research
- FOR 6933: Seminar
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 6940: Supervised Teaching
- FOR 6971: Research for Master's Thesis
- FOR 7979: Advanced Research
- FOR 7980: Research for Doctoral Dissertation
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6555: Introduction to Quantitative Genetics

Horticultural Sciences Departmental Courses

- ALS 5934: Graduate Professional Development Seminar
- HOS 5085C: Principles of Postharvest Horticulture
- HOS 5115C: Horticultural Plant Morphology and Identification
- HOS 5242: Genetics & Breeding of Vegetable Crops
- HOS 5306: Molecular Biology of Plant Hormones
- HOS 5330: Postharvest Technologies for Horticultural Crops
- HOS 5432: Advanced Nutritional Management of Ornamental Crops
- HOS 5515C: Greenhouse and Nursery Operations
- HOS 5516C: Advanced Production of Greenhouse and Nursery Crops
- HOS 5555: Tropical Fruit Production and Research in Florida
- HOS 5711: Phytochemicals in Food & Health
- HOS 6201: Breeding Perennial Cultivars
- HOS 6236: Molecular Marker Assisted Plant Breeding
- HOS 6331: Postharvest Biology
- HOS 6345: Environmental Physiology
- HOS 6412: Nutrition of Horticultural Crops
- HOS 6523: Research and Development in Turfgrass Science
- HOS 6545: Advanced Citiculture I
- HOS 6546: Advanced Citiculture II
- HOS 6905: Problems in Horticultural Science
- HOS 6910: Supervised Research
- HOS 6931: Horticultural Science Seminar
- HOS 6932: Special Topics
- HOS 6940: Supervised Teaching
- HOS 6941: Practicum in Horticultural Science
- HOS 6971: Research for Master's Thesis
- HOS 7979: Advanced Research
- HOS 7980: Research for Doctoral Dissertation
- ORH 5028C: Advanced Annual and Perennial Gardening
- ORH 5086: Advanced Golf and Sports Turf Management
- ORH 5282: Orcid Biology and Culture
- ORH 5322C: Palm Biology and Culture
- ORH 5817C: Advanced Florida Native Landscaping
- ORH 7941: Doctor of Plant Medicine: Internship in Environmental Horticulture
- PCB 5005: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PLS 5222C: Propagation of Horticultural Crops
- PLS 5241C: Advanced Plant Micropropagation
- PLS 5405: Advanced Composting Technology
Plant Pathology Departmental Courses

- PLP 5005C: General Plant Pathology
- PLP 5102: Theory and Practice of Plant Disease Control
- PLP 5115C: Citrus Pathology
- PLP 5155: Microbiological Control of Plant Diseases and Weeds
- PLP 6556C: Fungal Biology
- PLP 6223C: Viral Pathogens of Plants
- PLP 6241C: Bacterial Plant Pathogens
- PLP 6262C: Fungal Plant Pathogens
- PLP 6291: Plant Disease Diagnosis
- PLP 6303: Host-Parasite Interactions II
- PLP 6404: Epidemiology of Plant Disease
- PLP 6502: Host-Parasite Interactions I
- PLP 6621C: Pop Genetics Microbes
- PLP 6905: Problems in Plant Pathology
- PLP 6910: Supervised Research
- PLP 6921: Colloquium in Principles of Plant Pathology
- PLP 6932: Seminar in Plant Pathology
- PLP 6940: Supervised Teaching
- PLP 6942: Professional Internship in Plant Disease Clinic
- PLP 6971: Research for Master's Thesis
- PLP 7946: Plant Pathology Internship
- PLP 7979: Advanced Research
- PLP 7980: Research for Doctoral Dissertation

Soil and Water Science Departmental Courses

- ALS 5027: Reusable Learning Objects
- ALS 5155: Global Agroecosystems
- CWR 6537: Contaminant Subsurface Hydrology
- SWS 5050: Soils for Environmental Professionals
- SWS 5050L: Soils for Environmental Professionals Laboratory
- SWS 5115: Environmental Nutrient Management
- SWS 5132: Tropical Soil Management
- SWS 5182: Earth System Analysis
- SWS 5208: Sustainable Agricultural and Urban Land Management
- SWS 5234: Environmental Soil, Water, and Land Use
- SWS 5235: South Florida Ecosystems
- SWS 5244: Environmental Biogeochemistry
- SWS 5246: Water Resource Sustainability
- SWS 5247: Hydric Soils
- SWS 5248: Wetlands and Water Quality
- SWS 5305C: Soil Microbial Ecology
- SWS 5308: Ecology of Waterborne Pathogens
- SWS 5406: Soil and Water Chemistry
- SWS 5424C: Soil Chemical Analysis
- SWS 5551: Soils, Water, and Public Health
- SWS 5605C: Environmental Soil Physics
- SWS 5716C: Environmental Pedology
- SWS 5721C: GIS in Land Resource Management
- SWS 5805: Environmental Soil and Water Monitoring Techniques
- SWS 6134: Soil Quality
- SWS 6136: Soil Fertility
- SWS 6161: Bioavailability of Soil Nutrients
- SWS 6262: Soil Contamination and Remediation
- SWS 6323: Advanced Microbial Ecology
- SWS 6325: Rhizosphere Biochemistry
- SWS 6366: Biodegradation and Bioremediation
- SWS 6448: Biogeochemistry of Wetlands and Aquatic Systems
- SWS 6454: Advanced Soil and Water Chemistry
- SWS 6456: Advanced Biogeochemistry
- SWS 6464C: Soil Mineralogy
- SWS 6622: Vadose Zone Hydrology
- SWS 6722: Soil-Landscape Modeling
- SWS 6905: Special Problems
- SWS 6910: Supervised Research
- SWS 6931: Seminar
- SWS 6932: Topics in Soils
- SWS 6940: Supervised Teaching
- SWS 6971: Research for Master's Thesis
- SWS 7979: Advanced Research
- SWS 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses
Plant Molecular and Cellular Biology

College

College of Agricultural and Life Sciences

Department/School

Plant Molecular and Cellular Biology Department

Plant Molecular and Cellular Biology Program Information

Director: Gloria A. Moore
Graduate Coordinator: Matias Kirst

Plant Molecular and Cellular Biology (PCMB) is an interdisciplinary and interdepartmental graduate degree program that emphasizes understanding the molecular and cellular mechanisms that mediate plant development, adaptation, and evolution. Students can pursue an M.S. or a Ph.D. degree through the PMCB program. All students complete core courses in Advanced Genetics, Plant Molecular Biology and Genomics, Plant Cellular and Developmental Biology, and Plant Biochemistry. In addition to the core classes, students can select from a variety of courses in biochemistry, molecular biology, physiology, breeding, genetics, evolution, microbiology, and plant pathology.

New students are exposed to a variety of faculty and experimental systems while they rotate through several laboratories during their first two semesters before selecting an adviser and dissertation research area. Both M.S. and Ph.D. students take four required courses: PCB 5065 Advanced Genetics, PCB 5530 Plant Molecular Biology and Genomics, PCB 6528 Plant Cell and Developmental Biology and BOT 6935 Plant Biochemistry, as well as journal colloquium classes (PCB 7922 Journal Colloquium). Additional elective courses are taken after approval by the student’s supervisory committee. For additional information see http://pmcb.ifas.ufl.edu.

Successful candidates should have a strong interest in plant molecular and cellular mechanisms controlling development, metabolism, adaptation, and evolution. Applicants typically have a B.S. or M.S. in the agricultural, forestry, biological or chemical sciences with advanced undergraduate coursework in genetics, molecular and cellular biology, and biochemistry. However, outstanding students from a broad range of science disciplines are actively considered.

Degrees Offered with a Major in Plant Molecular and Cellular Biology

Doctor of Philosophy

without a concentration

concentration in Toxicology

Master of Science
Plant Molecular and Cellular Biology Courses

- BOT 6935: Special Topics
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6910: Supervised Research
- PCB 6937: Special Topics in Plant Molecular and Cellular Biology
- PCB 6971: Research for Master's Thesis
- PCB 7922: Journal Colloquium in Plant Molecular and Cellular Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Plant Pathology

College

College of Agricultural and Life Sciences

Department/School

Plant Pathology Department

Plant Pathology Program Information

A student may pursue studies in one of several basic areas of plant pathology. These areas include fungal plant pathology, plant bacteriology, plant virology, diagnostics, control, and also molecular and biochemical aspects of host-pathogen systems, biological control of pathogens and weeds, epidemiology, etiology, genetics of host-pathogen systems, soil microbiology, and pathogen taxonomy. In Florida, the variety of cultivated plants, coupled with an environment ideal for plant disease development, offers the student opportunities to study diseases of many crops as they develop. First-hand knowledge can be gained of diseases of field, fruit, ornamental, pasture, range, turf, and vegetable crops in temperate, subtropical, and tropical environments. Students who anticipate study in plant pathology at the University of Florida should include in their undergraduate programs training in botany, chemistry (through biochemistry), genetics, and microbiology.

Courses in nematology are offered by the Department of Entomology and Nematology.

Degrees Offered with a Major in Plant Pathology

Doctor of Philosophy

without a concentration
concentration in Toxicology

Master of Science

Plant Pathology Departmental Courses

- PLP 5005C: General Plant Pathology
- PLP 5102: Theory and Practice of Plant Disease Control
- PLP 5115C: Citrus Pathology
- PLP 5155: Microbiological Control of Plant Diseases and Weeds
- PLP 6636C: Fungal Biology
- PLP 6223C: Viral Pathogens of Plants
- PLP 6241C: Bacterial Plant Pathogens
- PLP 6262C: Fungal Plant Pathogens
- PLP 6291: Plant Disease Diagnosis
- PLP 6303: Host-Parasite Interactions II
- PLP 6404: Epidemiology of Plant Disease
- PLP 6502: Host-Parasite Interactions I
- PLP 6621C: Pop Genetics Microbes
- PLP 6905: Problems in Plant Pathology
- PLP 6910: Supervised Research
- PLP 6921: Colloquium in Principles of Plant Pathology
- PLP 6932: Seminar in Plant Pathology
- PLP 6940: Supervised Teaching
- PLP 6942: Professional Internship in Plant Disease Clinic
- PLP 6971: Research for Master's Thesis
- PLP 7946: Plant Pathology Internship
- PLP 7979: Advanced Research
- PLP 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5903: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

Soil and Water Science

College

Soil and Water Science Department

Soil and Water Science Program Information

The Soil and Water Science Department offers Master of Science (thesis or professional non-thesis option) and Doctor of Philosophy degrees in soil and water science with the following specializations: ecology, environmental science, hydrologic science, and soil science. The department also offers Master of Science (thesis or professional option) specialization in environmental science via distance education for place bound students (http://soils.ifas.ufl.edu/distance). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees section of this catalog.
Students can also develop specializations in several interdisciplinary areas including biogeochemistry, ecology, geographic information systems, hydrologic science, tropical agriculture, turfgrass management, and wetland science. The Department emphasizes (but is not limited to) the following research areas:

- Nutrient, Pesticide, and Waste Management
- Soil, Water, and Aquifer Remediation
- Carbon Dynamics and Ecosystem Services
- Landscape Analysis and Modeling
- Wetlands and Aquatic Ecosystems

Interests of the student and faculty, the facilities, and funding available will determine the student's research area. A specific program of study is prepared by an appointed supervisory committee for each student. Students will present a thesis or dissertation in their major field (M.S. thesis option and Ph.D.). In addition, Ph.D. candidates must pass a qualifying examination covering several areas of soil and water science and related fields.

**Prerequisites:** Students who expect to do graduate work in the Soil and Water Science Department should hold a bachelor's degree from an accredited college or university with a major in soil and water science or the equivalent background in another field of science. Graduate students should have backgrounds in biology, chemistry, physics, and mathematics and knowledge of basic soil and water science.

For more information, please see our website: [http://soils.ifas.ufl.edu](http://soils.ifas.ufl.edu).

**Degrees Offered with a Major in Soil and Water Science**

**Doctor of Philosophy**

_without a concentration_

_concentration in Geographic Information Systems_

_concentration in Hydrologic Sciences_

_concentration in Tropical Conservation and Development_

_concentration in Wetland Sciences_

**Master of Science**

_without a concentration_

_concentration in Agroecology_

_concentration in Geographic Information Systems_
concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Soil and Water Science Departmental Courses

- ALS 5027: Reusable Learning Objects
- ALS 5155: Global Agroecosystems
- CWR 6537: Contaminant Subsurface Hydrology
- SWS 5050: Soils for Environmental Professionals
- SWS 5050L: Soils for Environmental Professionals Laboratory
- SWS 5115: Environmental Nutrient Management
- SWS 5132: Tropical Soil Management
- SWS 5162: Earth System Analysis
- SWS 5208: Sustainable Agricultural and Urban Land Management
- SWS 5234: Environmental Soil, Water, and Land Use
- SWS 5235: South Florida Ecosystems
- SWS 5224: Environmental Biogeochemistry
- SWS 5248: Water Resource Sustainability
- SWS 5247: Hydric Soils
- SWS 5248: Wetlands and Water Quality
- SWS 5305C: Soil Microbial Ecology
- SWS 5308: Ecology of Waterborne Pathogens
- SWS 5406: Soil and Water Chemistry
- SWS 5424C: Soil Chemical Analysis
- SWS 5551: Soils, Water, and Public Health
- SWS 5605C: Environmental Soil Physics
- SWS 5716C: Environmental Pedology
- SWS 5721C: GIS in Land Resource Management
- SWS 5805: Environmental Soil and Water Monitoring Techniques
- SWS 6134: Soil Quality
- SWS 6136: Soil Fertility
- SWS 6161: Bioavailability of Soil Nutrients
- SWS 6262: Soil Contamination and Remediation
- SWS 6323: Advanced Microbial Ecology
- SWS 6325: Rhizosphere Biochemistry
- SWS 6366: Biodegradation and Bioremediation
- SWS 6448: Biogeochemistry of Wetlands and Aquatic Systems
- SWS 6454: Advanced Soil and Water Chemistry
- SWS 6456: Advanced Biogeochemistry
- SWS 6464C: Soil Mineralogy
- SWS 6622: Vadose Zone Hydrology
- SWS 6722: Soil-Landscape Modeling
- SWS 6905: Special Problems
- SWS 6910: Supervised Research
- SWS 6931: Seminar
- SWS 6932: Topics in Soils
- SWS 6940: Supervised Teaching
- SWS 6971: Research for Master's Thesis
- SWS 7979: Advanced Research
- SWS 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecule Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry
Wildlife Ecology and Conservation

College

College of Agricultural and Life Sciences

Department/School

Wildlife Ecology and Conservation Department

Wildlife Ecology and Conservation Program

The Department of Wildlife Ecology and Conservation offers a breadth of graduate programs that are designed to prepare students for professional employment in conservation of natural resources in a changing world. WEC faculty teach, conduct research, and provide service and extension in the following areas: avian ecology, behavioral ecology, community ecology, conservation biology, conservation education, conservation genetics, ecosystem management, environmental interpretation, habitat restoration, herpetofaunal ecology, human dimensions of wildlife management, international conservation, introduced species, landscape ecology, mammalian behavior, marine mammal ecology, plant ecology, population biology, range ecology, systems ecology, tropical conservation, urban wildlife relations, wetlands ecology, wildlife diseases, and wildlife management.

The Doctor of Philosophy (PhD) program in Wildlife Ecology and Conservation serves graduate students conducting advanced, original studies of fundamental ecological and social sciences (e.g., ecosystem, community, landscape ecology, human dimensions), usually with applications to further society's understanding of wildlife ecology and to improve conservation of wildlife resources.

The Master of Science (MS) thesis program in Wildlife Ecology and Conservation: (a) prepares graduate students for entry-level professional positions in areas of wildlife biology and ecology, natural resource management, conservation, and (b) provides a solid scientific foundation for further graduate work leading to the PhD degree.

The Master of Science, non-thesis (MS) program in Wildlife Ecology and Conservation provides advanced training for students in technical and professional aspects of wildlife management, conservation, and public education, emphasizing written and oral communication of scientific information.

For more information, please see our website: [http://www.wec.ufl.edu](http://www.wec.ufl.edu).

Degrees Offered with a Major in Wildlife Ecology and Conservation

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration
concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- WIS 5323C: Impact of Diseases on Wildlife Population
  - WIS 5376
- WIS 5406: Research Design in Wildlife Ecology
- WIS 5521: Plant-Animal Interactions
- WIS 5555C: Conservation Biology
- WIS 6444: Advanced Wetlands Ecology
- WIS 6455: Wildlife Population Ecology
- WIS 6466: Wildlife Population Modeling
- WIS 6468C: Pattern and Process in Landscape Ecology
- WIS 6525: Environmental Interpretation
- WIS 6544: Administration in Natural Resources
- WIS 6575: Mammalian Carnivores: Conservation and Management Issues
- WIS 6578: Human Dimensions of Biological Conservation
- WIS 6905: Research Problems in Wildlife and Range Sciences
- WIS 6910: Supervised Research
- WIS 6933: Seminar
- WIS 6934: Topics in Wildlife and Range Sciences
- WIS 6940: Supervised Teaching
- WIS 6971: Research for Master's Thesis
- WIS 6943: Wildlife and Agriculture
- WIS 7979: Advanced Research
- WIS 7980: Research for Doctoral Dissertation

College of Agricultural and Life Sciences Courses

- ALS 5106: Food and the Environment
- ALS 5364C: Molecular Techniques Laboratory
- ALS 5905: Individual Study
- ALS 5932: Special Topics
- ALS 6046: Grant Writing
- ALS 6921: Colloquium on Plant Pests of Regulatory Significance
- ALS 6925: Integrated Plant Medicine
- ALS 6930: Graduate Seminar
- ALS 6931: Plant Medicine Program Seminar
- ALS 6942: Principles of Plant Pest Risk Assessment and Management
- ALS 6943: Internship in Plant Pest Risk Assessment and Management
- BCH 5045: Graduate Survey of Biochemistry

College of the Arts

Dear L. Lavelli

Complete faculty listings: Follow this link.

The arts program at UF began in the 1920s to serve the state of Florida's needs. Meeting these needs over the past 80 years has propelled the college to excel on a national and international level and has defined its mission to provide instruction for students seeking professional careers in the arts. In addition to providing rich educational experiences and programs in the arts, the college has gained national and international recognition to the university through the high-level professionalism associated with the faculty and alumni, and the competence of students and graduates.

For more information about the College of the Arts, please see our website: http://www.arts.ufl.edu

Departments and Programs within the College of the Arts

College of the Arts Courses
Other

Art

College

College of the Arts

Department/School

School of Art and Art History

Art Program

Master of Fine Arts degree: The school offers the M.F.A. degree in art with specializations in art + technology, ceramics, creative photography, drawing, graphic design, painting, printmaking, and sculpture. Enrollment is competitive and limited. Candidates for admission should have adequate undergraduate training in art. Deficiencies may be corrected before beginning graduate study. Applicants must submit a portfolio for admission consideration (for comprehensive admission information: http://www.arts.ufl.edu/programs/grad.aspx). A minimum of 3 years residency is normally needed to complete the requirements for this degree, which for studio students culminates with an M.F.A. exhibition.

The M.F.A. requires a minimum of 60 credit hours: 24 hours must be in an area of specialization. Normal course requirements include:

- 12 hours of studio electives outside the area of specialization
- 6 hours of art history electives
- 3 hours of outside SA+AH electives (research/discipline appropriate)
- 6 hours of electives
- 6 hours of individual project or thesis research.

Although the M.F.A. is a thesis degree, students usually produce a creative project in lieu of thesis. Students should see the graduate program adviser for the School's requirements for the creative project.

Degrees Offered with a Major in Art

Master of Fine Arts

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6396: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5867: Colonial Andean Art
- ARH 5886: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
ARH 5905: Individual Study
ARH 6141: Greek Art Seminar
ARH 6292: Medieval Art Seminar
ARH 6394: Renaissance Art Seminar
ARH 6422: Beginnings of Modernism. Realism to Post-Impressionism 1848-1890
ARH 6477: Eighteenth-Century European Art Seminar
ARH 6481: Contemporary Art Seminar
ARH 6496: Modern Art Seminar
ARH 6596: Chinese Art Seminar
ARH 6597: African Art Seminar
ARH 6654: Pre-Columbian Art Seminar
ARH 6666: Colonial Latin American Art Seminar
ARH 6694: Nineteenth-Century Art – Seminar
ARH 6696: American Art Seminar
ARH 6797: Museum Education
ARH 6836: Exhibitions Seminar
ARH 6895: Collections Management Seminar
ARH 6900: Independent Study in Museology
ARH 6910: Supervised Research
ARH 6911: Advanced Study
ARH 6914: Independent Study in Ancient Art History
ARH 6915: Independent Study in Medieval Art History
ARH 6916: Independent Study in Renaissance and Baroque Art History
ARH 6917: Independent Study in Modern Art History
ARH 6918: Independent Study in Non-Western Art History
ARH 6930: Special Topics in Museology
ARH 6938: Seminar in Museum Studies
ARH 6941: Supervised Internship
ARH 6946: Museum Practicum
ARH 6948: Gallery Practicum
ARH 6971: Research for Master's Thesis
ARH 7979: Advanced Research
ARH 7980: Research for Doctoral Dissertation
ART 5674C: Digital Fabrication
ART 5905C: Directed Study
ART 5930C: Special Topics
ART 6410C: Printmaking Seminar: Mastering Process and Content
ART 6411C: Printmaking Seminar: Transformation and Change
ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
ART 6413C: Printmaking Seminar: Interdisciplinary Studio
ART 6671C: Advanced Experiments in Digital Art
ART 6672: Hypermedia
ART 6673C: Video Art
ART 6675C: Digital Art and Animation
ART 6691: Digital Art Studio
ART 6794C: Vessel Aesthetic 1
ART 6795C: Vessel Aesthetic 2
ART 6797C: Ceramic Sculpture 2
ART 6835C: Research in Methods and Materials of the Artist
ART 6849C: Reactive Environments
ART 6897: Professional Practices for the Visual Artist
ART 6910C: Supervised Research
ART 6925C: Art + Technology Workshop
ART 6926C: Advanced Study I
ART 6927C: Advanced Study II
ART 6928C: Advanced Study III
ART 6929C: Advanced Study IV
ART 6933C: Area Methods: Rotating Topics
ART 6971: Research for Master's Thesis
ART 6973C: Individual Project
DIG 6746C: Graduate Seminar in Sensors and Electronics
IDC 6505C: Programming for Artists

College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6942: Arts in Medicine Graduate Practicum
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management

Art Education

College
Art Education Program

Master of Arts degree in Art Education: The School offers the M.A. in art education. In addition to meeting requirements of the Graduate School for admission, prospective students should:

- Hold a degree in studio art, art history, design, or art education
- Send up to 10 images of original works of art (on CD or in slide form) and a research paper, article, or other sample of academic writing
- Official transcripts from all colleges/universities previously attended
- Statement of professional goals for attending graduate school and earning an M.A. degree in art education
- Current Curriculum Vitae or Resume
- Submit three current letters of recommendation.

The M.A. in art education requires a minimum of 36 credit hours. ARE 6049, ARE 6148, and ARE 6641 are required. The basic plan of study includes 3 credits of an approved art education elective; 9 credits in studio courses; 3 credits in art history; 6 credits in art history, studio, art education, or education electives; 3 credits of ARE 6746; and 3 credits of ARE 6971 or ARE 6973. To be admitted to candidacy, students must pass a comprehensive examination at the beginning of the second year. The program culminates in an oral examination on the thesis or project in lieu of a thesis.

Degrees Offered with a Major in Art Education

Master of Arts

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
- ARH 5867: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6292: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism, Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
- ARH 6496: Modern Art Seminar
- ARH 6596: Chinese Art Seminar
- ARH 6597: African Art Seminar
- ARH 6654: Pre-Columbian Art Seminar
- ARH 6666: Colonial Latin American Art Seminar
- ARH 6694: Nineteenth-Century Art–Seminar
- ARH 6696: American Art Seminar
- ARH 6797: Museum Education
ARH 6836: Exhibitions Seminar
ARH 6895: Collections Management Seminar
ARH 6900: Independent Study in Museology
ARH 6910: Supervised Research
ARH 6911: Advanced Study
ARH 6914: Independent Study in Ancient Art History
ARH 6915: Independent Study in Medieval Art History
ARH 6916: Independent Study in Renaissance and Baroque Art History
ARH 6917: Independent Study in Modern Art History
ARH 6918: Independent Study in Non-Western Art History
ARH 6930: Special Topics in Museology
ARH 6938: Seminar in Museum Studies
ARH 6941: Supervised Internship
ARH 6946: Museum Practicum
ARH 6948: Gallery Practicum
ARH 6971: Research for Master's Thesis
ARH 7979: Advanced Research
ARH 7980: Research for Doctoral Dissertation
ART 5674C: Digital Fabrication
ART 5905C: Directed Study
ART 5930C: Special Topics
ART 6410C: Printmaking Seminar: Mastering Process and Content
ART 6411C: Printmaking Seminar: Transformation and Change
ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
ART 6413C: Printmaking Seminar: Interdisciplinary Studio
ART 6671C: Advanced Experiments in Digital Art
ART 6672: Hypermedia
ART 6673C: Video Art
ART 6675C: Digital Art and Animation
ART 6691: Digital Art Studio
ART 6794C: Vessel Aesthetic 1
ART 6795C: Vessel Aesthetic 2
ART 6797C: Ceramic Sculpture 2
ART 6835C: Research in Methods and Materials of the Artist
ART 6849C: Reactive Environments
ART 6897: Professional Practices for the Visual Artist
ART 6910C: Supervised Research
ART 6925C: Art + Technology Workshop
ART 6926C: Advanced Study I
ART 6927C: Advanced Study II
ART 6928C: Advanced Study III
ART 6929C: Advanced Study IV
ART 6933: Area Methods: Rotating Topics
ART 6971: Research for Master's Thesis
ART 6973C: Individual Project
DIG 6746C: Graduate Seminar in Sensors and Electronics
IDC 6505C: Programming for Artists

College of the Arts Courses

HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
HUM 5595: Arts in Medicine in Practice
HUM 6340: Arts Advocacy and Public Policy
HUM 6353: Arts in Medicine Professional Seminar
HUM 6354: Arts in Medicine Advanced Professional Seminar
HUM 6358: Arts in Medicine Capstone Proposal
HUM 6359: Arts in Medicine Capstone
HUM 6942: Arts in Medicine Graduate Practicum
HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Art History

College

College of the Arts

Department/School

School of Art and Art History

Art History Program
Master of Arts and Doctor of Philosophy degrees in Art History: The School offers graduate programs leading to the M.A. and Ph.D. degrees. For complete details of the M.A. and Ph.D. degree requirements, see the Director of Graduate Studies—Art History. Art History students may participate in courses offered by the State University System’s programs in Paris, London, and Florence. Other study-abroad programs may be approved by the director of graduate studies.

For the M.A. degree, the School offers areas of emphasis in Ancient, Medieval, Renaissance/Baroque, Modern, and non-Western art history (including African, Asian, and Oceanic). A minimum of 36 credit hours is required: ARH 5816 (3 credits), 27 hours of course work, and ARH 6971 (6 credits). Required course work includes a minimum of 15 hours with 5 different art history Graduate Faculty (at least 12 hours of this course work must be graduate-level seminars). Nine credits may be taken in related areas with the graduate program adviser’s approval. Reading proficiency in a foreign language appropriate to the major area of study must be demonstrated before thesis research is begun. Language courses cannot apply toward degree credit.

For the Ph.D. degree, the School offers the same areas of specialization as for the M.A. degree. Up to 30 credits from the M.A. degree may apply toward the 90 credit Ph.D. degree. A program of 60 credit hours beyond the M.A. degree is required. Core courses will consist of a minimum of 30 hours in art history:

- 18 hours in a primary area (5000-level or above)
- 9 hours in a secondary area (5000-level or above)
- 3 hours of theory/methodology of art history (if ARH 5816 or its equivalent has not been taken as part of the M.A.)
- An additional 12 hours of outside electives taken in other schools or departments are required in a discipline(s) related to the primary area of study
- Finally, 27 hours of dissertation research and writing is required.

By the end of the second semester or equivalent full-time study, students should form their supervisory committee that must include a minimum of four Graduate Faculty members; one of whom must agree to serve as primary dissertation adviser and supervisory committee chair. The supervisory committee will also act as the qualifying examination committee. Normally students will take the qualifying examination during the spring term of the third year in residence. The examination is both written and oral. It will cover the major and minor art history areas of emphasis as well as the student’s preliminary formulation of a dissertation topic and provisional statement of the approaches to that topic as expressed in the dissertation prospectus. On successful completion of the qualifying examination, the approval by the supervisory committee of the dissertation prospectus, and fulfilling all other course and language requirements, the student makes formal application for a change of status to Ph.D. candidacy. Normally, a student will be expected to present the completed dissertation and defend it at an oral defense conducted by the supervisory committee by the end of the sixth year in the program. For Ph.D. students, reading knowledge of two research languages other than English must be demonstrated by the end of the second year of course work, or by the end of the first semester in the case of transfer students. Language courses are not applicable toward degree credit.

Degrees Offered with a Major in Art History

Doctor of Philosophy

Master of Arts

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6248C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5565: Indigenous American Art
- ARH 5667: Colonial Andean Art
- ARH 5816: Methods of Research and Bibliography
- ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
- ARH 5905: Individual Study
- ARH 6141: Greek Art Seminar
- ARH 6292: Medieval Art Seminar
- ARH 6394: Renaissance Art Seminar
- ARH 6422: Beginnings of Modernism. Realism to Post-Impressionism 1848-1890
- ARH 6477: Eighteenth-Century European Art Seminar
- ARH 6481: Contemporary Art Seminar
- ARH 6496: Modern Art Seminar
- ARH 6596: Chinese Art Seminar
- ARH 6597: African Art Seminar
- ARH 6654: Pre-Columbian Art Seminar
- ARH 6668: Colonial Latin American Art Seminar
College of the Arts Courses

- ARH 6694: Nineteenth-Century Art–Seminar
- ARH 6696: American Art Seminar
- ARH 6797: Museum Education
- ARH 6836: Exhibitions Seminar
- ARH 6839: Collections Management Seminar
- ARH 6900: Independent Study in Museology
- ARH 6910: Supervised Research
- ARH 6911: Advanced Study
- ARH 6914: Independent Study in Ancient Art History
- ARH 6915: Independent Study in Medieval Art History
- ARH 6916: Independent Study in Renaissance and Baroque Art History
- ARH 6917: Independent Study in Modern Art History
- ARH 6918: Independent Study in Non-Western Art History
- ARH 6930: Special Topics in Museology
- ARH 6938: Seminar in Museum Studies
- ARH 6941: Supervised Internship
- ARH 6946: Museum Practicum
- ARH 6948: Gallery Practicum
- ARH 6971: Research for Master’s Thesis
- ARH 7997: Advanced Research
- ARH 7998: Research for Doctoral Dissertation
- ART 5674C: Digital Fabrication
- ART 5905C: Directed Study
- ART 5930C: Special Topics
- ART 6410C: Printmaking Seminar: Mastering Process and Content
- ART 6411C: Printmaking Seminar: Transformation and Change
- ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
- ART 6413C: Printmaking Seminar: Interdisciplinary Studio
- ART 6671C: Advanced Experiments in Digital Art
- ART 6672: Hypermedia
- ART 6673C: Video Art
- ART 6675C: Digital Art and Animation
- ART 6691: Digital Art Studio
- ART 6794C: Vessel Aesthetic 1
- ART 6795C: Vessel Aesthetic 2
- ART 6797C: Ceramic Sculpture 2
- ART 6835C: Research in Methods and Materials of the Artist
- ART 6849C: Reactive Environments
- ART 6897: Professional Practices for the Visual Artist
- ART 6910C: Supervised Research
- ART 6925C: Art + Technology Workshop
- ART 6926: Advanced Study I
- ART 6927C: Advanced Study II
- ART 6928C: Advanced Study III
- ART 6929C: Advanced Study IV
- ART 6933: Area Methods: Rotating Topics
- ART 6971: Research for Master’s Thesis
- ART 6973C: Individual Project
- DIG 6746C: Graduate Seminar in Sensors and Electronics
- IDC 6505C: Programming for Artists

Arts in Medicine

College of the Arts

Arts in Medicine Program Information

Center for Arts in Medicine Director: Jill Sonke
Center for Arts in Medicine Graduate Advisor: Dylan Klompner

The Center for Arts in Medicine is committed to advancing research, education, and practice in the arts in healthcare, locally and globally. The Center offers an online Master of Arts in Arts in Medicine Program.
Prerequisites and Requirements: Admission to the MA in Arts in Medicine program requires a bachelor's degree in an arts, health, or related field of study, a GRE exam score or previous graduate degree, and completion of the Introduction to the Arts in Healthcare course at UF, or completion of an Arts in Healthcare Summer Intensive, or a minimum of one year of professional experience as an artist or administrator in the field of Arts in Medicine. Requirements of the degree include completion of 35 credits of coursework with a 3.0 or higher GPA.

Commitment of time: The MA in Arts in Medicine is designed to be completed in two years when students are enrolled in one class at a time (with one 8-week semester with two courses). Students should expect to dedicate 16 hours per week to each 8-week 3-credit hour course.

For more information, please see our website: http://www.arts.ufl.edu/cam.

Degrees Offered with a Major in Arts in Medicine

Master of Arts

Arts in Medicine Courses

Core Curriculum

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- PHC 6104: Evidence-Based Management of Public Health Programs

Practicum

- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum

Electives

- ANG 6930: Special Topics in Anthropology
- GMS 6822: Measuring and Analyzing Health Outcomes II
- HSA 6114: U.S. Health Care System
- HUM 6930: Special Topics in Fine Arts
- MMV 6651: Vocal Pedagogy
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- THE 6905: Individual Study

College of the Arts Courses

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Digital Arts and Sciences (Arts)

College

Department/School
Digital Worlds Institute

Digital Arts and Sciences (Arts) Program Information

The Master of Arts in Digital Arts & Sciences (DAS) degree seeks to allow students from diverse academic backgrounds the opportunity to develop fluency in the technologies, design practices and collaborative interdisciplinary teamwork increasingly required by the media, communications and entertainment industries. Graduates holding the M.A. in DAS degree would typically seek employment in the creative services sector, applying digital techniques and technologies in a variety of professions. Opportunities range from traditional cinema to interactive games, from broadcast media to online international networks to emergent industries.

Although this is a thesis degree, students usually produce a creative project in lieu of thesis. Students should see the graduate coordinator for the requirements for the creative project, which are also provided in the DAS Student Handbook.

Students seeking admission are expected to have an undergraduate background including:

- A degree in one of the fine arts or liberal arts
- A body of work that demonstrates accomplishment in the intended area
- A body of work that can clearly be enhanced with skills to be acquired in the DAS program.

Deficiencies may be corrected before beginning graduate study. In addition to appropriate academic credentials and prior scholastic achievement, admission into the program requires a well-constructed Statement of Purpose and media-related support material (i.e. samples of design, programming, video, web, writing, etc.) that demonstrates both prior interest and/or achievement in New Media/Digital Arts & Sciences.

Degrees Offered with a Major in Digital Arts and Sciences

Master of Arts

Digital Worlds Departmental Courses

- DIG 5555C: Digital Media Projection Design I
- DIG 5931C: Special Topics
- DIG 6027C: Interactive Storytelling
- DIG 6028: Roots of Digital Culture
- DIG 6050C: Entertainment Technology
- DIG 6125C: Digital Design & Visualization
- DIG 6126C: Interaction Design
- DIG 6256C: Audio Design For Digital Production
- DIG 6358C: APPLIED 3D MODELING
- DIG 6556C: Digital Media Projection Design II
- DIG 6589C: Digital Portfolio
- DIG 6719: Videogame Theory and Analysis
- DIG 6744C: Movement, Media and Machines
- DIG 6748C: Graduate Seminar in Sensors and Electronics
- DIG 6751C: Protocols for Multimedia Interfaces
- DIG 6788C: Digital Production & Game Design
- DIG 6840C: Interdisciplinary Research Seminar in Digital Arts & Sciences
- DIG 6850C: Digital Arts & Sciences Convergence
- DIG 6906: Independent Study - Graduate Level
- DIG 6950C: Digital Media Production
- DIG 6971: Research for Master's Thesis
- DIG 6973: Capstone Project in Lieu of Thesis
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers

College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6942: Arts in Medicine Graduate Practicum
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management

Museology
Museology Program Information

Master of Arts degree in Museology (Museum Studies): The School offers this interdisciplinary program that consists of both academic and practical work. The curriculum allows students to do graduate work in a disciplinary emphasis (art history, anthropology, history, education, or the natural sciences, for example) and at the same time complete a concentrated study in professional museum practice. The M.A. degree in museology requires 48 credit hours including:

- 15 credits of museum studies courses (museology seminar, 3 credits; collections management, 3 credits; museum education, 3 credits; exhibitions, 3 credits; special topics, 3 credits)
- 15 graduate credits in a disciplinary focus
- 6 credits of internship
- 6 credits of electives
- 6 credits of individual credit.

Several on-campus sites provide the program with laboratories for training students in museum work, including the University Galleries, Harn Museum of Art, Florida Museum of Natural History, and the gallery at the Reitz Union. Students must complete a 6-credit internship of at least 320 hours at an approved museum. In this experience, students undertake specific projects in which they gain first-hand experience in museum work. The Harn Museum of Art or the Florida Museum of Natural History may be able to oversee a few interns, but students are encouraged to apply for internships at other U.S. institutions or abroad.

A project-in-lieu-of-thesis (or thesis) is selected, researched, and carried out under the direction of a supervisory committee.

Degrees Offered with a Major in Museology

Master of Arts

concentration in Historic Preservation

without a concentration

School of Art and Art History Departmental Courses

- ARE 6049: History of Teaching Art
- ARE 6148: Curriculum in Teaching Art
- ARE 6246C: Principles of Teaching Art
- ARE 6247C: Teaching Art: The Study of Practice
- ARE 6386: Teaching Art in Higher Education
- ARE 6641: Issues in Art Education
- ARE 6746: Methods of Research in Art Education
- ARE 6905: Individual Study
- ARE 6910: Capstone Project
- ARE 6933: Special Topics in Art Education
- ARE 6944: Internship in Teaching Art
- ARE 6971: Research for Master's Thesis
- ARE 6973: Individual Project
- ARH 5357: French Art of the Ancien Regime: 1680-1780
- ARH 5420: Art in the Age of Revolution
- ARH 5440: Beginnings of Modernism
- ARH 5527: Arts of Central Africa
- ARH 5528: Art of West Africa
- ARH 5529: Clothing and Textiles in Africa
- ARH 5655: Indigenous American Art
• ARH 5667: Colonial Andean Art
• ARH 5816: Methods of Research and Bibliography
• ARH 5877: Gender, Representation, and the Visual Arts: 1600-1900
• ARH 5905: Individual Study
• ARH 6141: Greek Art Seminar
• ARH 6292: Medieval Art Seminar
• ARH 6394: Renaissance Art Seminar
• ARH 6422: Beginnings of Modernism. Realism to Post-Impressionism 1848-1890
• ARH 6477: Eighteenth-Century European Art Seminar
• ARH 6481: Contemporary Art Seminar
• ARH 6496: Modern Art Seminar
• ARH 6596: Chinese Art Seminar
• ARH 6597: African Art Seminar
• ARH 6654: Pre-Columbian Art Seminar
• ARH 6666: Colonial Latin American Art Seminar
• ARH 6694: Nineteenth-Century Art–Seminar
• ARH 6696: American Art Seminar
• ARH 6797: Museum Education
• ARH 6836: Exhibitions Seminar
• ARH 6895: Collections Management Seminar
• ARH 6900: Independent Study in Museology
• ARH 6910: Supervised Research
• ARH 6911: Advanced Study
• ARH 6914: Independent Study in Ancient Art History
• ARH 6915: Independent Study in Medieval Art History
• ARH 6916: Independent Study in Renaissance and Baroque Art History
• ARH 6917: Independent Study in Modern Art History
• ARH 6918: Independent Study in Non-Western Art History
• ARH 6930: Special Topics in Museology
• ARH 6938: Seminar in Museum Studies
• ARH 6941: Supervised Internship
• ARH 6946: Museum Practicum
• ARH 6948: Gallery Practicum
• ARH 6971: Research for Master's Thesis
• ARH 7979: Advanced Research
• ARH 7980: Research for Doctoral Dissertation
• ART 5674C: Digital Fabrication
• ART 5905C: Directed Study
• ART 5930C: Special Topics
• ART 6410C: Printmaking Seminar: Mastering Process and Content
• ART 6411C: Printmaking Seminar: Transformation and Change
• ART 6412C: Printmaking Seminar: Ideation, Studies, and Completed Works
• ART 6413C: Printmaking Seminar: Interdisciplinary Studio
• ART 6571C: Advanced Experiments in Digital Art
• ART 6672: Hypermedia
• ART 6673C: Video Art
• ART 6675C: Digital Art and Animation
• ART 6691C: Digital Art Studio
• ART 6794C: Vessel Aesthetic 1
• ART 6795C: Vessel Aesthetic 2
• ART 6797C: Ceramic Sculpture 2
• ART 6835C: Research in Methods and Materials of the Artist
• ART 6849C: Reactive Environments
• ART 6897: Professional Practices for the Visual Artist
• ART 6910C: Supervised Research
• ART 6925C: Art + Technology Workshop
• ART 6926C: Advanced Study I
• ART 6927C: Advanced Study II
• ART 6928C: Advanced Study III
• ART 6929C: Advanced Study IV
• ART 6933: Area Methods: Rotating Topics
• ART 6971: Research for Master's Thesis
• ART 6973C: Individual Project
• DIG 6746C: Graduate Seminar in Sensors and Electronics
• IDC 6505C: Programming for Artists

College of the Arts Courses

• HUM5357: Creativity and Health; Foundations of the Arts in Medicine
• HUM5695: Arts in Medicine in Practice
• HUM6340: Arts Advocacy and Public Policy
• HUM6353: Arts in Medicine Professional Seminar
• HUM6354: Arts in Medicine Advanced Professional Seminar
• HUM6358: Arts in Medicine Capstone Proposal
• HUM6359: Arts in Medicine Capstone
• HUM6942: Arts in Medicine Graduate Practicum
• HUM6984: Arts in Action: Consulting Project in Performing Arts Management

Music
College of the Arts

Music Department

Music Program Information

The Master of Music (M.M.) degree is offered in music or music education. The music program offers the following concentrations: choral conducting, composition, electronic music, ethnomusicology, instrumental conducting, music education, music history and literature, music theory, performance, and sacred music. The M.M. degree prepares students for careers as teachers in schools, churches, and universities; performers; music historians; music critics; church musicians; composers; conductors; and accompanists.

For more information, please see our website: http://www.arts.ufl.edu/welcome/music

Degrees Offered with a Major in Music

Doctor of Philosophy

- without a concentration
- concentration in Composition
- concentration in Music History and Literature

Master of Music

- without a concentration
- concentration in Choral Conducting
  - optional second concentration in Composition
  - optional second concentration in Instrumental Conducting
  - optional second concentration in Music History and Literature
  - optional second concentration in Music Theory
  - optional second concentration in Performance
optional second concentration in Sacred Music
optional second concentration in Piano Pedagogy
optional second concentration in Music Education
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

concentration in Composition

optional second concentration in Choral Conducting
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Music Theory
optional second concentration in Performance

optional second concentration in Piano Pedagogy
optional second concentration in Music Education
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

concentration in Electronic Music

optional second concentration in Choral Conducting
optional second concentration in Composition
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Music Theory
optional second concentration in Performance

optional second concentration in Sacred Music
optional second concentration in Piano Pedagogy
optional second concentration in Music Education
optional second concentration in Ethnomusicology

concentration in Ethnomusicology

optional second concentration in Choral Conducting
optional second concentration in Composition
optional second concentration in Electronic Music

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

concentration in Instrumental Conducting

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Music Education

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Sacred Music

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology
concentration in Music History and Literature
  
  optional second concentration in Composition

  optional second concentration in Choral Conducting

  optional second concentration in Instrumental Conducting

  optional second concentration in Music Theory

  optional second concentration in Performance

  optional second concentration in Piano Pedagogy

  optional second concentration in Music Education

  optional second concentration in Electronic Music

  optional second concentration in Ethnomusicology

concentration in Music Theory

  optional second concentration in Composition

  optional second concentration in Choral Conducting

  optional second concentration in Instrumental Conducting

  optional second concentration in Music History and Literature

  optional second concentration in Performance

  optional second concentration in Piano Pedagogy

  optional second concentration in Music Education

  optional second concentration in Electronic Music

  optional second concentration in Ethnomusicology

concentration in Performance

  optional second concentration in Composition

  optional second concentration in Choral Conducting

  optional second concentration in Instrumental Conducting

  optional second concentration in Music History and Literature

  optional second concentration in Music Theory

  optional second concentration in Sacred Music

  optional second concentration in Piano Pedagogy

  optional second concentration in Music Education
optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

concentration in Sacred Music

optional second concentration in Composition

optional second concentration in Choral Conducting

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Piano Pedagogy

optional second concentration in Music Education

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Music Departmental Courses

- DIG 6288: Music and Sound Design for Digital Media
- MUC 5315: Introduction to Electroacoustic Music
- MUC 6444: Composition of Electronic Music
- MUC 6445: Electroacoustic Music Composition: Digital I
- MUC 6446: Electroacoustic Music Composition: Digital II
- MUC 6900: Secondary Graduate Composition
- MUC 6930: Graduate Composition
- MUC 6932: Composition Seminar
- MUC 7447: Advanced Seminar in Electroacoustic Music
- MUC 7931: Advanced Graduate Composition
- MUC 7938: Seminar in Digital Sound Processing, Control, and Composition
- MUE 6080: Historical and Philosophical Foundations of Music Education
- MUE 6385: Music in Higher Education
- MUE 6399: Creative Thinking in Music
- MUE 6444: Materials and Methods of String Class Teaching
- MUE 6497: Public School Orchestral Literature
- MUE 6647: Trends in Teaching and Learning Music
- MUE 6696: Technology Assisted Music Learning
- MUE 6747: Assessing Music Learning
- MUE 6785: Research in Music Education
- MUE 6790: Capstone Project for Music Education
- MUE 6931: Instructional Design in Music Education
- MUE 7746: Measurement and Evaluation of Music
- MUE 7938: Music Education Seminar
- MUG 6105: Graduate Conducting
- MUG 7106: Advanced Graduate Conducting
- MJH 5219: Graduate Music History Review
- MJH 5505: Introduction to Ethnomusicology
- MJH 5684: Introduction to Historical Musicology
- MJH 6528: American Vernacular Music
- MJH 6545: The Guitar in Latin American Culture
- MJH 6548: Seminar in Caribbean Music
- MJH 6549: Seminar in Brazilian Music
- MJH 6635: Seminar in American Music
- MJH 6665: History of Opera
- MJH 6671: Seminar in Renaissance Music
- MJH 6672: Seminar in Baroque Music
- MJH 6673: Seminar in Classical Music
- MJH 6674: Seminar in Nineteenth-Century Music
- MJH 6675: Seminar in Twentieth-Century Music
- MJH 6831: Nationalism in Music
- MJH 6935: Special Topics in Music History
• MJH 7411: Medieval and Renaissance Notation
• MJH 7938: Musicology Seminar
• MUL 6435: String Literature
• MUL 6446: Piano Literature
• MUL 6495: Graduate Organ Literature
• MUL 6555: Survey of Wind Literature
• MUL 6565: Chamber Music Literature
• MUL 6645: Choral Literature
• MUN 6010: Graduate Ensemble
• MUN 6125: Concert Band
• MUN 6135: Symphonic Band
• MUN 6145: Symphonic Wind Ensemble
• MUN 6215: University Orchestra
• MUN 6315: University Choir
• MUN 6325: Women's Chorale
• MUN 6335: Men's Glee Club
• MUN 6445: Percussion Ensemble
• MUN 6495: Steel Drum Ensemble
• MUN 6496: World Music Ensemble
• MUN 6497: New Music Ensemble
• MUN 6715: Jazz Band
• MUR 6206: Survey of Hymnody
• MUS 6705: Sacred Music Literature
• MUS 5911: Directed Study
• MUS 6685: Psychology of Music
• MUS 6716: Methods of Musical Research and Bibliography
• MUS 6905: Projects and Problems
• MUS 6910: Supervised Research
• MUS 6940: Supervised Teaching
• MUS 6971: Research for Master's Thesis
• MUS 6973: Individual Project
• MUS 7656: Teaching Music and the Creative Process
• MUS 7905: Projects and Problems
• MUS 7979: Advanced Research
• MUS 7980: Research for Doctoral Dissertation
• MUT 6051: Graduate Music Theory Review
• MUT 6445: Advanced Counterpoint
• MUT 6531: Figured Bass and Continuo Performance
• MUT 6565: Late Nineteenth- and Twentieth-Century Styles
• MUT 6576: Contemporary Styles
• MUT 6617: Approaches to Theoretical Analysis in Music Education
• MUT 6624: Seminar in Set Theory
• MUT 6627: Seminar in Reductive Analysis
• MUT 6629: Analytical Techniques
• MUT 6751: Pedagogy of Music Theory
• MUT 6936: Music Theory Seminar
• MUT 7316: Advanced Orchestration
• MUT 7585: Seminar in Musical Style
• MUT 7760: History of Music Theory
• MMK 5156: Improvisational Keyboard Skills and Related Technology
• MMK 6605: Organ Pedagogy
• MMK 6651: Piano Pedagogy
• MMK 6661: Advanced Piano Pedagogy
• MO 6250: Secondary Music Performance
• MO 6460: Music Performance
• MO 7460: Music Performance
• MUS 6651: String Pedagogy
• MV 6651: Vocal Pedagogy

College of the Arts Courses

• HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
• HUM 5595: Arts in Medicine in Practice
• HUM 6340: Arts Advocacy and Public Policy
• HUM 6353: Arts in Medicine Professional Seminar
• HUM 6354: Arts in Medicine Advanced Professional Seminar
• HUM 6358: Arts in Medicine Capstone Proposal
• HUM 6359: Arts in Medicine Capstone
• HUM 6942: Arts in Action: Consulting Project in Performing Arts Management

Music Education

College

College of the Arts
Music Education Program Information

The Master of Music (M.M.) degree is offered in music or music education. The music education program offers the following concentrations: choral conducting, composition, electronic music, ethnomusicology, instrumental conducting, music history and literature, music theory, performance, and piano pedagogy. The M.M. degree prepares students for careers as teachers in studios, schools, and universities; performers; music historians; music critics; church musicians; composers; conductors; and accompanists.

For more information, please see our website: http://www.arts.ufl.edu/welcome/music

Degrees Offered with a Major in Music Education

Doctor of Philosophy

Master of Music

Without a Concentration

Concentration in Choral Conducting

- optional second concentration in Piano Pedagogy
- optional second concentration in Composition
- optional second concentration in Instrumental Conducting
- optional second concentration in Music History and Literature
- optional second concentration in Music Theory
- optional second concentration in Performance
- optional second concentration in Electronic Music
- optional second concentration in Ethnomusicology

Concentration in Composition

- optional second concentration in Choral Conducting
- optional second concentration in Piano Pedagogy
- optional second concentration in Instrumental Conducting
- optional second concentration in Music History and Literature
optional second concentration in **Music Theory**

optional second concentration in **Performance**

optional second concentration in **Electronic Music**

optional second concentration in **Ethnomusicology**

Concentration in **Electronic Music**

optional second concentration in **Choral Conducting**

optional second concentration in **Composition**

optional second concentration in **Instrumental Conducting**

optional second concentration in **Music History and Literature**

optional second concentration in **Music Theory**

optional second concentration in **Performance**

optional second concentration in **Piano Pedagogy**

optional second concentration in **Ethnomusicology**

Concentration in **Ethnomusicology**

optional second concentration in **Choral Conducting**

optional second concentration in **Composition**

optional second concentration in **Instrumental Conducting**

optional second concentration in **Music History and Literature**

optional second concentration in **Music Theory**

optional second concentration in **Performance**

optional second concentration in **Electronic Music**

optional second concentration in **Piano Pedagogy**

Concentration in **Instrumental Conducting**

optional second concentration in **Piano Pedagogy**

optional second concentration in **Composition**

optional second concentration in **Choral Conducting**

optional second concentration in **Music History and Literature**
optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

Concentration in Music History and Literature
optional second concentration in Choral Conducting
optional second concentration in Piano Pedagogy
optional second concentration in Instrumental Conducting
optional second concentration in Composition
optional second concentration in Music Theory
optional second concentration in Performance
optional second concentration in Electronic Music
optional second concentration in Ethnomusicology

Concentration in Performance
optional second concentration in Choral Conducting
optional second concentration in Piano Pedagogy
optional second concentration in Instrumental Conducting
optional second concentration in Music History and Literature
optional second concentration in Composition

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

Concentration in Piano Pedagogy

optional second concentration in Choral Conducting

optional second concentration in Composition

optional second concentration in Instrumental Conducting

optional second concentration in Music History and Literature

optional second concentration in Music Theory

optional second concentration in Performance

optional second concentration in Electronic Music

optional second concentration in Ethnomusicology

College of the Arts Courses

- HUM5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM5595: Arts in Medicine in Practice
- HUM6340: Arts Advocacy and Public Policy
- HUM6353: Arts in Medicine Professional Seminar
- HUM6354: Arts in Medicine Advanced Professional Seminar
- HUM6358: Arts in Medicine Capstone Proposal
- HUM6359: Arts in Medicine Capstone
- HUM6942: Arts in Medicine Graduate Practicum
- HUM6944: Arts in Action: Consulting Project in Performing Arts Management

Music Departmental Courses

- DIG6288: Music and Sound Design for Digital Media
- MUC5315: Introduction to Electroacoustic Music
- MUC6444: Composition of Electronic Music
- MUC6445: Electroacoustic Music Composition: Digital I
- MUC6446: Electroacoustic Music Composition-Digital II
- MUC6900: Secondary Graduate Composition
- MUC6930: Graduate Composition
- MUC6932: Composition Seminar
- MUC7447: Advanced Seminar in Electroacoustic Music
- MUC7931: Advanced Graduate Composition
- MUC7938: Seminar in Digital Sound Processing, Control, and Composition
- MUE6080: Historical and Philosophical Foundations of Music Education
- MUE6385: Music in Higher Education
- MUE6399: Creative Thinking in Music
- MUE6444: Materials and Methods of String Class Teaching
- MUE6497: Public School Orchestral Literature
- MUE6697: Trends in Teaching and Learning Music
- MUE6896: Technology-Assisted Music Learning
- MUE6747: Assessing Music Learning
- MUE6785: Research in Music Education
- MUE6790: Capstone Project for Music Education
- MUE6931: Instructional Design in Music Education
- MUE7746: Measurement and Evaluation of Music
- MUE7938: Music Education Seminar
- MUG 6105: Graduate Conducting
- MUG 7106: Advanced Graduate Conducting
- MUH 5219: Graduate Music History Review
- MUH 5505: Introduction to Ethnomusicology
- MUH 5684: Introduction to Historical Musicology
- MUH 6526: American Vernacular Music
- MUH 6545: The Guitar in Latin American Culture
- MUH 6548: Seminar in Caribbean Music
- MUH 6549: Seminar in Brazilian Music
- MUH 6635: Seminar in American Music
- MUH 6665: History of Opera
- MUH 6671: Seminar in Renaissance Music
- MUH 6672: Seminar in Baroque Music
- MUH 6673: Seminar in Classical Music
- MUH 6674: Seminar in Nineteenth-Century Music
- MUH 6675: Seminar in Twentieth-Century Music
- MUH 6931: Nationalism in Music
- MUH 6935: Special Topics in Music History
- MUH 7411: Medieval and Renaissance Notation
- MUH 7938: Musicology Seminar
- MUL 6435: String Literature
- MUL 6486: Piano Literature
- MUL 6495: Graduate Organ Literature
- MUL 6555: Survey of Wind Literature
- MUL 6565: Chamber Music Literature
- MUL 6645: Choral Literature
- MUN 6010: Graduate Ensemble
- MUN 6125: Concert Band
- MUN 6135: Symphonic Band
- MUN 6145: Symphonic Wind Ensemble
- MUN 6215: University Orchestra
- MUN 6315: University Choir
- MUN 6325: Women's Chorale
- MUN 6335: Men's Glee Club
- MUN 6445: Percussion Ensemble
- MUN 6495: Steel Drum Ensemble
- MUN 6496: World Music Ensemble
- MUN 6497: New Music Ensemble
- MUN 6715: Jazz Band
- MUR 6206: Survey of Hymnody
- MUR 6705: Sacred Music Literature
- MUS 5911: Directed Study
- MUS 6685: Psychology of Music
- MUS 6716: Methods of Musical Research and Bibliography
- MUS 6905: Projects and Problems
- MUS 6910: Supervised Research
- MUS 6940: Supervised Teaching
- MUS 6971: Research for Master's Thesis
- MUS 6973: Individual Project
- MUS 7656: Teaching Music and the Creative Process
- MUS 7905: Projects and Problems
- MUS 7979: Advanced Research
- MUS 7980: Research for Doctoral Dissertation
- MUT 6051: Graduate Music Theory Review
- MUT 6445: Advanced Counterpoint
- MUT 6531: Figured Bass and Continuo Performance
- MUT 6565: Late Nineteenth- and Twentieth-Century Styles
- MUT 6576: Contemporary Styles
- MUT 6817: Approaches to Theoretical Analysis in Music Education
- MUT 6624: Seminar in Set Theory
- MUT 6627: Seminar in Reductive Analysis
- MUT 6629: Analytical Techniques
- MUT 6751: Pedagogy of Music Theory
- MUT 6896: Music Theory Seminar
- MUT 7316: Advanced Orchestration
- MUT 7585: Seminar in Musical Style
- MUT 7760: History of Music Theory
- MK 5156: Improvisational Keyboard Skills and Related Technology
- MK 6605: Organ Pedagogy
- MK 6651: Piano Pedagogy
- MK 6661: Advanced Piano Pedagogy
- MO 6250: Secondary Music Performance
- MO 6460: Music Performance
- MO 7460: Music Performance
- MS 6651: String Pedagogy
- MV 6651: Vocal Pedagogy

Theatre

College
College of the Arts

Department/School

School of Theatre and Dance

Degrees Offered with a Major in Theatre

Master of Fine Arts

College of the Arts Courses

- HUM 5357: Creativity and Health: Foundations of the Arts in Medicine
- HUM 5595: Arts in Medicine in Practice
- HUM 6340: Arts Advocacy and Public Policy
- HUM 6353: Arts in Medicine Professional Seminar
- HUM 6354: Arts in Medicine Advanced Professional Seminar
- HUM 6358: Arts in Medicine Capstone Proposal
- HUM 6359: Arts in Medicine Capstone
- HUM 6942: Arts in Medicine Graduate Practicum
- HUM 6944: Arts in Action: Consulting Project in Performing Arts Management

Theatre and Dance Departmental Courses

- ARC 6670: Lighting Design Seminar
- DAN 6436: Laban Movement Analysis
- DAA 6757: Pilates Technique for the Dancer
- DAA 6905: Graduate Dance Project
- DAN 6949: Dance Clinical Practice
- THE 5238: African-American Theatre History and Practice
- THE 5287: History of Decor and Architecture for the Stage
- THE 5910: Introduction to Graduate Study in Theatre
- THE 6265: Costume History
- THE 6526: History, Literature, and Criticism I
- THE 6528: History, Literature, and Criticism II
- THE 6565: Seminar in Creative Process
- THE 6905: Individual Study
- THE 6940: Supervised Teaching
- THE 6941: Internship
- THE 6950: Applied Theatre
- THE 6955: Summer Repertory Theatre
- THE 6971: Research for Master's Thesis
- THE 6973C: Project in Lieu of Thesis
- TPA 5025: Lighting Design I
- TPA 5047: Costume Design I
- TPA 5067: Scene Design I
- TPA 5072: Drawing and Rendering
- TPA 5079: Graduate Scene Painting
- TPA 5082: Advanced Theatre Graphics
- TPA 5236: Costume Technologies Workshop
- TPA 6005: Design I
- TPA 6006: Design II
- TPA 6009: Design Studio
- TPA 6026: Lighting Design II
- TPA 6048: Costume Design II
- TPA 6054: Detail Design for Costume Designers
- TPA 6069: Scene Design II
- TPA 6235: Costume Construction
- TPA 6237: Pattern Making: Flat Patternmaking
- TPA 6243: Pattern Making: Draping
- TPA 6268: Computer Drafting 2D
- TPA 6357: Programming and Presentation for the Lighting Designer
- TPP 5234: Multi-Cultural Performance Workshop
- TPP 6115: Graduate Acting I: Modern Acting Theory and Practice
- TPP 6116: Graduate Acting II: Shakespeare and High Style
- TPP 6145: Graduate Acting III: Period Styles
- TPP 6149: Acting IV: Contemporary Realism
Warrington College of Business Administration

Dear Jamie Kraft

Complete faculty listings: Follow this link.

Graduate degrees offered by the Warrington College of Business Administration are the Doctor of Philosophy with major programs in business administration and in economics; the Master of Arts with majors in programs in economics, in international business, and in business administration with concentrations in concentrations in management, in finance, and in real estate, and in business management, including concentrations in entrepreneurship, in finance, in marketing, and in retail; the Master of Business Administration; and the Master of Accounting. Fields of concentration and requirements for the M.B.A. are given under Graduate Degrees of this catalog, as well as admission and degree requirements for the Ph.D., M.A., and M.S. degrees.

Master of Arts: The M.A. degree with a major in international business is designed to provide students with quantitative and application skills to be used in an international business setting. The program provides practical training with a brief study trip to a major international city, where students are required to participate actively in business tours and lectures. The students also have the opportunity to gain credits for the degree by studying at one or more foreign universities for a period of 2 weeks to 8 months.

Master of Science: The M.S. degree with a major in management targets students from nonbusiness backgrounds who would like to gain "core" business knowledge and application skills. Requirements span the traditional business disciplines to produce a sound knowledge base for students seeking a solid business foundation. Students are required to take such courses as accounting, finance, economics, entrepreneurship, management, marketing, organizational behavior, and statistics. Typical positions for graduates include managers, consultants, and analysts.

Doctor of Philosophy: For the Ph.D. in business administration, students must have a concentration in one of the following:

- Accounting
- Information Systems and Operation Management
- Finance
- Insurance
- Management
- Marketing
- Real estate and urban analysis.

Specific requirements for the various departments and specialties are given in the Graduate Degrees section in this catalog. (Requirements for the Ph.D. degree in economics are described under the Economics section of the catalog.) All candidates for the Ph.D. in business administration must satisfy the following general requirements:

Breadth requirement: All applicants for the Ph.D. in the business administration program are expected to have completed prior business-related coursework at either the advanced undergraduate or graduate level. Students entering without prior work are required to take a minimum of three graduate courses in at least two fields other than their chosen area of concentration. Most often, the appropriate courses will be found in the M.B.A. first-year core; the particular courses to be taken by a student will be decided in consultation with the student's academic advisor. After a student enters the Ph.D. program, the courses taken to satisfy the breadth requirement must be taken in the College of Business Administration.

Research foundations requirement: All students must complete a six-course research skills sequence that prepares them for scholarly research in their chosen area of concentration. Research foundations are defined as essential methodological tools (e.g., statistics, quantitative analysis) and/or substantive content domains (e.g., psychology, economics) outside the student's major field that are considered essential to conducting high quality research in the chosen field. The specific research skills required by each area of concentration can be found in the field descriptions in this Catalog.

Other requirements include satisfactory completion of graduate course work in the major field of concentration, as well as one or two minor fields designed to add depth to the student's research training. Minors are selected by the student in consultation with his or her advisory committee, and may be within or outside the College of Business Administration. Other requirements for the Ph.D. are given in the Graduate Degrees section of this catalog.

Departments and Programs within Warrington College of Business Administration

Warrington College of Business Courses

Other

Accounting

College

Warrington College of Business Administration

Department/School

Fisher School of Accounting
Accounting Program Information

Master of Accounting: Three variations of the Master of Accounting degree program are available. These allow students to select one of three tracks: Audit, Tax, and Generalist. Minimum admission requirements include an acceptable score on the Graduate Management Admission Test (GMAT), with a minimum score of 550 and completion of essays with a minimum score of 4. International students must submit a satisfactory score on the following TOEFL (Test of English as a Foreign Language: paper-based=570, internet-based=86). Additional information, including minimum GPA standards for admission, may be viewed at http://warrington.ufl.edu/accounting/academics/macc.

Combined degree program: The recommended curriculum to prepare for a professional career in accounting is the 3/2 five-year program with a joint awarding of the Bachelor of Science in Accounting and Master of Accounting degrees upon completion of the 150-hour program. The entry point into the 3/2 program is the beginning of the senior year.

Traditional Master of Accounting program: Students who have already completed an undergraduate degree in accounting may enter the 1-year M.Acc. degree program which requires satisfactory completion of 34 hours of course work. A minimum of 28 credits must be in graduate-level courses; a minimum of 20 credits must be in graduate-level accounting courses. The remaining credits are selected from recommended elective courses that vary by area of specialization. Students are cautioned to seek early advisement, since many graduate courses are offered only once a year.

J.D./M.Acc. program: A joint program leading to the Juris Doctor and Master of Accounting degrees is offered by the Fisher School of Accounting and Levin College of Law. Specific details for the M.Acc., J.D./M.Acc., and Ph.D. programs are available at http://warrington.ufl.edu/accounting/academics/jd-macc.

Degrees Offered with a Major in Accounting

Master of Accounting

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6891: International Auditing
- ACG 6897: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Business Administration (Accounting)

College

Warrington College of Business Administration
Business Administration (Accounting) Program Information

The Ph.D. program offers a broad-based interdisciplinary training that prepares students to conduct both empirical and analytical research. The curriculum consists of course work of four types: the major field, a breadth requirement, a research foundation requirement, and a minor or supporting field. In addition, students must demonstrate competence in conducting research and teaching, and must complete a dissertation on an accounting topic.

The major field in accounting consists of at least 18 credit hours of course work including research analysis, archival research, analytical research, experimental research, readings, and a research project. The breadth requirement consists of at least 13 credit hours of course work including microeconomic theory, corporate finance theory, game theory, asset pricing, and information economics. The research foundation requirement consists of at least 12 hours of graduate course work in mathematical economics, statistics, or econometrics. The minor or supporting field requirement is met by completing a minimum of 12 hours of graduate course work in the selected field.

Students demonstrate competency in conducting research by completing a research project in the summers of the first and second year. The teaching competence is demonstrated by completing at least 1 hour (but no more than 5 hours) of supervised teaching, and by teaching for at least 2 semesters. Admission requirements include a history of academic excellence, adequate score on the GMAT (the average score of recently admitted applicants is 690 for GMAT), competence in written and spoken English (TOEFL Internet-based test (iBT) required for applicants whose native language is not English), appreciation of accounting issues, and institutional and math competency. The school requires a total score of 91, including a minimum of 26 on the speaking section.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

concentration in Accounting

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax I
- TAX 5027: Federal Income Tax II
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation
Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Microeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6286: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6606: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7846: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary/Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6396: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
• MAN 6321: Human Resource Management
• MAN 6331: Compensation in Organizations
• MAN 6351: Training and Development in Organizations
• MAN 6365: Organizational Staffing
• MAN 6366: Organizational Staffing
• MAN 6385: Strategic Human Resource Management
• MAN 6446: Negotiations
• MAN 6447: Art and Science of Negotiation
• MAN 6537: Managing Technology in Organizations
• MAN 6627: Cross Cultural Negotiation
• MAN 6635: International Aspects of Human Resource Management
• MAN 6636: Global Strategic Management
• MAN 6637: Global Strategic Management
• MAN 6721: Business Policy
• MAN 6724: Strategic Management
• MAN 6905: Individual Work in Management
• MAN 6910: Supervised Research
• MAN 6930: Special Topics
• MAN 6940: Supervised Teaching
• MAN 6957: International Studies in Management
• MAN 6958: International Study Program
• MAN 6973: Project in Lieu of Thesis
• MAN 7108: Seminar in Research Concepts and Methods in Management
• MAN 7109: Seminar in Motivation and Attitudes
• MAN 7146: Seminar in Leadership
• MAN 7207: Seminar on Foundations of Organizational Theory
• MAN 7208: Seminar in Contemporary Approaches to Organizations
• MAN 7267: Seminar on Groups and Teams Research
• MAN 7275: Organizational Behavior
• MAN 7328: Seminar on Staffing and Selection
• MAN 7778: Seminar in Strategic Adaptation to Environment
• MAN 7779: Strategic Processes and Structure in Organizations
• MAN 7953: Seminar in Management
• MAN 7979: Advanced Research
• MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Customer Analysis
• MAR 6646: Marketing Research for Managerial Decision Making
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6725: Introduction to Electronic Commerce
• MAR 6816: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6833: Product Development and Management
• MAR 6834: Marketing of Science and Technology
• MAR 6835: Marketing of Science and Technology
• MAR 6837: Consumer-Centered Product Design
• MAR 6861: Customer Relationship Management
• MAR 6862: Customer Relationship Management
• MAR 6905: Individual Work
• MAR 6910: Supervised Research
• MAR 6930: Special Topics in Marketing
• MAR 6940: Supervised Teaching
• MAR 6957: International Studies in Marketing
• MAR 6971: Research for Master's Thesis
• MAR 6973: Project in Lieu of Thesis
• MAR 7507: Perspectives on Consumer Behavior
• MAR 7588: Consumer Information Processing and Decision Making
• MAR 7589: Judgment and Decision Making
• MAR 7626: Multivariate Statistical Methods in Marketing
• MAR 7636: Research Methods in Marketing
• MAR 7666: Marketing Decision Models
• MAR 7786: Marketing Literature
• MAR 7925: Workshop in Marketing Research
• MAR 7979: Advanced Research
• MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses
Business Administration (Finance, Insurance, and Real Estate)

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Business Administration (Finance, Insurance, and Real Estate) Program Information

The Ph.D. in Business Administration - Finance and Real Estate program prepares students to engage in productive scholarly research and teaching in the broad area of financial and real estate economics. Graduates of this program typically are placed with major universities in the United States, although some students choose to work in research positions at non-academic institutions.

The Ph.D. program has a strong emphasis on scholarly research training. Admission requirements include (a) minimum grade point average of 3.5 in the last two years of an undergraduate program and in any previous graduate-level work, (b) minimum GRE score of 1300 or GMAT score of 600 (both verbal and quantitative scores must exceed the sixtieth percentile), and (c) (for nonnative speakers of English) a minimum score of 550 on the TOEFL. Generally students will not be admitted to the Ph.D. program unless they have been offered financial assistance by the University.

Finance

The student pursuing a concentration in finance typically specializes in corporate finance, financial markets and institutions, or investments. The Ph.D. curriculum consists of course work of four types: research foundations, the major field, a minor or supporting field, and a breadth requirement.

The research foundation requirements are comprised of courses in microeconomic theory, macroeconomic theory, mathematical methods and applications to economics, mathematical statistics, and econometrics. The actual courses will depend on the student's background and proposed thesis research.

The major field in finance consists of at least 16 credit hours in graduate course work in finance including financial theory, corporate finance, and seminars in empirical methods, market microstructure, and special topics. Students may elect to have one "strong" minor (16 credit hours), two "weak" minors (8 credit hours each), or a supporting field which is not declared as a minor. If a supporting field is chosen, at least 16 hours of course work acceptable to the student's supervisory committee must be taken. The supporting field option is selected when a student wishes to take courses across a number of departments. The department offers a combined B.S./M.S. program. Contact the graduate coordinator for information.

The breadth requirement applies only to students with no prior course work in business and consists of at least three courses from the following list (two or more fields must be represented): managers and legal environment of business, finance, money and capital markets, problems and methods of marketing management, consumer behavior, and financial and managerial accounting.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/phd-fre.

Real Estate

The research foundations are identical to those listed above for finance. The major field, minor, and supporting field requirements have the same credit stipulation as those outlined above for finance, except that the major work is in real estate.

The breadth requirement, as in all concentrations for the business administration program, applies only to students entering without prior course work in business. It consists of at least three courses from the following list (two or more fields must be represented): managers and legal environment of business, finance, money and capital markets, problems and methods of marketing management, consumer behavior, and financial and managerial accounting.

Other degree requirements are listed in the Graduate Degrees section of this catalog.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/phd-fre.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy
concentration in Finance

concentration in Insurance

concentration in Quantitative Finance

concentration in Real Estate and Urban Analysis

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6436: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
Information Systems and Operations Management Departmental Courses

- ISM5021: Information Systems in Organizations
- ISM5022: Management Information Systems
- ISM6123: Systems Analysis and Design
- ISM6128: Advanced Business Systems Design and Development I
- ISM6129: Advanced Business Systems Design and Development II
- ISM6215: Business Database Systems I
- ISM6216: Business Database Systems II
- ISM6217: Database Management Systems
- ISM6222: Business Telecom Strategy and Applications I
- ISM6223: Business Telecom Strategy and Applications II
- ISM6224: Business Telecom Strategy and Applications III
- ISM6226: Business Telecom Strategy and Applications
- ISM6236: Business Objects I
- ISM6239: Business Objects II
- ISM6257: Intermediate Business Programming
- ISM6258: Advanced Business Programming
- ISM6259: Business Programming
- ISM6405: Business Intelligence
- ISM6423: Data Analysis for Decision Support
- ISM6485: Electronic Commerce and Logistics
- ISM6486: eCommerce Technologies
- ISM6487: Risks and Controls in eCommerce
- ISM6942: Electronic Commerce Practicum
- ISM7166: Advanced Business Systems Design and Development III
- MAN5001: Management
- MAN5502: Production and Operations Management
- MAN6508: Management of Service Operations
- MAN6511: Production Management Problems
- MAN6528: Principles of Logistics/Transportation Systems
- MAN6573: Purchasing and Materials Management
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6705: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 5607: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6527: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
**Marketing Departmental Courses**

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6649: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

**Warrington College of Business Administration Courses**

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

**Business Administration (Information Systems and Operations Management)**

College
The Department of Information Systems & Operations Management offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM), the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the Graduate Degrees section of this catalog.

Doctor of Philosophy:
The mission of the Ph.D. Program is to educate scholars who will make substantial contributions in their field of research. Our primary goal is to train graduate students to make such contributions. To achieve this goal, we attempt to place students in productive academic research environments. The major areas of study within the department are Information Systems/Information Technology (IS/IT) and Operations Management (OM).

Students come from a variety of backgrounds, with the most common being engineering, computer sciences, mathematics, business, and statistics. Students admitted for the Ph.D. choose to specialize either in information systems/information technology, or in operations management. The course schedule taken by each student is always personalized to fit the background of the student and is developed in consultation with the Ph.D. program coordinator and/or chair of the dissertation committee. Additionally, doctoral students will be required to attend all ISOM Workshops and the Department Seminar Series (regardless of area of specialization) held at the University of Florida.

Admission requirements for the Ph.D. include:
- A minimum grade point average of 3.2
- A minimum GMAT score of 650, or GRE scores acceptable to the program
- For nonnative speakers of English, submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6.5), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/phd-isom](http://warrington.ufl.edu/graduate/academics/phd-isom).

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

concentration in Information Systems and Operations Management

Information Systems and Operations Management Departmental Courses
MAN 5502: Production and Operations Management
MAN 6508: Management of Service Operations
MAN 6511: Production Management Problems
MAN 6528: Principles of Logistics/Transportation Systems
MAN 6573: Purchasing and Materials Management
MAN 6575: Purchasing and Supplier Relationship Management
MAN 6581: Project Management
MAN 6586: Project Management
MAN 6598: Logistics and Distribution Management
MAN 6599: Tactical Logistics Planning
MAN 6617: International Operations/Logistics
MAN 6619: International Logistics
QMB 5303: Managerial Statistics
QMB 5304: Introduction to Managerial Statistics
QMB 5305: Advanced Managerial Statistics
QMB 6358: Statistical Analysis for Managerial Decisions I
QMB 6359: Statistical Analysis for Managerial Decisions II
QMB 6607: Decision Processes Under Uncertainty I
QMB 6616: Business Process Analysis
QMB 6693: Quality Management and Control Systems
QMB 6697: Optimization in Simulation Modeling I
QMB 6755: Managerial Quantitative Analysis I
QMB 6756: Managerial Quantitative Analysis II
QMB 6905: Individual Work in Information Systems and Operations Management
QMB 6910: Supervised Research
QMB 6930: Special Topics in Information Systems and Operations Management
QMB 6940: Supervised Teaching
QMB 6941: Internship
QMB 6957: International Studies in Quantitative Methods
QMB 6971: Research for Master's Thesis
QMB 7931: Special Topics in Information Systems and Operations Management
QMB 7933: Seminar in Information Systems and Operations Management
QMB 7937: Advanced Research
QMB 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

ACG 5005: Financial Accounting
ACG 5065: Financial and Managerial Accounting
ACG 5075: Managerial Accounting
ACG 5226: Advanced Accounting
ACG 5505: Governmental Accounting
ACG 5637: Auditing I
ACG 5647: Auditing II
ACG 5815: Accounting Regulation
ACG 6136: Accounting Theory
ACG 6175: Financial Reporting and Analysis
ACG 6207: Accounting for Risk
ACG 6265: International Accounting and Taxation
ACG 6685: Issues in Audit Practice
ACG 6685: Forensic Accounting
ACG 6691: International Auditing
ACG 6697: Information Systems Assurance
ACG 6905: Individual Work in Accounting
ACG 6935: Special Topics in Accounting
ACG 6940: Supervised Teaching
ACG 7885: Accounting Research I
ACG 7886: Accounting Research II
ACG 7887: Research Analysis in Accounting
ACG 7939: Theoretical Constructs in Accounting
ACG 7979: Advanced Research
ACG 7980: Research for Doctoral Dissertation
TAX 5005: Introduction to Federal Income Taxation
TAX 5025: Federal Income Tax 1
TAX 5027: Federal Income Tax 2
TAX 5065: Tax Professional Research
TAX 6105: Corporate Taxation
TAX 6115: Advanced Corporate Taxation
TAX 6205: Partnership Taxation
TAX 6526: International Taxation
TAX 6726: Executive Tax Planning
TAX 6877: State and Local Taxation

Economics Departmental Courses

ECO 5715: Open Economy Macroeconomics
ECO 6075: Economics/Consumer Education
ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6967: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Macroeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5706: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6416: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions II
- FIN 6518: Investment Concepts
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FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analysis
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics in Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7806: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary/Mortgage Markets and Institutions
REE 6208: Secondary/Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Management Departmental Courses

BUL 5445: Ethical Role of the Manager
BUL 5810: Legal Environment of Business
BUL 5811: Managers and Legal Environment of Business
BUL 5831: Commercial Law
BUL 5832: Commercial Law for Accountants
BUL 6440: Business Ethics and Corporation Social Responsibility
BUL 6441: Business Ethics and Corporation Social Responsibility
BUL 6516: Law of Real Estate Transactions
BUL 6652: Law and Ethics of Corporate Governance
BUL 6656: Law for Entrepreneurs
BUL 6821: Cyberlaw and Ethics
BUL 6841: Employment Law
BUL 6851: International Business Law
BUL 6852: International Business Law
BUL 6891: Legal Aspects of Technology Management
BUL 6906: Individual Work
BUL 6930: Special Topics
ENT 6706: Global Entrepreneurship
MAN 5141: Leadership Skills
MAN 5245: Organizational Behavior
MAN 5246: Organizational Behavior
MAN 5265: Managing Groups and Teams
MAN 6107: Motivation in Organizational Setting
MAN 6128: Management Skills and Personality Development
MAN 6149: Developing Leadership Skills
MAN 6257: Power and Politics in Organizations
MAN 6266: Managing Groups and Teams in Organizations
MAN 6286: Managing Strategic Processes and Change in Organizations
MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management
MAN 6331: Compensation in Organizations
MAN 6351: Training and Development in Organizations
MAN 6365: Organizational Staffing
MAN 6366: Organizational Staffing
MAN 6385: Strategic Human Resource Management
MAN 6446: Negotiations
MAN 6447: Art and Science of Negotiation
MAN 6537: Managing Technology in Organizations
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6671: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

MAR 5805: Problems and Methods in Marketing Management
MAR 5806: Problems and Methods in Marketing Management
MAR 6157: International Marketing
MAR 6158: International Marketing
MAR 6237: The Art and Science of Pricing
MAR 6256: Strategy and Tactics of Pricing
MAR 6335: Building and Managing Brand Equity
MAR 6456: Business-to-Business Marketing
MAR 6508: Customer Analysis
MAR 6646: Marketing Research for Managerial Decision Making
MAR 6648: Marketing Research for Managerial Decision Making
MAR 6722: Web-Based Marketing
MAR 6725: Introduction to Electronic Commerce
MAR 6816: Advanced Marketing Management (MBA)
MAR 6818: Advanced Marketing Management
MAR 6833: Product Development and Management
MAR 6834: Marketing of Science and Technology
MAR 6835: Marketing of Science and Technology
MAR 6837: Consumer-Centered Product Design
MAR 6861: Customer Relationship Management
MAR 6862: Customer Relationship Management
MAR 6905: Individual Work
MAR 6910: Supervised Research
MAR 6930: Special Topics in Marketing
MAR 6940: Supervised Teaching
MAR 6957: International Studies in Marketing
MAR 6971: Research for Master's Thesis
MAR 6973: Project in Lieu of Thesis
MAR 7507: Perspectives on Consumer Behavior
MAR 7588: Consumer Information Processing and Decision Making
MAR 7589: Judgment and Decision Making
MAR 7626: Multivariate Statistical Methods in Marketing
MAR 7636: Research Methods in Marketing
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Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Business Administration (M.A.)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Master of Arts

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5847: Auditing II
- ACG 615: Accounting Regulation
- ACG 6126: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6355: Issues in Audit Practice
- ACG 6885: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7855: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6896: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and The Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics in Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7936: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
• ISM6215: Business Database Systems I
• ISM6216: Business Database Systems II
• ISM6217: Database Management Systems
• ISM6222: Business Telecom Strategy and Applications I
• ISM6223: Business Telecom Strategy and Applications II
• ISM6224: Business Telecom Strategy and Applications III
• ISM6226: Business Telecom Strategy and Applications
• ISM6236: Business Objects I
• ISM6239: Business Objects II
• ISM6257: Intermediate Business Programming
• ISM6258: Advanced Business Programming
• ISM6259: Business Programming
• ISM6405: Business Intelligence
• ISM6423: Data Analysis for Decision Support
• ISM6485: Electronic Commerce and Logistics
• ISM6486: eCommerce Technologies
• ISM6487: Risks and Controls in eCommerce
• ISM6942: Electronic Commerce Practicum
• ISM7166: Advanced Business Systems Design and Development III
• MAN 5501: Management
• MAN 5502: Production and Operations Management
• MAN 6508: Management of Service Operations
• MAN 6511: Production Management Problems
• MAN 6528: Principles of Logistics/Transportation Systems
• MAN 6573: Purchasing and Materials Management
• MAN 6575: Purchasing and Supplier Relationship Management
• MAN 6581: Project Management
• MAN 6586: Project Management
• MAN 6598: Logistics and Distribution Management
• MAN 6599: Tactical Logistics Planning
• MAN 6617: International Operations/Legislation
• MAN 6619: International Logistics
• QMB 5303: Managerial Statistics
• QMB 5304: Introduction to Managerial Statistics
• QMB 5305: Advanced Managerial Statistics
• QMB 6358: Statistical Analysis for Managerial Decisions I
• QMB 6359: Statistical Analysis for Managerial Decisions II
• QMB 6607: Decision Processes Under Uncertainty I
• QMB 6616: Business Process Analysis
• QMB 6693: Quality Management and Control Systems
• QMB 6697: Optimization in Simulation Modeling I
• QMB 6755: Managerial Quantitative Analysis I
• QMB 6756: Managerial Quantitative Analysis II
• QMB 6905: Individual Work in Information Systems and Operations Management
• QMB 6910: Supervised Research
• QMB 6930: Special Topics in Information Systems and Operations Management
• QMB 6940: Supervised Teaching
• QMB 6941: Internship
• QMB 6957: International Studies in Quantitative Methods
• QMB 6971: Research for Master's Thesis
• QMB 7931: Special Topics in Information Systems and Operations Management
• QMB 7933: Seminar in Information Systems and Operations Management
• QMB 7979: Advanced Research
• QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

• BUL 5445: Ethical Role of the Manager
• BUL 5810: Legal Environment of Business
• BUL 5811: Managers and Legal Environment of Business
• BUL 5831: Commercial Law
• BUL 5832: Commercial Law for Accountants
• BUL 6440: Business Ethics and Corporation Social Responsibility
• BUL 6441: Business Ethics and Corporate Social Responsibility
• BUL 6516: Law of Real Estate Transactions
• BUL 6652: Law and Ethics of Corporate Governance
• BUL 6656: Law for Entrepreneurs
• BUL 6821: Cyberlaw and Ethics
• BUL 6841: Employment Law
• BUL 6851: International Business Law
• BUL 6852: International Business Law
• BUL 6891: Legal Aspects of Technology Management
• BUL 6905: Individual Work
• BUL 6930: Special Topics
• ENT 6706: Global Entrepreneurship
• MAN 5141: Leadership Skills
• MAN 5245: Organizational Behavior
• MAN 5246: Organizational Behavior
• MAN 5265: Managing Groups and Teams
• MAN 6107: Motivation in Organizational Setting
• MAN 6128: Management Skills and Personal Development
• MAN 6149: Developing Leadership Skills
• MAN 6257: Power and Politics in Organizations
• MAN 6266: Managing Groups and Teams in Organizations
• MAN 6286: Managing Strategic Processes and Change in Organizations
• MAN 6296: Designing Effective Organizations
• MAN 6321: Human Resource Management
• MAN 6331: Compensation in Organizations
• MAN 6351: Training and Development in Organizations
• MAN 6365: Organizational Staffing
• MAN 6366: Organizational Staffing
• MAN 6385: Strategic Human Resource Management
• MAN 6446: Negotiations
• MAN 6447: Art and Science of Negotiation
• MAN 6537: Managing Technology in Organizations
• MAN 6627: Cross Cultural Negotiation
• MAN 6635: International Aspects of Human Resource Management
• MAN 6636: Global Strategic Management
• MAN 6637: Global Strategic Management
• MAN 6721: Business Policy
• MAN 6724: Strategic Management
• MAN 6905: Individual Work in Management
• MAN 6910: Supervised Research
• MAN 6930: Special Topics
• MAN 6940: Supervised Teaching
• MAN 6957: International Studies in Management
• MAN 6958: International Study Program
• MAN 6973: Project in Lieu of Thesis
• MAN 7108: Seminar in Research Concepts and Methods in Management
• MAN 7109: Seminar in Motivation and Attitudes
• MAN 7146: Seminar in Leadership
• MAN 7207: Seminar on Foundations of Organizational Theory
• MAN 7208: Seminar in Contemporary Approaches to Organizations
• MAN 7267: Seminar on Groups and Teams Research
• MAN 7275: Organizational Behavior
• MAN 7328: Seminar on Staffing and Selection
• MAN 7778: Seminar in Strategic Adaptation to Environment
• MAN 7779: Strategic Processes and Structure in Organizations
• MAN 7933: Seminar in Management
• MAN 7979: Advanced Research
• MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Customer Analysis
• MAR 6646: Marketing Research for Managerial Decision Making
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6725: Introduction to Electronic Commerce
• MAR 6816: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6833: Product Development and Management
• MAR 6834: Marketing of Science and Technology
• MAR 6835: Marketing of Science and Technology
• MAR 6837: Consumer-Centered Product Design
• MAR 6861: Customer Relationship Management
• MAR 6862: Customer Relationship Management
• MAR 6905: Individual Work
• MAR 6910: Supervised Research
• MAR 6930: Special Topics in Marketing
• MAR 6940: Supervised Teaching
• MAR 6957: International Studies in Marketing
• MAR 6971: Research for Master's Thesis
• MAR 6973: Project in Lieu of Thesis
• MAR 7507: Perspectives on Consumer Behavior
• MAR 7588: Consumer Information Processing and Decision Making
• MAR 7589: Judgment and Decision Making
• MAR 7626: Multivariate Statistical Methods in Marketing
• MAR 7636: Research Methods in Marketing
• MAR 7866: Marketing Decision Models
• MAR 7786: Marketing Literature
• MAR 7925: Workshop in Marketing Research
• MAR 7979: Advanced Research
• MAR 7980: Research for Doctoral Dissertation
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Business Administration (M.B.A)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Master of Business Administration

General

concentration in Competitive Strategy

concentration in Entrepreneurship

concentration in Finance

concentration in Global Management

concentration in Graham-Buffett Security Analysis

concentration in Human Resource Management

concentration in Information Systems and Operations Management
concentration in International Studies

concentration in Latin American Business

concentration in Management

concentration in Marketing

concentration in Real Estate

concentration in Sports Administration

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6897: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7997: Research Analysis in Accounting
- ACG 7998: Theoretical Constructs in Accounting
- ACG 7999: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy/ Macroeconomics
- ECO 6075: Economics/ Consumer Education
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6906: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6108: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6936: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
ISM 6223: Business Telecom Strategy and Applications II
ISM 6224: Business Telecom Strategy and Applications III
ISM 6226: Business Telecom Strategy and Applications
ISM 6236: Business Objects
ISM 6239: Business Objects II
ISM 6257: Intermediate Business Programming
ISM 6258: Advanced Business Programming
- ISM6259: Business Programming
- ISM6405: Business Intelligence
- ISM6423: Data Analysis for Decision Support
- ISM6485: Electronic Commerce and Logistics
- ISM6486: eCommerce Technologies
- ISM6487: Risks and Controls in eCommerce
- ISM6942: Electronic Commerce Practicum
- ISM7166: Advanced Business Systems Design and Development III

- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6586: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7990: Research for Doctoral Dissertation

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6681: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6126: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
MAN 6447: Art and Science of Negotiation
MAN 6537: Managing Technology in Organizations
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6958: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

MAR 5805: Problems and Methods in Marketing Management
MAR 5806: Problems and Methods in Marketing Management
MAR 6157: International Marketing
MAR 6158: International Marketing
MAR 6237: The Art and Science of Pricing
MAR 6256: Strategy and Tactics of Pricing
MAR 6335: Building and Managing Brand Equity
MAR 6456: Business-to-Business Marketing
MAR 6508: Customer Analysis
MAR 6646: Marketing Research for Managerial Decision Making
MAR 6648: Marketing Research for Managerial Decision Making
MAR 6722: Web-Based Marketing
MAR 6725: Introduction to Electronic Commerce
MAR 6816: Advanced Marketing Management (MBA)
MAR 6818: Advanced Marketing Management
MAR 6833: Product Development and Management
MAR 6834: Marketing of Science and Technology
MAR 6835: Marketing of Science and Technology
MAR 6837: Consumer-Centered Product Design
MAR 6861: Customer Relationship Management
MAR 6862: Customer Relationship Management
MAR 6905: Individual Work
MAR 6910: Supervised Research
MAR 6930: Special Topics in Marketing
MAR 6940: Supervised Teaching
MAR 6957: International Studies in Marketing
MAR 6971: Research for Master's Thesis
MAR 6973: Project in Lieu of Thesis
MAR 7507: Perspectives on Consumer Behavior
MAR 7588: Consumer Information Processing and Decision Making
MAR 7589: Judgment and Decision Making
MAR 7626: Multivariate Statistical Methods in Marketing
MAR 7636: Research Methods in Marketing
MAR 7866: Marketing Decision Models
MAR 7786: Marketing Literature
MAR 7925: Workshop in Marketing Research
MAR 7979: Advanced Research
MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

GEB 5212: Professional Writing in Business
GEB 5215: Professional Communication in Business
GEB 5217: Executive Communication
GEB 5225: Advanced Business Writing
GEB 5929: Foundations Review
GEB 6229: Professional Communication for Accountants
GEB 6365: International Business
Business Administration (M.S.)

College

Warrington College of Business Administration

Degrees Offered with a Major in Business Administration

Master of Science

without a concentration

concentration in Retailing

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6130: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6686: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information System Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses
• ECO 5715: Open Economy Macroeconomics
• ECO 6075: Economics/Consumer Education
• ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
• ECO 6409: Game Theory Applied to Business Decisions
• ECO 6716: International Macroeconomics
• ECO 6906: Individual Work in Economics
• ECO 6910: Supervised Research
• ECO 6936: Special Topics
• ECO 6940: Supervised Teaching
• ECO 6957: International Studies in Economics
• ECO 6971: Research for Master's Thesis
• ECO 7113: Information Economics
• ECO 7115: Microeconomic Theory
• ECO 7118: Markets and Institutions
• ECO 7119: Information, Incentives, and Agency Theory
• ECO 7120: General Equilibrium and Welfare Economics
• ECO 7206: Macroeconomic Theory I
• ECO 7272: Economic Growth I
• ECO 7404: Game Theory for Economists
• ECO 7406: Mathematical Economics: Game Theory
• ECO 7408: Dynamic Economics: Theory and Applications
• ECO 7409: Mathematical Methods and Applications to Economics
• ECO 7415: Statistical Methods in Economics
• ECO 7424: Econometric Models and Methods
• ECO 7426: Econometric Methods I
• ECO 7427: Econometric Methods II
• ECO 7452: Best Empirical Practices in Economics
• ECO 7516: Tax Theory and Public Policy
• ECO 7525: Welfare Economics and The Second Best
• ECO 7534: Empirical Public Economics I
• ECO 7535: Empirical Public Economics II
• ECO 7536: Theoretical Public Economics
• ECO 7706: Theory of International Trade
• ECO 7707: International Economic Relations
• ECO 7925: Research Skills Workshop
• ECO 7938: Advanced Economics Seminar
• ECO 7979: Advanced Research
• ECO 7980: Research for Doctoral Dissertation
• ECP 5415: Antitrust Policy and Managerial Decisions
• ECP 5702: Managerial Economics
• ECP 5705: Economics of Business Decisions
• ECP 6417: Public Policy and Social Control
• ECP 6701: Competitive Strategies in Expanding Markets
• ECP 6708: Cases in Competitive Strategy
• ECP 6407: Economics for Managing Information for Electronic Commerce
• ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
• ECP 7408: Empirical Industrial Organization
• ECP 7418: Economics of Regulation
• ECP 7419: Current Research in Regulation
• HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

• ENT 5275: Family Business Management
• ENT 6006: Entrepreneurship
• ENT 6008: Entrepreneurial Opportunity
• ENT 6016: Venture Analysis
• ENT 6116: Business Plan Formation
• ENT 6416: Venture Finance
• ENT 6506: Social Entrepreneurship
• ENT 6616: Creativity in Entrepreneurship
• ENT 6905: Individual Work in Entrepreneurship
• ENT 6930: Special Topics
• ENT 6933: Entrepreneurship Lecture Series
• ENT 6946: Entrepreneurial Consulting Project
• ENT 6950: Integrated Technology Ventures
• ENT 6957: International Studies in Entrepreneurship
• FIN 5405: Business Financial Management
• FIN 5437: Finance I: Asset Valuation, Risk, and Return
• FIN 5439: Finance II: Capital Structure and Risk Management Issues
• FIN 6108: Personal Financial Management
• FIN 6246: Money and Capital Markets
• FIN 6296: Capitalism
• FIN 6306: Investment Banking
• FIN 6416: International Cash Flow Management
• FIN 6425: Corporate Finance
• FIN 6427: Measuring and Managing Value
• FIN 6429: Financial Decision Making
• FIN 6432: Asset Valuation and Corporate Finance
• FIN 6434: Private Equity
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<tbody>
<tr>
<td>FIN 6438</td>
<td>Study in Valuation</td>
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<tr>
<td>FIN 6465</td>
<td>Financial Statement Analysis</td>
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<td>FIN 6477</td>
<td>Entrepreneurial Finance</td>
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<td>FIN 6489</td>
<td>Financial Risk Management</td>
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<td>FIN 6496</td>
<td>Mergers &amp; Acquisitions</td>
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<td>FIN 6518</td>
<td>Investment Concepts</td>
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<td>Asset Management Project</td>
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<td>FIN 6575</td>
<td>Emerging Markets Finance I</td>
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<td>Emerging Markets Finance II</td>
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<td>Securities Trading</td>
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<td>FIN 6595</td>
<td>Investment Analytics</td>
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<tr>
<td>FIN 6596</td>
<td>Introduction to Computational Methods &amp; Derivative Pricing</td>
</tr>
<tr>
<td>FIN 6608</td>
<td>Financial Management of the Multinational Corporation</td>
</tr>
<tr>
<td>FIN 6626</td>
<td>International Finance</td>
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<tr>
<td>FIN 6638</td>
<td>International Finance</td>
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<tr>
<td>FIN 6643</td>
<td>Project Analysis in a Global Environment</td>
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<tr>
<td>FIN 6727</td>
<td>Economic Organizations and Markets</td>
</tr>
<tr>
<td>FIN 6728</td>
<td>Capitalism and Regulation</td>
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<tr>
<td>FIN 6729</td>
<td>Economics Organizations and Markets</td>
</tr>
<tr>
<td>FIN 6785</td>
<td>Investment Banking and Corporate Financial Modeling I</td>
</tr>
<tr>
<td>FIN 6786</td>
<td>Investment Banking and Corporate Financial Modeling II</td>
</tr>
<tr>
<td>FIN 6905</td>
<td>Individual Work in Finance</td>
</tr>
<tr>
<td>FIN 6930</td>
<td>Special Topics in Finance</td>
</tr>
<tr>
<td>FIN 6935</td>
<td>Finance Professional Speaker Series</td>
</tr>
<tr>
<td>FIN 6936</td>
<td>Special Topics In Investment Finance</td>
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<tr>
<td>FIN 6940</td>
<td>Supervised Teaching</td>
</tr>
<tr>
<td>FIN 6957</td>
<td>International Studies in Finance</td>
</tr>
<tr>
<td>FIN 6958</td>
<td>International Finance Study Tour</td>
</tr>
<tr>
<td>FIN 6971</td>
<td>Research for Master's Thesis</td>
</tr>
<tr>
<td>FIN 7446</td>
<td>Financial Theory I</td>
</tr>
<tr>
<td>FIN 7447</td>
<td>Financial Theory II</td>
</tr>
<tr>
<td>FIN 7806</td>
<td>Corporate Finance</td>
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<td>FIN 7809</td>
<td>Investments</td>
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<tr>
<td>FIN 7848</td>
<td>Marketing Microstructure</td>
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<tr>
<td>FIN 7938</td>
<td>Finance Research Workshop</td>
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<tr>
<td>FIN 7979</td>
<td>Advanced Research</td>
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<tr>
<td>FIN 7980</td>
<td>Research for Doctoral Dissertation</td>
</tr>
<tr>
<td>GEB 5114</td>
<td>Entrepreneurship and Venture Finance</td>
</tr>
<tr>
<td>GEB 5118</td>
<td>New Venture Creation</td>
</tr>
<tr>
<td>GEB 6157</td>
<td>Entrepreneurship Experiential Learning Project</td>
</tr>
<tr>
<td>GEB 6366</td>
<td>Fundamentals of International Business</td>
</tr>
<tr>
<td>GEB 6924</td>
<td>Entrepreneurship Professional Speaker Series</td>
</tr>
<tr>
<td>REE 6045</td>
<td>Introduction to Real Estate</td>
</tr>
<tr>
<td>REE 6058</td>
<td>Construction Considerations in Real Estate</td>
</tr>
<tr>
<td>REE 6105</td>
<td>Real Estate Appraisal</td>
</tr>
<tr>
<td>REE 6206</td>
<td>Primary Mortgage Markets and Institutions</td>
</tr>
<tr>
<td>REE 6208</td>
<td>Secondary Mortgage Markets and Securitization</td>
</tr>
<tr>
<td>REE 6315</td>
<td>Real Estate Market and Transaction Analysis</td>
</tr>
<tr>
<td>REE 6395</td>
<td>Investment Property Analysis</td>
</tr>
<tr>
<td>REE 6397</td>
<td>Real Estate Securities and Portfolios</td>
</tr>
<tr>
<td>REE 6705</td>
<td>Geographic Information Systems and Location Analysis</td>
</tr>
<tr>
<td>REE 6737</td>
<td>Real Estate Development</td>
</tr>
<tr>
<td>REE 6905</td>
<td>Individual Work in Real Estate</td>
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<tr>
<td>REE 6910</td>
<td>Supervised Research</td>
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<tr>
<td>REE 6930</td>
<td>Special Topics in Real Estate</td>
</tr>
<tr>
<td>REE 6935</td>
<td>Real Estate Case Studies</td>
</tr>
<tr>
<td>REE 6940</td>
<td>Supervised Teaching</td>
</tr>
<tr>
<td>REE 6948</td>
<td>Capstone Seminar and Applied Project</td>
</tr>
<tr>
<td>REE 6957</td>
<td>International Studies in Real Estate</td>
</tr>
<tr>
<td>REE 7979</td>
<td>Advanced Research</td>
</tr>
<tr>
<td>REE 7980</td>
<td>Research for Doctoral Dissertation</td>
</tr>
</tbody>
</table>

Information Systems and Operations Management Departmental Courses

- **ISM 5021**: Information Systems in Organizations
- **ISM 6022**: Management Information Systems
- **ISM 6123**: Systems Analysis and Design
- **ISM 6128**: Advanced Business Systems Design and Development I
- **ISM 6129**: Advanced Business Systems Design and Development II
- **ISM 6215**: Business Database Systems I
- **ISM 6216**: Business Database Systems II
- **ISM 6217**: Database Management Systems
- **ISM 6222**: Business Telecor Strategy and Applications I
- **ISM 6223**: Business Telecor Strategy and Applications II
- **ISM 6224**: Business Telecor Strategy and Applications III
- **ISM 6226**: Business Telecor Strategy and Applications
ISM 6236: Business Objects I
ISM 6239: Business Objects II
ISM 6257: Intermediate Business Programming
ISM 6258: Advanced Business Programming
ISM 6259: Business Programming
ISM 6405: Business Intelligence
ISM 6423: Data Analysis for Decision Support
ISM 6485: Electronic Commerce and Logistics
ISM 6486: eCommerce Technologies
ISM 6487: Risks and Controls in eCommerce
ISM 6942: Electronic Commerce Practicum
ISM 7166: Advanced Business Systems Design and Development III
MAN 5501: Management
MAN 5502: Production and Operations Management
MAN 6508: Management of Service Operations
MAN 6511: Production Management Problems
MAN 6528: Principles of Logistics/Transportation Systems
MAN 6573: Purchasing and Materials Management
MAN 6575: Purchasing and Supplier Relationship Management
MAN 6581: Project Management
MAN 6586: Project Management
MAN 6598: Logistics and Distribution Management
MAN 6599: Tactical Logistics Planning
MAN 6617: International Operations/Logistics
MAN 6619: International Logistics
QMB 5303: Managerial Statistics
QMB 5304: Introduction to Managerial Statistics
QMB 5305: Advanced Managerial Statistics
QMB 6358: Statistical Analysis for Managerial Decisions I
QMB 6359: Statistical Analysis for Managerial Decisions II
QMB 6607: Decision Processes Under Uncertainty I
QMB 6616: Business Process Analysis
QMB 6693: Quality Management and Control Systems
QMB 6697: Optimization in Simulation Modeling I
QMB 6755: Managerial Quantitative Analysis I
QMB 6756: Managerial Quantitative Analysis II
QMB 6905: Individual Work in Information Systems and Operations Management
QMB 6910: Supervised Research
QMB 6930: Special Topics in Information Systems and Operations Management
QMB 6940: Supervised Teaching
QMB 6941: Internship
QMB 6957: International Studies in Quantitative Methods
QMB 6971: Research for Master's Thesis
QMB 7931: Special Topics in Information Systems and Operations Management
QMB 7933: Seminar in Information Systems and Operations Management
QMB 7979: Advanced Research
QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

BUL 5445: Ethical Role of the Manager
BUL 5810: Legal Environment of Business
BUL 5811: Managers and Legal Environment of Business
BUL 5831: Commercial Law
BUL 5832: Commercial Law for Accountants
BUL 6440: Business Ethics and Corporation Social Responsibility
BUL 6441: Business Ethics and Corporate Social Responsibility
BUL 6516: Law of Real Estate Transactions
BUL 6652: Law and Ethics of Corporate Governance
BUL 6656: Law for Entrepreneurs
BUL 6821: Cyberlaw and Ethics
BUL 6841: Employment Law
BUL 6851: International Business Law
BUL 6852: International Business Law
BUL 6891: Legal Aspects of Technology Management
BUL 6905: Individual Work
BUL 6930: Special Topics
ENT 6706: Global Entrepreneurship
MAN 5141: Leadership Skills
MAN 5245: Organizational Behavior
MAN 5246: Organizational Behavior
MAN 5265: Managing Groups and Teams
MAN 6107: Motivation in Organizational Setting
MAN 6128: Management Skills and Personal Development
MAN 6149: Developing Leadership Skills
MAN 6257: Power and Politics in Organizations
MAN 6266: Managing Groups and Teams in Organizations
MAN 6286: Managing Strategic Processes and Change in Organizations
MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management
MAN 6331: Compensation in Organizations
MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6236: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
Business Administration (Management)

College

Warrington College of Business Administration

Department/School

Management Department

Business Administration (Management) Program Information

Doctor of Philosophy

The Ph.D. program in business administration in the Department of Management prepares students for careers as faculty members of universities that emphasize teaching and research. The program is designed so that the student will (1) develop strong competence in the base discipline crucial to the study of organizations and organization processes and (2) follow a field of specialization in organizational behavior, organizational theory, human resource management, and strategic studies. Admission requirements for the Ph.D. include (a) a minimum grade point average of 3.0, (b) a minimum GRE score of 1000, and (c) for nonnative speakers of English, a minimum score of 550 on the TOEFL.

The research interests of the faculty are quite broad. For example, work is being done on defining the domain of performance in organizations, employee selection, performance appraisal, goal setting and incentives, aging, dispositions and job satisfaction, corporate governance, health care, innovation processes, organizational control and executive compensation practices, agency theory, and organizational processes. Faculty often work on interdisciplinary projects with other departments.

In addition, the student has exposure to scholars and faculty members from other universities, and from other departments in the University, who are invited to give workshops in the Department.

Breadth Requirement: All students pursuing the Ph.D. are expected to be well versed in the structure and functioning of business organizations and the environment within which they operate. This requirement may be met through undergraduate or master's level work in business administration. The student who does not meet the breadth requirement before entering the Ph.D. program must take at least three graduate courses in different functional areas in the Warrington College of Business Administration but outside of the Department of Management. These courses should complement the major area of study selected by the student.

Research Skills Requirement: The general nature of the research requirement has been specified by the Graduate Committee of the Warrington College of Business. Students must take six approved courses to satisfy it. For the typical student in the Department of Management, the research foundation courses include at least 18 credits in courses such as philosophy of social science (e.g., PHI 5425 or PHI 5405), basic statistical methods (e.g., STA 6126), research methods (e.g., MAR 7786, EDF 7932), or PPE 6308), psychometrics (e.g., EDF 6436, EDF 7439), multivariate analysis (EDF 7932), experimental design (MAR 7622), field research methods (POS 6757), and qualitative research (EDF 6475, SYA 6315). The specific program is determined by the student's supervisory committee and will be tailored to fit the student's prior preparation and the specialization that the student chooses.

Major Course Requirements: The program of study for each student will include required seminars in Organizational Behavior, Organizational Theory, Strategic Management, and Human Resource Management Research, and the Management Workshop.

Specialization Requirements: Each student selects a specialization area. Courses must provide the depth of knowledge required to teach and conduct research successfully in the area of specialization. This part of the program will be developed by the supervisory committee in conjunction with the student. The specialization courses are primarily offered within the Department of Management, although it is quite common for students to take courses in related disciplines, such as Marketing, Finance, Economics, Psychology, Statistics, and Decision and Information Systems. Procedures for the qualifying examinations, dissertation, and final examination are given in the Requirements for the PhD. section of this catalog.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/phd-mgt.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

concentration in Management
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6897: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7207: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
- ECO 7427: Econometric Methods II
- ECO 7452: Best Empirical Practices in Economics
- ECO 7516: Tax Theory and Public Policy
- ECO 7525: Welfare Economics and the Second Best
- ECO 7534: Empirical Public Economics I
- ECO 7535: Empirical Public Economics II
- ECO 7536: Theoretical Public Economics
- ECO 7706: Theory of International Trade
- ECO 7707: International Economic Relations
- ECO 7925: Research Skills Workshop
- ECO 7938: Advanced Economics Seminar
- ECO 7979: Advanced Research
- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6807: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses
Information Systems and Operations Management Departmental Courses

- ISM5021: Information Systems in Organizations
- ISM6022: Management Information Systems
- ISM6123: Systems Analysis and Design
- ISM6128: Advanced Business Systems Design and Development I
- ISM6129: Advanced Business Systems Design and Development II
- ISM6215: Business Database Systems I
- ISM6216: Business Database Systems II
- ISM6217: Database Management Systems
- ISM6222: Business Telecom Strategy and Applications I
- ISM6223: Business Telecom Strategy and Applications II
- ISM6224: Business Telecom Strategy and Applications III
- ISM6226: Business Telecom Strategy and Applications
- ISM6236: Business Objects I
- ISM6239: Business Objects II
- ISM6257: Intermediate Business Programming
- ISM6258: Advanced Business Programming
- ISM6259: Business Programming
- ISM6405: Business Intelligence
- ISM6423: Data Analysis for Decision Support
- ISM6485: Electronic Commerce and Logistics
- ISM6486: eCommerce Technologies
- ISM6487: Risks and Controls in eCommerce
- ISM6942: Electronic Commerce Practicum
- ISM7166: Advanced Business Systems Design and Development III
- MAN5501: Management
- MAN5502: Production and Operations Management
- MAN6508: Management of Service Operations
- MAN6511: Production Management Problems
- MAN6528: Principles of Logistics/Transportation Systems
- MAN6573: Purchasing and Materials Management
- MAN6575: Purchasing and Supplier Relationship Management
- MAN6581: Project Management
- MAN6586: Project Management
- MAN6598: Logistics and Distribution Management
- MAN6599: Tactical Logistics Planning
- MAN6617: International Operations/Logistics
- MAN6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6359: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty I
- QMB 6616: Business Process Analysis
- QMB 6693: Quality Management and Control Systems
- QMB 6697: Optimization in Simulation Modeling I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II
- QMB 6905: Individual Work in Information Systems and Operations Management
- QMB 6910: Supervised Research
- QMB 6930: Special Topics in Information Systems and Operations Management
- QMB 6940: Supervised Teaching
- QMB 6941: Internship
- QMB 6957: International Studies in Quantitative Methods
- QMB 6971: Research for Master's Thesis
- QMB 7931: Special Topics in Information Systems and Operations Management
- QMB 7933: Seminar in Information Systems and Operations Management
- QMB 7979: Advanced Research
- QMB 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
The Art and Science of Pricing
MAR 6237: The Art and Science of Pricing
MAR 6256: Strategy and Tactics of Pricing
MAR 6335: Building and Managing Brand Equity
MAR 6456: Business-to-Business Marketing
MAR 6508: Customer Analysis
MAR 6646: Marketing Research for Managerial Decision Making
MAR 6648: Marketing Research for Managerial Decision Making
MAR 6722: Web-Based Marketing
MAR 6725: Introduction to Electronic Commerce
MAR 6816: Advanced Marketing Management (MBA)
MAR 6818: Advanced Marketing Management
MAR 6833: Product Development and Management
MAR 6834: Marketing of Science and Technology
MAR 6835: Marketing of Science and Technology
MAR 6837: Consumer-Centered Product Design
MAR 6861: Customer Relationship Management
MAR 6862: Customer Relationship Management
MAR 6905: Individual Work
MAR 6910: Supervised Research
MAR 6930: Special Topics in Marketing
MAR 6940: Supervised Teaching
MAR 6967: International Studies in Marketing
MAR 6971: Research for Master's Thesis
MAR 6973: Project in Lieu of Thesis
MAR 7507: Perspectives on Consumer Behavior
MAR 7588: Consumer Information Processing and Decision Making
MAR 7589: Judgment and Decision Making
MAR 7626: Multivariate Statistical Methods in Marketing
MAR 7636: Research Methods in Marketing
MAR 7666: Marketing Decision Models
MAR 7786: Marketing Literature
MAR 7925: Workshop in Marketing Research
MAR 7979: Advanced Research
MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Business Administration (Marketing - Master's)

College

Warrington College of Business Administration

Department/School

Marketing Department

Business Administration (Marketing - Master's)

The Masters of Business Administration (M.B.A) with a concentration in marketing focuses on consumer behavior, marketing management, and marketplace phenomenon. Students study the critical linkages between an organization and its environment, particularly customers and competitors.

The M.S. degree in Business Administration with a concentration in marketing is intended for students whose ultimate objective is to earn a Ph.D. in marketing at another institution. Applicants must have (a) an undergraduate degree from a nationally accredited program, (b) a minimum 3.5 undergraduate GPA, (c) a minimum 600 GMAT (1250 GRE), and (d) evidence of a strong interest in academic research in marketing. The concentration requires 30 credits of graduate-level courses, at least half of which must be in marketing.

Degrees Offered with a Major in Business Administration
Master of Arts

concentration in Marketing

Master of Science

concentration in Marketing

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6649: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
Business Administration (Marketing - Ph.D.)

College

Warrington College of Business Administration

Department/School

Marketing Department

Business Administration (Marketing - Ph.D.)

The doctoral program is research-focused and offers the opportunity for concentrated study in consumer behavior, marketing management, and quantitative or analytical modeling of marketplace phenomena.

The Ph.D. curriculum consists of course work in three areas: research foundations, the major field, and electives. In addition, students are required to complete a first-year summer research project, a third-year review paper, and a dissertation. Other requirements are outlined in the Graduate Degrees section of this catalog.

The research foundations requirement comprises a set of research methods and data analysis courses chosen from statistics, psychology, and/or economics. The major field course work is made up of a set of four required marketing seminars that are completed during the student's first 2 years in the program. Electives are selected from both advanced marketing seminars and other related disciplines to complement the student's research program.

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

concentration in Marketing

Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6818: Advanced Marketing Management (MBA)
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6891: International Auditing
- ACG 6897: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax 1
- TAX 5027: Federal Income Tax 2
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
- TAX 6205: Partnership Taxation
- TAX 6526: International Taxation
- TAX 6726: Executive Tax Planning
- TAX 6877: State and Local Taxation

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Macroeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
ECO 7426: Econometric Methods I
ECO 7427: Econometric Methods II
ECO 7452: Best Empirical Practices in Economics
ECO 7516: Tax Theory and Public Policy
ECO 7525: Welfare Economics and The Second Best
ECO 7534: Empirical Public Economics I
ECO 7535: Empirical Public Economics II
ECO 7536: Theoretical Public Economics
ECO 7706: Theory of International Trade
ECO 7707: International Economic Relations
ECO 7925: Research Skills Workshop
ECO 7938: Advanced Economics Seminar
ECO 7979: Advanced Research
ECO 7980: Research for Doctoral Dissertation
ECP 5415: Antitrust Policy and Managerial Decisions
ECP 5702: Managerial Economics
ECP 5705: Economics of Business Decisions
ECP 6417: Public Policy and Social Control
ECP 6701: Competitive Strategies in Expanding Markets
ECP 6708: Cases in Competitive Strategy
ECP 6807: Economics for Managing Information for Electronic Commerce
ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
ECP 7408: Empirical Industrial Organization
ECP 7418: Economics of Regulation
ECP 7419: Current Research in Regulation
HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

ENT 5275: Family Business Management
ENT 6006: Entrepreneurship
ENT 6008: Entrepreneurial Opportunity
ENT 6016: Venture Analysis
ENT 6116: Business Plan Formation
ENT 6416: Venture Finance
ENT 6506: Social Entrepreneurship
ENT 6616: Creativity in Entrepreneurship
ENT 6905: Individual Work in Entrepreneurship
ENT 6930: Special Topics
ENT 6933: Entrepreneurship Lecture Series
ENT 6946: Entrepreneurial Consulting Project
ENT 6950: Integrated Technology Ventures
ENT 6957: International Studies in Entrepreneurship
FIN 5405: Business Financial Management
FIN 5437: Finance I: Asset Valuation, Risk, and Return
FIN 5439: Finance II: Capital Structure and Risk Management Issues
FIN 6108: Personal Financial Management
FIN 6246: Money and Capital Markets
FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6435: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6608: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7806: Corporate Finance
FIN 7809: Investments
FIN 7848: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6058: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary/Mortgage Markets and Institutions
REE 6208: Secondary/Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
ISM 6223: Business Telecom Strategy and Applications II
ISM 6224: Business Telecom Strategy and Applications III
ISM 6226: Business Telecom Strategy and Applications
ISM 6236: Business Objects I
ISM 6239: Business Objects II
ISM 6257: Intermediate Business Programming
ISM 6258: Advanced Business Programming
ISM 6259: Business Programming
ISM 6405: Business Intelligence
ISM 6423: Data Analysis for Decision Support
ISM 6485: Electronic Commerce and Logistics
ISM 6486: eCommerce Technologies
ISM 6487: Risks and Controls in eCommerce
ISM 6942: Electronic Commerce Practicum
ISM 7166: Advanced Business Systems Design and Development III
MAN 5501: Management
MAN 5502: Production and Operations Management
MAN 6508: Management of Service Operations
MAN 6511: Production Management Problems
MAN 6528: Principles of Logistics/Transportation Systems
MAN 6573: Purchasing and Materials Management
MAN 6575: Purchasing and Supplier Relationship Management
MAN 6581: Project Management
MAN 6586: Project Management
MAN 6598: Logistics and Distribution Management
MAN 6599: Tactical Logistics Planning
MAN 6617: International Operations/Logistics
MAN 6619: International Logistics
CMG 5303: Managerial Statistics
Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6973: Project in Lieu of Thesis
- MAN 7109: Seminar in Research Concepts and Methods in Management
- MAN 7146: Seminar in Leadership
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
Warrington College of Business Administration Courses

- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
- MAN 7980: Research for Doctoral Dissertation

Business Administration (Ph.D.)

College

Degrees Offered with a Major in Business Administration

Doctor of Philosophy

Accounting Departmental Courses

- ACG 5005: Financial Accounting
- ACG 5065: Financial and Managerial Accounting
- ACG 5075: Managerial Accounting
- ACG 5226: Advanced Accounting
- ACG 5505: Governmental Accounting
- ACG 5637: Auditing I
- ACG 5647: Auditing II
- ACG 5815: Accounting Regulation
- ACG 6136: Accounting Theory
- ACG 6175: Financial Reporting and Analysis
- ACG 6207: Accounting for Risk
- ACG 6265: International Accounting and Taxation
- ACG 6635: Issues in Audit Practice
- ACG 6685: Forensic Accounting
- ACG 6691: International Auditing
- ACG 6697: Information Systems Assurance
- ACG 6905: Individual Work in Accounting
- ACG 6935: Special Topics in Accounting
- ACG 6940: Supervised Teaching
- ACG 7885: Accounting Research I
- ACG 7886: Accounting Research II
- ACG 7887: Research Analysis in Accounting
- ACG 7939: Theoretical Constructs in Accounting
- ACG 7979: Advanced Research
- ACG 7980: Research for Doctoral Dissertation
- TAX 5005: Introduction to Federal Income Taxation
- TAX 5025: Federal Income Tax I
- TAX 5027: Federal Income Tax II
- TAX 5065: Tax Professional Research
- TAX 6105: Corporate Taxation
- TAX 6115: Advanced Corporate Taxation
• TAX 6205: Partnership Taxation
• TAX 6526: International Taxation
• TAX 6726: Executive Tax Planning
• TAX 6877: State and Local Taxation

Economics Departmental Courses

• ECO 5715: Open Economy Macroeconomics
• ECO 6075: Economics/Consumer Education
• ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
• ECO 6409: Game Theory Applied to Business Decisions
• ECO 6716: International Macroeconomics
• ECO 6906: Individual Work in Economics
• ECO 6910: Supervised Research
• ECO 6936: Special Topics
• ECO 6940: Supervised Teaching
• ECO 6957: International Studies in Economics
• ECO 6971: Research for Master's Thesis
• ECO 7113: Information Economics
• ECO 7115: Microeconomic Theory
• ECO 7118: Markets and Institutions
• ECO 7119: Information, Incentives, and Agency Theory
• ECO 7120: General Equilibrium and Welfare Economics
• ECO 7206: Macroeconomic Theory
• ECO 7272: Economic Growth I
• ECO 7404: Game Theory for Economists
• ECO 7405: Mathematical Economics: Game Theory
• ECO 7406: Dynamic Economics: Theory and Applications
• ECO 7408: Mathematical Methods and Applications to Economics
• ECO 7415: Statistical Methods in Economics
• ECO 7424: Econometric Models and Methods
• ECO 7426: Econometric Methods I
• ECO 7427: Econometric Methods II
• ECO 7452: Best Empirical Practices in Economics
• ECO 7516: Tax Theory and Public Policy
• ECO 7525: Welfare Economics and The Second Best
• ECO 7534: Empirical Public Economics I
• ECO 7535: Empirical Public Economics II
• ECO 7536: Theoretical Public Economics
• ECO 7706: Theory of International Trade
• ECO 7707: International Economic Relations
• ECO 7925: Research Skills Workshop
• ECO 7938: Advanced Economics Seminar
• ECO 7979: Advanced Research
• ECO 7980: Research for Doctoral Dissertation
• ECP 5415: Antitrust Policy and Managerial Decisions
• ECP 5702: Managerial Economics
• ECP 5705: Economics of Business Decisions
• ECP 6417: Public Policy and Social Control
• ECP 6701: Competitive Strategies in Expanding Markets
• ECP 6708: Cases in Competitive Strategy
• ECP 6407: Economics for Managing Information for Electronic Commerce
• ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
• ECP 7408: Empirical Industrial Organization
• ECP 7418: Economics of Regulation
• ECP 7419: Current Research in Regulation
• EHA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

• ENT 5275: Family Business Management
• ENT 6006: Entrepreneurship
• ENT 6008: Entrepreneurial Opportunity
• ENT 6016: Venture Analysis
• ENT 6116: Business Plan Formation
• ENT 6416: Venture Finance
• ENT 6506: Social Entrepreneurship
• ENT 6616: Creativity in Entrepreneurship
• ENT 6905: Individual Work in Entrepreneurship
• ENT 6930: Special Topics
• ENT 6933: Entrepreneurship Lecture Series
• ENT 6946: Entrepreneurial Consulting Project
• ENT 6950: Integrated Technology Ventures
• ENT 6957: International Studies in Entrepreneurship
• FIN 5405: Business Financial Management
• FIN 5437: Finance I: Asset Valuation, Risk, and Return
• FIN 5439: Finance II: Capital Structure and Risk Management Issues
• FIN 6108: Personal Financial Management
• FIN 6246: Money and Capital Markets
FIN 6296: Capitalism
FIN 6306: Investment Banking
FIN 6418: International Cash Flow Management
FIN 6425: Corporation Finance
FIN 6427: Measuring and Managing Value
FIN 6429: Financial Decision Making
FIN 6432: Asset Valuation and Corporate Finance
FIN 6434: Private Equity
FIN 6438: Study in Valuation
FIN 6465: Financial Statement Analysis
FIN 6477: Entrepreneurial Finance
FIN 6489: Financial Risk Management
FIN 6496: Mergers & Acquisitions
FIN 6518: Investment Concepts
FIN 6525: Asset Management Project
FIN 6526: Portfolio Theory
FIN 6528: Asset Allocation and Investment Strategy
FIN 6537: Derivative Securities
FIN 6545: Fixed Income Security Valuation
FIN 6547: Interest Rate Risk Management
FIN 6549: Special Topics in Fixed Income Securities
FIN 6575: Emerging Markets Finance I
FIN 6576: Emerging Markets Finance II
FIN 6585: Securities Trading
FIN 6595: Investment Analytics
FIN 6596: Introduction to Computational Methods & Derivative Pricing
FIN 6606: Financial Management of the Multinational Corporation
FIN 6626: International Finance
FIN 6638: International Finance
FIN 6643: Project Analysis in a Global Environment
FIN 6727: Economic Organizations and Markets
FIN 6728: Capitalism and Regulation
FIN 6729: Economics Organizations and Markets
FIN 6785: Investment Banking and Corporate Financial Modeling I
FIN 6786: Investment Banking and Corporate Financial Modeling II
FIN 6905: Individual Work in Finance
FIN 6930: Special Topics in Finance
FIN 6935: Finance Professional Speaker Series
FIN 6936: Special Topics In Investment Finance
FIN 6940: Supervised Teaching
FIN 6957: International Studies in Finance
FIN 6958: International Finance Study Tour
FIN 6971: Research for Master's Thesis
FIN 7446: Financial Theory I
FIN 7447: Financial Theory II
FIN 7808: Corporate Finance
FIN 7809: Investments
FIN 7846: Marketing Microstructure
FIN 7938: Finance Research Workshop
FIN 7979: Advanced Research
FIN 7980: Research for Doctoral Dissertation
GEB 5114: Entrepreneurship and Venture Finance
GEB 5118: New Venture Creation
GEB 6157: Entrepreneurship Experiential Learning Project
GEB 6366: Fundamentals of International Business
GEB 6924: Entrepreneurship Professional Speaker Series
REE 6045: Introduction to Real Estate
REE 6056: Construction Considerations in Real Estate
REE 6105: Real Estate Appraisal
REE 6206: Primary Mortgage Markets and Institutions
REE 6208: Secondary Mortgage Markets and Securitization
REE 6315: Real Estate Market and Transaction Analysis
REE 6395: Investment Property Analysis
REE 6397: Real Estate Securities and Portfolios
REE 6705: Geographic Information Systems and Location Analysis
REE 6737: Real Estate Development
REE 6905: Individual Work in Real Estate
REE 6910: Supervised Research
REE 6930: Special Topics in Real Estate
REE 6935: Real Estate Case Studies
REE 6940: Supervised Teaching
REE 6948: Capstone Seminar and Applied Project
REE 6957: International Studies in Real Estate
REE 7979: Advanced Research
REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

ISM 5021: Information Systems in Organizations
ISM 6022: Management Information Systems
ISM 6123: Systems Analysis and Design
ISM 6128: Advanced Business Systems Design and Development I
ISM 6129: Advanced Business Systems Design and Development II
ISM 6215: Business Database Systems I
ISM 6216: Business Database Systems II
ISM 6217: Database Management Systems
ISM 6222: Business Telecom Strategy and Applications I
ISM 6223: Business Telecom Strategy and Applications II
ISM 6224: Business Telecom Strategy and Applications III
ISM 6226: Business Telecom Strategy and Applications
ISM 6236: Business Objects I
ISM 6239: Business Objects II
ISM 6257: Intermediate Business Programming
ISM 6258: Advanced Business Programming
ISM 6259: Business Programming
ISM 6405: Business Intelligence
ISM 6423: Data Analysis for Decision Support
ISM 6485: Electronic Commerce and Logistics
ISM 6486: eCommerce Technologies
ISM 6487: Risks and Controls in eCommerce
ISM 6942: Electronic Commerce Practicum
ISM 7166: Advanced Business Systems Design and Development III
MAN 5501: Management
MAN 5502: Production and Operations Management
MAN 6058: Management of Service Operations
MAN 6511: Production Management Problems
MAN 6528: Principles of Logistics/Transportation Systems
MAN 6573: Purchasing and Materials Management
MAN 6575: Purchasing and Supplier Relationship Management
MAN 6581: Project Management
MAN 6586: Project Management
MAN 6598: Logistics and Distribution Management
MAN 6599: Tactical Logistics Planning
MAN 6617: International Operations/Logistics
MAN 6619: International Logistics
QMB 5303: Managerial Statistics
QMB 5304: Introduction to Managerial Statistics
QMB 5305: Advanced Managerial Statistics
QMB 6358: Statistical Analysis for Managerial Decisions I
QMB 6359: Statistical Analysis for Managerial Decisions II
QMB 6607: Decision Processes Under Uncertainty I
QMB 6616: Business Process Analysis
QMB 6693: Quality Management and Control Systems
QMB 6697: Optimization in Simulation Modeling I
QMB 6755: Managerial Quantitative Analysis I
QMB 6756: Managerial Quantitative Analysis II
QMB 6905: Individual Work in Information Systems and Operations Management
QMB 6910: Supervised Research
QMB 6930: Special Topics in Information Systems and Operations Management
QMB 6940: Supervised Teaching
QMB 6941: Internship
QMB 6957: International Studies in Quantitative Methods
QMB 6971: Research for Master's Thesis
QMB 7931: Special Topics in Information Systems and Operations Management
QMB 7933: Seminar in Information Systems and Operations Management
QMB 7979: Advanced Research
QMB 7980: Research for Doctoral Dissertation

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
• MAN 6149: Developing Leadership Skills
• MAN 6257: Power and Politics in Organizations
• MAN 6266: Managing Groups and Teams in Organizations
• MAN 6286: Managing Strategic Processes and Change in Organizations
• MAN 6296: Designing Effective Organizations
• MAN 6321: Human Resource Management
• MAN 6331: Compensation in Organizations
• MAN 6351: Training and Development in Organizations
• MAN 6356: Organizational Staffing
• MAN 6358: Strategic Human Resource Management
• MAN 6446: Negotiations
• MAN 6447: Art and Science of Negotiation
• MAN 6537: Managing Technology in Organizations
• MAN 6627: Cross Cultural Negotiation
• MAN 6635: International Aspects of Human Resource Management
• MAN 6636: Global Strategic Management
• MAN 6637: Global Strategic Management
• MAN 6721: Business Policy
• MAN 6724: Strategic Management
• MAN 6905: Individual Work in Management
• MAN 6910: Supervised Research
• MAN 6930: Special Topics
• MAN 6940: Supervised Teaching
• MAN 6957: International Studies in Management
• MAN 6958: International Study Program
• MAN 6973: Project in Lieu of Thesis
• MAN 7108: Seminar in Research Concepts and Methods in Management
• MAN 7109: Seminar in Motivation and Attitudes
• MAN 7146: Seminar in Leadership
• MAN 7207: Seminar on Foundations of Organizational Theory
• MAN 7208: Seminar in Contemporary Approaches to Organizations
• MAN 7267: Seminar on Groups and Teams Research
• MAN 7275: Organizational Behavior
• MAN 7328: Seminar on Staffing and Selection
• MAN 7778: Seminar in Strategic Adaptation to Environment
• MAN 7779: Strategic Processes and Structure in Organizations
• MAN 7953: Seminar in Management
• MAN 7979: Advanced Research
• MAN 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Customer Analysis
• MAR 6646: Marketing Research for Managerial Decision Making
• MAR 6648: Marketing Research for Managerial Decision Making
• MAR 6722: Web-Based Marketing
• MAR 6725: Introduction to Electronic Commerce
• MAR 6816: Advanced Marketing Management (MBA)
• MAR 6818: Advanced Marketing Management
• MAR 6833: Product Development and Management
• MAR 6834: Marketing of Science and Technology
• MAR 6835: Marketing of Science and Technology
• MAR 6837: Consumer-Centered Product Design
• MAR 6881: Customer Relationship Management
• MAR 6882: Customer Relationship Management
• MAR 6905: Individual Work
• MAR 6910: Supervised Research
• MAR 6930: Special Topics in Marketing
• MAR 6940: Supervised Teaching
• MAR 6957: International Studies in Marketing
• MAR 6973: Project in Lieu of Thesis
• MAR 7507: Perspectives on Consumer Behavior
• MAR 7588: Consumer Information Processing and Decision Making
• MAR 7589: Judgment and Decision Making
• MAR 7626: Multivariate Statistical Methods in Marketing
• MAR 7636: Research Methods in Marketing
• MAR 7666: Marketing Decision Models
• MAR 7786: Marketing Literature
• MAR 7925: Workshop in Marketing Research
• MAR 7979: Advanced Research
• MAR 7980: Research for Doctoral Dissertation
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Economics

College

Warrington College of Business Administration

Department/School

Economics Department

Degrees Offered with a Major in Economics

Doctor of Philosophy

Master of Arts

Economics Departmental Courses

- ECO 5715: Open Economy Macroeconomics
- ECO 6075: Economics/Consumer Education
- ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
- ECO 6409: Game Theory Applied to Business Decisions
- ECO 6716: International Macroeconomics
- ECO 6906: Individual Work in Economics
- ECO 6910: Supervised Research
- ECO 6936: Special Topics
- ECO 6940: Supervised Teaching
- ECO 6957: International Studies in Economics
- ECO 6971: Research for Master's Thesis
- ECO 7113: Information Economics
- ECO 7115: Microeconomic Theory
- ECO 7118: Markets and Institutions
- ECO 7119: Information, Incentives, and Agency Theory
- ECO 7120: General Equilibrium and Welfare Economics
- ECO 7206: Microeconomic Theory I
- ECO 7272: Economic Growth I
- ECO 7404: Game Theory for Economists
- ECO 7405: Mathematical Economics: Game Theory
- ECO 7406: Dynamic Economics: Theory and Applications
- ECO 7408: Mathematical Methods and Applications to Economics
- ECO 7415: Statistical Methods in Economics
- ECO 7424: Econometric Models and Methods
- ECO 7426: Econometric Methods I
The Masters of Science in Entrepreneurship (M.S.E.) program is a one-year, 36-credit, campus-based program designed for young and aspiring entrepreneurs and change-makers. Offered to both business and non-business majors alike, the program is a combination of classroom delivery and experiential learning activities with a focus on opportunity assessment, feasibility analysis, lean entrepreneurial concept testing, business plan development, entrepreneurial leadership, and the sourcing of capital. Students are exposed to cutting edge entrepreneurial theory, which they apply immediately by consulting for small business, commercializing UF technology, and creating their own businesses.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/mse.

Degrees Offered with a Major in Entrepreneurship

Master of Science in Entrepreneurship
Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6018: International Cash Flow Management
- FIN 6425: Corporate Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6606: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7808: Corporate Finance
- FIN 7809: Investments
- FIN 7848: Marketing Microstructure
- FIN 7936: Finance Research Workshop
- FIN 7979: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary/Mortgage Markets and Institutions
- REE 6208: Secondary/Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
Finance

College

Warrington College of Business Administration

Department/School

Finance, Insurance, and Real Estate Department

Finance Program Information

The student pursuing a major in finance typically specializes in corporate finance, financial markets and institutions, or investments.

Master of Science degree in Finance, nonthesis option: This M.S. program option consists of at least 32 credits in letter-graded courses. It is designed to ensure that each student acquires a basic knowledge of the major financial economics subject areas: corporate finance, derivatives, fixed income securities, investments, international finance, and real estate. The program is designed to prepare students with an undergraduate background in finance for positions in commercial banking, money management, investment banking, and securities markets.

The Department also offers a combined bachelor's/master's program. Contact the admissions director for information.

Master of Science degree in Finance/juris doctorate joint degree program: This joint degree program culminates in the M.S. and J.D. degrees. Applicants must meet the entrance requirements for both the Warrington College of Business Administration and the Levin College of Law. Admission to the second degree program is required no later than the end of the second consecutive semester after beginning one degree in the joint program.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/msf.

Degrees Offered with a Major in Finance

Master of Science

Finance, Insurance, and Real Estate Departmental Courses

- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
- REE 6737: Real Estate Development
- REE 6905: Individual Work in Real Estate
- REE 6910: Supervised Research
- REE 6930: Special Topics in Real Estate
- REE 6935: Real Estate Case Studies
- REE 6940: Supervised Teaching
- REE 6948: Capstone Seminar and Applied Project
- REE 6957: International Studies in Real Estate
- REE 7979: Advanced Research
- REE 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business
- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporate Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6438: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analytics
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7828: Corporate Finance
- FIN 7829: Investments
- FIN 7848: Marketing Microstructure
- FIN 7938: Finance Research Workshop
- FIN 7939: Advanced Research
- FIN 7980: Research for Doctoral Dissertation
- GEB 5114: Entrepreneurship and Venture Finance
- GEB 5118: New Venture Creation
- GEB 6157: Entrepreneurship Experiential Learning Project
- GEB 6366: Fundamentals of International Business
- GEB 6924: Entrepreneurship Professional Speaker Series
- REE 6045: Introduction to Real Estate
- REE 6058: Construction Considerations in Real Estate
- REE 6105: Real Estate Appraisal
- REE 6206: Primary/Mortgage Markets and Institutions
- REE 6208: Secondary Mortgage Markets and Securitization
- REE 6315: Real Estate Market and Transaction Analysis
- REE 6395: Investment Property Analysis
- REE 6397: Real Estate Securities and Portfolios
- REE 6705: Geographic Information Systems and Location Analysis
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Information Systems and Operations Management

### College

- Warrington College of Business Administration

### Department/School

- Information Systems and Operations Management Department

### Information Systems and Operations Management Program Information

The Department of Information Systems & Operations Management offers graduate courses leading to the Master of Science in Information Systems and Operations Management (M.S.ISOM); the Ph.D. degree in Business Administration; and a concentration in the Master of Business Administration (M.B.A.) program. Minimum requirements for these degrees are available in the [Graduate Degrees](#) section of this catalog.

**Master of Science:** The M.S.ISOM program provides computing, analytical, and application skills to be used in a business setting. The primary areas of emphasis in the M.S.ISOM program are business intelligence and analytics, information systems/information technology, and supply chain management. Requirements span traditional academic disciplines to produce a multiple-discipline focus. Typical positions for graduates include decision support specialist, information systems specialist, systems analyst, and logistic support specialist.

For a student with a bachelor's degree in business or economics, the M.S.ISOM non-thesis on-campus program consists of a minimum of 36 credit hours, normally requiring a minimum of three semesters of study, not including summer. For students without a bachelor's degree in business or economics, the M.S.ISOM non-thesis on-campus program consists of a minimum of 40 credit hours, normally requiring a minimum of four semesters of study, not including summer.

All M.S.ISOM candidates must complete 26 credits of core coursework:

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6485: Electronic Commerce and Logistics (capstone course)
- MAN 6581: Project Management
- QMB 6358: Statistical Analysis for Managerial Decisions I
- QMB 6755: Managerial Quantitative Analysis I
- QMB 6756: Managerial Quantitative Analysis II

All M.S.ISOM candidates must also complete 6 credits of track coursework for the information technology, supply chain management, or business intelligence and analytics track:

**Information Technology Track**

- ISM 6216: Business Database Systems II
- ISM 6256: Business Objects I
ISM 6259: Business Programming

Supply Chain Management Track
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management

Business Intelligence and Analytics Track
- ISM 6216: Business Database Systems II
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support

These required courses total 32 credit hours. In addition, each M.S.ISOM student with an undergraduate major or minor in business must take a minimum of 4 additional hours of approved graduate business electives for a total of 36 credit hours required for the M.S.ISOM degree. For students without an undergraduate business degree or minor, instead of graduate business electives, they must complete four of the following core business courses: ACG 5005, ACG 5075, ECP 5703, FIN 5437, FIN 5439, MAN 5846, MAR 5806.

Bachelor/Master of Science: The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both the bachelor's and master's degrees, using 12 to 16 credit hours of graduate-level courses for both degrees.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/ms-isom.

Degrees Offered With a Major in Information Systems and Operations Management

Master of Science in Information Systems and Operations Management

without a concentration

concentration in Supply Chain Management

Information Systems and Operations Management Departmental Courses

- ISM 5021: Information Systems in Organizations
- ISM 6022: Management Information Systems
- ISM 6123: Systems Analysis and Design
- ISM 6128: Advanced Business Systems Design and Development I
- ISM 6129: Advanced Business Systems Design and Development II
- ISM 6215: Business Database Systems I
- ISM 6216: Business Database Systems II
- ISM 6217: Database Management Systems
- ISM 6222: Business Telecom Strategy and Applications I
- ISM 6223: Business Telecom Strategy and Applications II
- ISM 6224: Business Telecom Strategy and Applications III
- ISM 6226: Business Telecom Strategy and Applications
- ISM 6236: Business Objects I
- ISM 6239: Business Objects II
- ISM 6257: Intermediate Business Programming
- ISM 6258: Advanced Business Programming
- ISM 6259: Business Programming
- ISM 6405: Business Intelligence
- ISM 6423: Data Analysis for Decision Support
- ISM 6485: Electronic Commerce and Logistics
- ISM 6486: eCommerce Technologies
- ISM 6487: Risks and Controls in eCommerce
- ISM 6602: Electronic Commerce Practicum
- ISM 7166: Advanced Business Systems Design and Development III
- MAN 5501: Management
- MAN 5502: Production and Operations Management
- MAN 6508: Management of Service Operations
- MAN 6511: Production Management Problems
- MAN 6528: Principles of Logistics/Transportation Systems
- MAN 6573: Purchasing and Materials Management
- MAN 6575: Purchasing and Supplier Relationship Management
- MAN 6581: Project Management
- MAN 6598: Project Management
- MAN 6598: Logistics and Distribution Management
- MAN 6599: Tactical Logistics Planning
- MAN 6617: International Operations/Logistics
- MAN 6619: International Logistics
- QMB 5303: Managerial Statistics
- QMB 5304: Introduction to Managerial Statistics
- QMB 5305: Advanced Managerial Statistics
- QMB 6385: Statistical Analysis for Managerial Decisions I
- QMB 6389: Statistical Analysis for Managerial Decisions II
- QMB 6607: Decision Processes Under Uncertainty
International Business

College

Warrington College of Business Administration

Department/School

Management Department

International Business Program

The Master of International Business (M.I.B.) is a non-thesis interdisciplinary graduate business program designed to enhance a student's knowledge and understanding of global business trends and problems.

All M.I.B. candidates must complete the 30-credit curriculum, which consists of 14 core credits and 16 elective credits, with a grade point average (major and overall) of 3.0 or higher. The curriculum includes a mandatory global immersion experience and a non-thesis capstone project.

Combined Degree: The Master of International Business offers a combined bachelor's/master's degree option for students pursuing a bachelor's degree in a business discipline or minor in business administration.

For more information, please see our website: [http://warrington.ufl.edu/graduate/academics/mib](http://warrington.ufl.edu/graduate/academics/mib).

Degrees Offered with a Major in International Business

Master of International Business

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
BUL 5811: Managers and Legal Environment of Business
BUL 5831: Commercial Law
BUL 5832: Commercial Law for Accountants
BUL 6441: Business Ethics and Corporate Social Responsibility
BUL 6516: Law of Real Estate Transactions
BUL 6652: Law and Ethics of Corporate Governance
BUL 6656: Law for Entrepreneurs
BUL 6821: Cyberlaw and Ethics
BUL 6841: Employment Law
BUL 6851: International Business Law
BUL 6852: International Business Law
BUL 6891: Legal Aspects of Technology Management
BUL 6905: Individual Work
BUL 6930: Special Topics
ENT 6706: Global Entrepreneurship
MAN 5141: Leadership Skills
MAN 5245: Organizational Behavior
MAN 5246: Organizational Behavior
MAN 6107: Motivation in Organizational Setting
MAN 6128: Management Skills and Personal Development
MAN 6149: Developing Leadership Skills
MAN 6257: Power and Politics in Organizations
MAN 6266: Managing Groups and Teams in Organizations
MAN 6286: Managing Strategic Processes and Change in Organizations
MAN 6296: Designing Effective Organizations
MAN 6321: Human Resource Management
MAN 6331: Compensation in Organizations
MAN 6351: Training and Development in Organizations
MAN 6365: Organizational Staffing
MAN 6386: Organizational Staffing
MAN 6385: Strategic Human Resource Management
MAN 6446: Negotiation
MAN 6447: Art and Science of Negotiation
MAN 6537: Managing Technology in Organizations
MAN 6627: Cross Cultural Negotiation
MAN 6635: International Aspects of Human Resource Management
MAN 6636: Global Strategic Management
MAN 6637: Global Strategic Management
MAN 6721: Business Policy
MAN 6724: Strategic Management
MAN 6905: Individual Work in Management
MAN 6910: Supervised Research
MAN 6930: Special Topics
MAN 6940: Supervised Teaching
MAN 6957: International Studies in Management
MAN 6998: International Study Program
MAN 6973: Project in Lieu of Thesis
MAN 7108: Seminar in Research Concepts and Methods in Management
MAN 7109: Seminar in Motivation and Attitudes
MAN 7146: Seminar in Leadership
MAN 7207: Seminar on Foundations of Organizational Theory
MAN 7208: Seminar in Contemporary Approaches to Organizations
MAN 7267: Seminar on Groups and Teams Research
MAN 7275: Organizational Behavior
MAN 7328: Seminar on Staffing and Selection
MAN 7778: Seminar in Strategic Adaptation to Environment
MAN 7779: Strategic Processes and Structure in Organizations
MAN 7933: Seminar in Management
MAN 7979: Advanced Research
MAN 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

ACG 5005: Financial Accounting
ACG 5065: Financial and Managerial Accounting
ACG 5075: Managerial Accounting
ACG 5226: Advanced Accounting
ACG 5506: Governmental Accounting
ACG 5637: Auditing I
ACG 5647: Auditing II
ACG 5815: Accounting Regulation
ACG 6136: Accounting Theory
ACG 6175: Financial Reporting and Analysis
ACG 6267: Accounting for Risk
ACG 6265: International Accounting and Taxation
ACG 6635: Issues in Audit Practice
ACG 6685: Forensic Accounting
ACG 6691: International Auditing
ACG 6697: Information Systems Assurance
ACG 6905: Individual Work in Accounting
ACG 6935: Special Topics in Accounting
ACG 6940: Supervised Teaching
ACG 7885: Accounting Research I
ACG 7886: Accounting Research II
ACG 7887: Research Analysis in Accounting
ACG 7939: Theoretical Constructs in Accounting
ACG 7979: Advanced Research
ACG 7980: Research for Doctoral Dissertation
TAX 5005: Introduction to Federal Income Taxation
TAX 5025: Federal Income Tax 1
TAX 5027: Federal Income Tax 2
TAX 5065: Tax Professional Research
TAX 6105: Corporate Taxation
TAX 6115: Advanced Corporate Taxation
TAX 6205: Partnership Taxation
TAX 6526: International Taxation
TAX 6726: Executive Tax Planning
TAX 6877: State and Local Taxation

Economics Departmental Courses

ECO 5715: Open Economy Macroeconomics
ECO 6075: Economics/Consumer Education
ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
ECO 6409: Game Theory Applied to Business Decisions
ECO 6716: International Macroeconomics
ECO 6906: Individual Work in Economics
ECO 6910: Supervised Research
ECO 6936: Special Topics
ECO 6940: Supervised Teaching
ECO 6957: International Studies in Economics
ECO 6971: Research for Master's Thesis
ECO 7113: Information Economics
ECO 7115: Microeconomic Theory
ECO 7118: Markets and Institutions
ECO 7119: Information, Incentives, and Agency Theory
ECO 7120: General Equilibrium and Welfare Economics
ECO 7206: Microeconomic Theory I
ECO 7272: Economic Growth I
ECO 7404: Game Theory for Economists
ECO 7405: Mathematical Economics: Game Theory
ECO 7406: Dynamic Economics: Theory and Applications
ECO 7408: Mathematical Methods and Applications to Economics
ECO 7415: Statistical Methods in Economics
ECO 7424: Econometric Models and Methods
ECO 7426: Econometric Methods I
ECO 7427: Econometric Methods II
ECO 7452: Best Empirical Practices in Economics
ECO 7516: Tax Theory and Public Policy
ECO 7525: Welfare Economics and The Second Best
ECO 7534: Empirical Public Economics I
ECO 7535: Empirical Public Economics II
ECO 7536: Theoretical Public Economics
ECO 7706: Theory of International Trade
ECO 7707: International Economic Relations
ECO 7925: Research Skills Workshop
ECO 7938: Advanced Economics Seminar
ECO 7979: Advanced Research
ECO 7980: Research for Doctoral Dissertation
ECP 6415: Antitrust Policy and Managerial Decisions
ECP 5702: Managerial Economics
ECP 5705: Economics of Business Decisions
ECP 6417: Public Policy and Social Control
ECP 6701: Competitive Strategies in Expanding Markets
ECP 6708: Cases in Competitive Strategy
ECP 6407: Economics for Managing Information for Electronic Commerce
ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
ECP 7408: Empirical Industrial Organization
ECP 7418: Economics of Regulation
ECP 7419: Current Research in Regulation
HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

ENT 5275: Family Business Management
ENT 6006: Entrepreneurship
ENT 6008: Entrepreneurial Opportunity
ENT 6016: Venture Analysis
ENT 6116: Business Plan Formation
• REE 6948: Capstone Seminar and Applied Project
• REE 6957: International Studies in Real Estate
• REE 7979: Advanced Research
• REE 7980: Research for Doctoral Dissertation

Information Systems and Operations Management Departmental Courses

• ISM5021: Information Systems in Organizations
• ISM6022: Management Information Systems
• ISM6123: Systems Analysis and Design
• ISM6128: Advanced Business Systems Design and Development I
• ISM6129: Advanced Business Systems Design and Development II
• ISM6215: Business Database Systems I
• ISM6216: Business Database Systems II
• ISM6217: Database Management Systems
• ISM6222: Business Telecom Strategy and Applications I
• ISM6223: Business Telecom Strategy and Applications II
• ISM6224: Business Telecom Strategy and Applications III
• ISM6226: Business Telecom Strategy and Applications
• ISM6236: Business Objects I
• ISM6239: Business Objects II
• ISM6257: Intermediate Business Programming
• ISM6258: Advanced Business Programming
• ISM6259: Business Programming
• ISM6405: Business Intelligence
• ISM6423: Data Analysis for Decision Support
• ISM6485: Electronic Commerce and Logistics
• ISM6486: eCommerce Technologies
• ISM6487: Risks and Controls in eCommerce
• ISM6942: Electronic Commerce Practicum
• ISM7166: Advanced Business Systems Design and Development III
• MAN 5501: Management
• MAN 5502: Production and Operations Management
• MAN 6508: Management of Service Operations
• MAN 6511: Production Management Problems
• MAN 6528: Principles of Logistics/Transportation Systems
• MAN 6573: Purchasing and Materials Management
• MAN 6575: Purchasing and Supplier Relationship Management
• MAN 6581: Project Management
• MAN 6586: Project Management
• MAN 6598: Logistics and Distribution Management
• MAN 6599: Tactical Logistics Planning
• MAN 6617: International Operations/Logistics
• MAN 6619: International Logistics
• QMB 5303: Managerial Statistics
• QMB 5304: Introduction to Managerial Statistics
• QMB 5305: Advanced Managerial Statistics
• QMB 6358: Statistical Analysis for Managerial Decisions I
• QMB 6359: Statistical Analysis for Managerial Decisions II
• QMB 6607: Decision Processes Under Uncertainty
• QMB 6616: Business Process Analysis
• QMB 6693: Quality Management and Control Systems
• QMB 6697: Optimization in Simulation Modeling I
• QMB 6755: Managerial Quantitative Analysis I
• QMB 6756: Managerial Quantitative Analysis II
• QMB 6905: Individual Work in Information Systems and Operations Management
• QMB 6910: Supervised Research
• QMB 6930: Special Topics in Information Systems and Operations Management
• QMB 6940: Supervised Teaching
• QMB 6941: Internship
• QMB 6957: International Studies in Quantitative Methods
• QMB 6971: Research for Master's Thesis
• QMB 7931: Special Topics in Information Systems and Operations Management
• QMB 7933: Seminar in Information Systems and Operations Management
• QMB 7979: Advanced Research
• QMB 7980: Research for Doctoral Dissertation

Marketing Departmental Courses

• MAR 5805: Problems and Methods in Marketing Management
• MAR 5806: Problems and Methods in Marketing Management
• MAR 6157: International Marketing
• MAR 6158: International Marketing
• MAR 6237: The Art and Science of Pricing
• MAR 6256: Strategy and Tactics of Pricing
• MAR 6335: Building and Managing Brand Equity
• MAR 6456: Business-to-Business Marketing
• MAR 6508: Customer Analysis
• MAR 6646: Marketing Research for Managerial Decision Making
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Management

College

Warrington College of Business Administration

Department/School

Management Department

Management Program Information

Master of Science degree with a major in Management, non-thesis option: This M.S. program is designed to afford general business competency to students who possess little or no educational business background. The M.S. with a major in management program is only open to non-business majors. Students must complete the 32-credit curriculum, which consists of 22 core credits and 10 elective credits, with a grade point average (major and overall) of 3.0 or higher.

Combined Degree Program: The M.S. with a major in management offers a combined bachelor's/master's degree option.

For more information, please see our website: http://warrington.ufl.edu/graduate/academics/msm.

Degrees Offered with a Major in Management
Master of Science

without a concentration

concentration in Health Care Risk Management

Management Departmental Courses

- BUL 5445: Ethical Role of the Manager
- BUL 5810: Legal Environment of Business
- BUL 5811: Managers and Legal Environment of Business
- BUL 5831: Commercial Law
- BUL 5832: Commercial Law for Accountants
- BUL 6440: Business Ethics and Corporation Social Responsibility
- BUL 6441: Business Ethics and Corporate Social Responsibility
- BUL 6516: Law of Real Estate Transactions
- BUL 6652: Law and Ethics of Corporate Governance
- BUL 6656: Law for Entrepreneurs
- BUL 6821: Cyberlaw and Ethics
- BUL 6841: Employment Law
- BUL 6851: International Business Law
- BUL 6852: International Business Law
- BUL 6891: Legal Aspects of Technology Management
- BUL 6905: Individual Work
- BUL 6930: Special Topics
- ENT 6706: Global Entrepreneurship
- MAN 5141: Leadership Skills
- MAN 5245: Organizational Behavior
- MAN 5246: Organizational Behavior
- MAN 5265: Managing Groups and Teams
- MAN 6107: Motivation in Organizational Setting
- MAN 6128: Management Skills and Personal Development
- MAN 6149: Developing Leadership Skills
- MAN 6257: Power and Politics in Organizations
- MAN 6266: Managing Groups and Teams in Organizations
- MAN 6286: Managing Strategic Processes and Change in Organizations
- MAN 6296: Designing Effective Organizations
- MAN 6321: Human Resource Management
- MAN 6331: Compensation in Organizations
- MAN 6351: Training and Development in Organizations
- MAN 6365: Organizational Staffing
- MAN 6366: Organizational Staffing
- MAN 6385: Strategic Human Resource Management
- MAN 6446: Negotiations
- MAN 6447: Art and Science of Negotiation
- MAN 6537: Managing Technology in Organizations
- MAN 6627: Cross Cultural Negotiation
- MAN 6635: International Aspects of Human Resource Management
- MAN 6636: Global Strategic Management
- MAN 6637: Global Strategic Management
- MAN 6721: Business Policy
- MAN 6724: Strategic Management
- MAN 6905: Individual Work in Management
- MAN 6910: Supervised Research
- MAN 6930: Special Topics
- MAN 6940: Supervised Teaching
- MAN 6957: International Studies in Management
- MAN 6958: International Study Program
- MAN 6973: Project in Lieu of Thesis
- MAN 7108: Seminar in Research Concepts and Methods in Management
- MAN 7109: Seminar in Motivation and Attitudes
- MAN 7146: Seminar in Leadership
- MAN 7207: Seminar on Foundations of Organizational Theory
- MAN 7208: Seminar in Contemporary Approaches to Organizations
- MAN 7267: Seminar on Groups and Teams Research
- MAN 7275: Organizational Behavior
- MAN 7328: Seminar on Staffing and Selection
- MAN 7778: Seminar in Strategic Adaptation to Environment
- MAN 7779: Strategic Processes and Structure in Organizations
- MAN 7933: Seminar in Management
- MAN 7979: Advanced Research
• MAN 7980: Research for Doctoral Dissertation

Accounting Departmental Courses

• ACG 5005: Financial Accounting
• ACG 5065: Financial and Managerial Accounting
• ACG 5075: Managerial Accounting
• ACG 5226: Advanced Accounting
• ACG 5505: Governmental Accounting
• ACG 5637: Auditing I
• ACG 5647: Auditing II
• ACG 5815: Accounting Regulation
• ACG 5816: Accounting Theory
• ACG 6175: Financial Reporting and Analysis
• ACG 6207: Accounting for Risk
• ACG 6265: International Accounting and Taxation
• ACG 6665: Issues in Audit Practice
• ACG 6685: Forensic Accounting
• ACG 6691: International Auditing
• ACG 6697: Information Systems Assurance
• ACG 6905: Individual Work in Accounting
• ACG 6935: Special Topics in Accounting
• ACG 6940: Supervised Teaching
• ACG 7885: Accounting Research I
• ACG 7886: Accounting Research II
• ACG 7887: Research Analysis in Accounting
• ACG 7939: Theoretical Constructs in Accounting
• ACG 7979: Advanced Research
• ACG 7980: Research for Doctoral Dissertation
• TAX 5005: Introduction to Federal Income Taxation
• TAX 5025: Federal Income Tax I
• TAX 5027: Federal Income Tax II
• TAX 5065: Tax Professional Research
• TAX 6105: Corporate Taxation
• TAX 6115: Advanced Corporate Taxation
• TAX 6205: Partnership Taxation
• TAX 6526: International Taxation
• TAX 6728: Executive Tax Planning
• TAX 6877: State and Local Taxation

Economics Departmental Courses

• ECO 5715: Open Economy Macroeconomics
• ECO 6075: Economics/Consumer Education
• ECO 6407: Game Theory and Competitive Strategy: Theory and Cases
• ECO 6409: Game Theory Applied to Business Decisions
• ECO 6716: International Macroeconomics
• ECO 6906: Individual Work in Economics
• ECO 6910: Supervised Research
• ECO 6916: Special Topics
• ECO 6940: Supervised Teaching
• ECO 6957: International Studies in Economics
• ECO 6971: Research for Master's Thesis
• ECO 7113: Information Economics
• ECO 7115: Macroeconomic Theory
• ECO 7118: Markets and Institutions
• ECO 7119: Information, Incentives, and Agency Theory
• ECO 7120: General Equilibrium and Welfare Economics
• ECO 7206: Microeconomic Theory I
• ECO 7272: Economic Growth I
• ECO 7404: Game Theory for Economists
• ECO 7405: Mathematical Economics: Game Theory
• ECO 7406: Dynamic Economics: Theory and Applications
• ECO 7408: Mathematical Methods and Applications to Economics
• ECO 7415: Statistical Methods in Economics
• ECO 7424: Econometric Models and Methods
• ECO 7425: Econometric Methods I
• ECO 7427: Econometric Methods II
• ECO 7452: Best Empirical Practices in Economics
• ECO 7516: Tax Theory and Public Policy
• ECO 7525: Welfare Economics and The Second Best
• ECO 7534: Empirical Public Economics I
• ECO 7535: Empirical Public Economics II
• ECO 7536: Theoretical Public Economics
• ECO 7706: Theory of International Trade
• ECO 7707: International Economic Relations
• ECO 7925: Research Skills Workshop
• ECO 7938: Advanced Economics Seminar
• ECO 7979: Advanced Research


- ECO 7980: Research for Doctoral Dissertation
- ECP 5415: Antitrust Policy and Managerial Decisions
- ECP 5702: Managerial Economics
- ECP 5705: Economics of Business Decisions
- ECP 6417: Public Policy and Social Control
- ECP 6701: Competitive Strategies in Expanding Markets
- ECP 6708: Cases in Competitive Strategy
- ECP 6407: Economics for Managing Information for Electronic Commerce
- ECP 7407: Theory of Industrial Organization: Product Differentiation and Strategy
- ECP 7408: Empirical Industrial Organization
- ECP 7418: Economics of Regulation
- ECP 7419: Current Research in Regulation
- HSA 6436: Health Economics

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6436: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
- FIN 6595: Investment Analysis
- FIN 6596: Introduction to Computational Methods & Derivative Pricing
- FIN 6608: Financial Management of the Multinational Corporation
- FIN 6626: International Finance
- FIN 6638: International Finance
- FIN 6643: Project Analysis in a Global Environment
- FIN 6727: Economic Organizations and Markets
- FIN 6728: Capitalism and Regulation
- FIN 6729: Economics Organizations and Markets
- FIN 6785: Investment Banking and Corporate Financial Modeling I
- FIN 6786: Investment Banking and Corporate Financial Modeling II
- FIN 6905: Individual Work in Finance
- FIN 6930: Special Topics in Finance
- FIN 6935: Finance Professional Speaker Series
- FIN 6936: Special Topics in Investment Finance
- FIN 6940: Supervised Teaching
- FIN 6957: International Studies in Finance
- FIN 6958: International Finance Study Tour
- FIN 6971: Research for Master's Thesis
- FIN 7446: Financial Theory I
- FIN 7447: Financial Theory II
- FIN 7806: Corporate Finance
- FIN 7809: Investments
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>FIN 7848</td>
<td>Marketing Microstructure</td>
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<td>FIN 7938</td>
<td>Finance Research Workshop</td>
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<td>Advanced Research</td>
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<td>Research for Doctoral Dissertation</td>
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<td>GEB 5114</td>
<td>Entrepreneurship and Venture Finance</td>
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<td>GEB 5118</td>
<td>New Venture Creation</td>
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<td>GEB 6157</td>
<td>Entrepreneurship Experiential Learning Project</td>
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<td>GEB 6366</td>
<td>Fundamentals of International Business</td>
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<td>Entrepreneurship Professional Speaker Series</td>
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<td>GEE 6045</td>
<td>Introduction to Real Estate</td>
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<td>GEE 6058</td>
<td>Construction Considerations in Real Estate</td>
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<td>GEE 6105</td>
<td>Real Estate Appraisal</td>
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<td>GEE 6206</td>
<td>Primary/Mortgage Markets and Institutions</td>
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<td>GEE 6208</td>
<td>Secondary Mortgage Markets and Securitization</td>
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<td>GEE 6315</td>
<td>Real Estate Market Transaction Analysis</td>
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<td>GEE 6395</td>
<td>Investment Property Analysis</td>
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<td>GEE 6397</td>
<td>Real Estate Securities and Portfolios</td>
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<td>GEE 6705</td>
<td>Geographic Information Systems and Location Analysis</td>
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<td>GEE 6737</td>
<td>Real Estate Development</td>
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<td>Individual Work in Real Estate</td>
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<td>Supervised Research</td>
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<td>GEE 6930</td>
<td>Special Topics in Real Estate</td>
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<td>GEE 6935</td>
<td>Real Estate Case Studies</td>
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<td>GEE 6940</td>
<td>Supervised Teaching</td>
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<td>GEE 6948</td>
<td>Capstone Seminar and Applied Project</td>
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<td>GEE 6957</td>
<td>International Studies in Real Estate</td>
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<td>GEE 7979</td>
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<td>Research for Doctoral Dissertation</td>
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**Information Systems and Operations Management Departmental Courses**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ISM 5021</td>
<td>Information Systems in Organizations</td>
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<td>ISM 6022</td>
<td>Management Information Systems</td>
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<td>ISM 6123</td>
<td>Systems Analysis and Design</td>
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<td>ISM 6128</td>
<td>Advanced Business Systems Design and Development I</td>
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<td>ISM 6129</td>
<td>Advanced Business Systems Design and Development II</td>
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<td>ISM 6215</td>
<td>Business Database Systems I</td>
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<td>ISM 6216</td>
<td>Business Database Systems II</td>
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<td>ISM 6217</td>
<td>Database Management Systems</td>
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<td>ISM 6222</td>
<td>Business Telecom Strategy and Applications I</td>
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<tr>
<td>ISM 6223</td>
<td>Business Telecom Strategy and Applications II</td>
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<td>ISM 6224</td>
<td>Business Telecom Strategy and Applications III</td>
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<td>ISM 6226</td>
<td>Business Telecom Strategy and Applications</td>
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<td>ISM 6236</td>
<td>Business Objects I</td>
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<td>ISM 6239</td>
<td>Business Objects II</td>
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<td>ISM 6257</td>
<td>Intermediate Business Programming</td>
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<td>ISM 6258</td>
<td>Advanced Business Programming</td>
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<td>Business Programming</td>
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<td>ISM 6405</td>
<td>Business Intelligence</td>
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<td>ISM 6423</td>
<td>Data Analysis for Decision Support</td>
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<td>ISM 6485</td>
<td>Electronic Commerce and Logistics</td>
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<td>ISM 6486</td>
<td>eCommerce Technologies</td>
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<td>ISM 6487</td>
<td>Risks and Controls in eCommerce</td>
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<td>ISM 6942</td>
<td>Electronic Commerce Practicum</td>
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<td>ISM 7166</td>
<td>Advanced Business Systems Design and Development III</td>
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<td>MAN 5501</td>
<td>Management</td>
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<td>MAN 5502</td>
<td>Production and Operations Management</td>
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<td>MAN 6508</td>
<td>Management of Service Operations</td>
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<td>MAN 6511</td>
<td>Production Management Problems</td>
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<td>MAN 6528</td>
<td>Principles of Logistics/Transportation Systems</td>
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<td>MAN 6573</td>
<td>Purchasing and Materials Management</td>
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<td>MAN 6575</td>
<td>Purchasing and Supplier Relationship Management</td>
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<td>MAN 6581</td>
<td>Project Management</td>
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<td>MAN 6586</td>
<td>Project Management</td>
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<td>MAN 6598</td>
<td>Logistics and Distribution Management</td>
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<td>MAN 6599</td>
<td>Tactical Logistics Planning</td>
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<td>MAN 6617</td>
<td>International Operations/Logistics</td>
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<td>MAN 6619</td>
<td>International Logistics</td>
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<td>QMB 5303</td>
<td>Managerial Statistics</td>
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<td>QMB 5304</td>
<td>Introduction to Managerial Statistics</td>
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<td>QMB 5305</td>
<td>Advanced Managerial Statistics</td>
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<td>QMB 6358</td>
<td>Statistical Analysis for Managerial Decisions I</td>
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<td>QMB 6359</td>
<td>Statistical Analysis for Managerial Decisions II</td>
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<td>QMB 6607</td>
<td>Decision Processes Under Uncertainty I</td>
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<td>QMB 6616</td>
<td>Business Process Analysis</td>
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<td>QMB 6693</td>
<td>Quality Management and Control Systems</td>
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<td>QMB 6697</td>
<td>Optimization in Simulation Modeling I</td>
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<tr>
<td>QMB 6755</td>
<td>Managerial Quantitative Analysis I</td>
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<tr>
<td>QMB 6756</td>
<td>Managerial Quantitative Analysis II</td>
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<tr>
<td>QMB 6905</td>
<td>Individual Work in Information Systems and Operations Management</td>
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<td>QMB 6910</td>
<td>Supervised Research</td>
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<tr>
<td>QMB 6930</td>
<td>Special Topics in Information Systems and Operations Management</td>
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</tbody>
</table>
Marketing Departmental Courses

- MAR 5805: Problems and Methods in Marketing Management
- MAR 5806: Problems and Methods in Marketing Management
- MAR 6157: International Marketing
- MAR 6158: International Marketing
- MAR 6237: The Art and Science of Pricing
- MAR 6256: Strategy and Tactics of Pricing
- MAR 6335: Building and Managing Brand Equity
- MAR 6456: Business-to-Business Marketing
- MAR 6508: Customer Analysis
- MAR 6646: Marketing Research for Managerial Decision Making
- MAR 6648: Marketing Research for Managerial Decision Making
- MAR 6722: Web-Based Marketing
- MAR 6725: Introduction to Electronic Commerce
- MAR 6816: Advanced Marketing Management (MBA)
- MAR 6818: Advanced Marketing Management
- MAR 6833: Product Development and Management
- MAR 6834: Marketing of Science and Technology
- MAR 6835: Marketing of Science and Technology
- MAR 6837: Consumer-Centered Product Design
- MAR 6861: Customer Relationship Management
- MAR 6862: Customer Relationship Management
- MAR 6905: Individual Work
- MAR 6910: Supervised Research
- MAR 6930: Special Topics in Marketing
- MAR 6940: Supervised Teaching
- MAR 6957: International Studies in Marketing
- MAR 6971: Research for Master's Thesis
- MAR 6973: Project in Lieu of Thesis
- MAR 7507: Perspectives on Consumer Behavior
- MAR 7588: Consumer Information Processing and Decision Making
- MAR 7589: Judgment and Decision Making
- MAR 7626: Multivariate Statistical Methods in Marketing
- MAR 7636: Research Methods in Marketing
- MAR 7666: Marketing Decision Models
- MAR 7786: Marketing Literature
- MAR 7925: Workshop in Marketing Research
- MAR 7979: Advanced Research
- MAR 7980: Research for Doctoral Dissertation

Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6906: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

Real Estate

College

Warrington College of Business Administration

Department/School
Finance, Insurance, and Real Estate Department

Real Estate Program Information

The ten-month, full-time in residence, Nathan S. Collier Master of Science in Real Estate (MSRE) Program, housed in the Warrington College of Business Administration (WCBA), thrives on innovation, a dynamic student body, significant interaction with high-level working professionals, and nationally recognized professors. The program is a unique combination of theory and practice that will both enhance your real estate education and develop your professional skills.

Master of Science degree in real estate, nonthesis option: This M.S. option consists of at least 34 credits of letter-graded courses. It is designed to ensure that each student acquires a basic knowledge of the various functional areas in real estate, real estate finance and investment, real estate development, real estate law and institutions, real estate asset management, international real estate, and advanced training in specialized areas. The capstone course (REE 6948) involves actual projects in which students work in teams to undertake a real estate problem for real clients. This two-tiered program of study provides both a firm theoretical foundation for later professional effectiveness and an applied bridge to professional practice.

Master of Science degree in real estate/juris doctorate joint program: This joint degree program culminates in the M.S. and J.D. degrees. Applicants must meet the entrance requirements for both the Warrington College of Business Administration and the Levin College of Law. Admission to the second degree program is required no later than the end of the second consecutive semester after beginning one degree of the joint program.

The Department also offers a combined bachelor's / master's program for all undergraduate disciplines.

For more information, please contact the admissions director and see our website: http://warrington.ufl.edu/graduate/academics/msre.

Degrees Offered with a Major in Real Estate

Master of Science

Finance, Insurance, and Real Estate Departmental Courses

- ENT 5275: Family Business Management
- ENT 6006: Entrepreneurship
- ENT 6008: Entrepreneurial Opportunity
- ENT 6016: Venture Analysis
- ENT 6116: Business Plan Formation
- ENT 6416: Venture Finance
- ENT 6506: Social Entrepreneurship
- ENT 6616: Creativity in Entrepreneurship
- ENT 6905: Individual Work in Entrepreneurship
- ENT 6930: Special Topics
- ENT 6933: Entrepreneurship Lecture Series
- ENT 6946: Entrepreneurial Consulting Project
- ENT 6950: Integrated Technology Ventures
- ENT 6957: International Studies in Entrepreneurship
- FIN 5405: Business Financial Management
- FIN 5437: Finance I: Asset Valuation, Risk, and Return
- FIN 5439: Finance II: Capital Structure and Risk Management Issues
- FIN 6106: Personal Financial Management
- FIN 6246: Money and Capital Markets
- FIN 6296: Capitalism
- FIN 6306: Investment Banking
- FIN 6418: International Cash Flow Management
- FIN 6425: Corporation Finance
- FIN 6427: Measuring and Managing Value
- FIN 6429: Financial Decision Making
- FIN 6432: Asset Valuation and Corporate Finance
- FIN 6434: Private Equity
- FIN 6436: Study in Valuation
- FIN 6465: Financial Statement Analysis
- FIN 6477: Entrepreneurial Finance
- FIN 6489: Financial Risk Management
- FIN 6496: Mergers & Acquisitions
- FIN 6518: Investment Concepts
- FIN 6525: Asset Management Project
- FIN 6526: Portfolio Theory
- FIN 6528: Asset Allocation and Investment Strategy
- FIN 6537: Derivative Securities
- FIN 6545: Fixed Income Security Valuation
- FIN 6547: Interest Rate Risk Management
- FIN 6549: Special Topics in Fixed Income Securities
- FIN 6575: Emerging Markets Finance I
- FIN 6576: Emerging Markets Finance II
- FIN 6585: Securities Trading
Warrington College of Business Administration Courses

- GEB 5212: Professional Writing in Business
- GEB 5215: Professional Communication in Business
- GEB 5217: Executive Communication
- GEB 5225: Advanced Business Writing
- GEB 5929: Foundations Review
- GEB 6229: Professional Communication for Accountants
- GEB 6365: International Business
- GEB 6368: Globalization and the Business Environment
- GEB 6905: Individual Work
- GEB 6928: Professional Development Module IV
- GEB 6930: Special Topics
- GEB 6941: Internship
- GEB 6957: International Studies in Business

College of Dentistry

Interim Dean: Boyd Robinson
Associate Dean & Director: Roberta Pileggi

Complete faculty listings: Follow this link.

Advanced education has progressed over the years to be an integral component of the College of Dentistry, growing from six certificate residency programs, with an enrollment of only 36 students in 1979, to fourteen certificate programs and various fellowship programs. Enrollment is now over 140. In 1993, the college started master degree programs in endodontics, orthodontics, periodontics and prosthodontics, and continues today to grow.

Follow this link for more information about UF's College of Dentistry graduate programs: http://admissions.dental.ufl.edu/advanced-graduate-programs/programs-application-process/

Departments and Programs within the College of Dentistry
Dental Sciences Program Information

The College of Dentistry offers the Master of Science degree in dental sciences with concentrations in endodontics, orthodontics, periodontics, and prosthodontics. These concentrations include a minimum of 38 hours of appropriate course work and research in topics relevant to each specialization. Requirements for the master's degree include:

- Satisfactory completion of all course work
- Meeting the requirements for clinical certification in the respective dental specialty
- Thesis or project based on research.

Prerequisites for admission, in addition to those of the Graduate School, include:

- D.D.S. or D.M.D. degree
- Completion of Parts I and II of the American Dental Association's National Board of Dental Examinations.

The application deadline for Endodontics, Periodontics, and Prosthodontics is August 1.
The application deadline of Orthodontics is September 2.

Send applications to:
Master of Science Program,
College of Dentistry,
P.O. Box 100402,
Health Science Center,
University of Florida,
Gainesville, FL 32610-0402.

Those not in Dentistry are given in-department graduate credit. Registration in the courses listed below is restricted to students currently admitted to a program in the College of Dentistry.

Degrees Offered with a Major in Dental Sciences

Master of Science

without a concentration

concentration in Endodontics

concentration in Orthodontics

concentration in Periodontics
General Courses

- DEN 6937
- DEN 6674: Advanced Oral Pathology
- DEN 6675: Craniofacial Pain
- DEN 6676: Advanced Oral Medicine and Drug Interactions in Dentistry
- DEN 6679: Advanced Radiology and Interpretation
- DEN 6905: Individual Study
- DEN 6910: Supervised Research
- DEN 6934: Special Topics in Dentistry
- DEN 6935: Special Topics in Dentistry
- DEN 6936: Practice Management
- DEN 6940: Supervised Teaching
- DEN 6941: Clinical Teaching in Dentistry
- DEN 6942: Grand Rounds
- DEN 6971: Research for Master’s Thesis
- DEN 6973: Project in Lieu of Thesis

Endodontics Courses

- DEN 6642: Introduction to Advanced Endodontics
- DEN 6643: Treatment Planning/Cases Presentation
- DEN 6644: Nonsurgical Endodontic Care I
- DEN 6645: Nonsurgical Endodontic Care II
- DEN 6646: Surgical Endodontics I
- DEN 6647: Surgical Endodontics II

Orthodontics Courses

- DEN 6602: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 1: Class I Treatment
- DEN 6603: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 2: Class II Treatment
- DEN 6604: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 3: Class II Treatment and Overbite Treatments
- DEN 6605: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 4: Class II Treatment and Overbite Treatments
- DEN 6606: Orthodontic Treatment–Appliance Management and Effect of Treatment Part 5: Class III and Crossbite Treatments and Soft Tissue Considerations
- DEN 6608: Analysis, Diagnosis, and Treatment Planning: Part I
- DEN 6609: Analysis, Diagnosis, and Treatment Planning: Part II
- DEN 6610: Biology of Tooth Movement: Part I
- DEN 6612: Orthodontic Biomechanics: Part I
- DEN 6613: Orthodontic Biomechanics: Part II
- DEN 6614: Ortho-Perio Relationships: Part I
- DEN 6615: Ortho-Perio Relationships: Part II
- DEN 6616: Orthognathic Surgery: Part I
- DEN 6617: Orthognathic Surgery: Part II
- DEN 6618: Postnatal Growth and Development
- DEN 6670: Craniofacial Anomalies
- DEN 6671: Prenatal Growth and Development
- DEN 6672: Materials in Orthodontics

Periodontics Courses

- DEN 6652: Review of Periodontics Literature I
- DEN 6653: Review of Periodontics Literature II
- DEN 6654: Review of Periodontics Literature III
- DEN 6655: Review of Periodontics Literature IV
- DEN 6656: Introduction to Advanced Periodontology
- DEN 6657: Periodontal Histology and Histopathology
DEN 6658: Treatment Planning in Periodontal Therapy

Prosthodontics Courses

- DEN 6622: Principles of Occlusion
- DEN 6623: Maxillofacial Prosthetics
- DEN 6624: Dental Implant Restoration
- DEN 6625: Fixed Prosthodontic Ceramics
- DEN 6626: Advanced Removable Partial Dentures
- DEN 6627: Treatment Planning Seminar

College of Design, Construction, and Planning

Dear C. Silver

Complete faculty listings: Follow this link.

DCP is home to five independent professional disciplines: architecture, construction management, interior design, landscape architecture and urban and regional planning. The college also is home to an interdisciplinary program in historic preservation, which allows graduate students to gain expertise in research and application of historic preservation in the United States and abroad.

Accreditation and Degrees

The academic programs in the college have an accreditation process from the professional organizations of each discipline.

- Architecture – National Architectural Accrediting Board
- Construction Management – American Council for Construction Education
- Interior Design – Foundation for Interior Design Education Research
- Landscape Architecture – American Society of Landscape Architects
- Urban and Regional Planning – Planning Accreditation Board

DCP offers both undergraduate and graduate degrees and programs. Through its academic units, the college offers doctoral, master’s, and bachelor’s degrees, as well as distance education programs, combined degrees, joint degrees, certificate programs, and academic minors.

College Institutes, Centers and Programs

Research and service projects conducted through the research centers and institutes often entail multidisciplinary, cross-campus student input and effort. Each division of the college is involved in on-going projects that advance both scholarly study and professional practice. The college contributes to community, state, regional and national efforts to conserve and improve the quality of the natural and built environments through its research centers. The college’s teaching and research programs have national and international prominence.

For more information, please see our website: http://www.dcp.ufl.edu

Departments and Programs within the College of Design, Construction, and Planning

College of Design, Construction, and Planning Courses

Other

Architecture

College

School of Architecture

Degrees Offered with a Major in Architecture

Master of Science in Architectural Studies
without a concentration

concentration in Historic Preservation

concentration in Sustainable Architecture

concentration in Sustainable Design

Master of Architecture

without a concentration

concentration in Historic Preservation

concentration in Sustainable Architecture

concentration in Sustainable Design

Courses

- ARC 6512: Structural Modeling
- ARC 6116: Drawing toward Architecture
- ARC 6311C: Building Information Modeling
- ARC 6383: St. Augustine Interdisciplinary Design Studio
- DCP 6710: History and Theory of Historic Preservation
- DCP 6715: Preservation Building Technology
- DCP 6971: Research for Master's Thesis
- URP 6272: Advanced Planning Information Systems

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6228: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Construction Management

College

Department/School

M.E. Rinker, Sr. School of Construction Management

Degrees Offered with a Major in Construction Management
Master of Construction Management

without a concentration

concentration in Historic Preservation

concentration in Sustainable Construction

concentration in Sustainable Design

Master of Science in Construction Management

without a concentration

concentration in Historic Preservation

concentration in Sustainable Construction

concentration in Sustainable Design

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
- ICM 5905: Special Studies
- ICM 6420: Commercial Management and Cost Control
- ICM 6440: Construction Value Management
• ICM 6680: Principles of International Sustainable Construction
• ICM 6682: Construction Ecology and Metabolism
• ICM 6684: High-Performance Green Building Delivery Systems
• ICM 6710: Construction Human Resource Management
• ICM 6750: Managing Construction Information Technology
• ICM 6751: International Construction Management
• ICM 6752: Construction Finance and Investment
• ICM 6761: Advanced Planning, Scheduling, and Logistics
• ICM 6762: Construction Risk Management
• ICM 6770: Advanced Project Safety Management
• ICM 6772: International Strategic Management
• ICM 6905: Directed Independent Study in International Construction
• ICM 6910: Supervised Research
• ICM 6930: Construction Communication and Research
• ICM 6934: International Construction Research

College of Design, Construction, and Planning Courses

• DCP 6205: Ecological Issues in Sustainability and the Built Environment
• DCP 6211: Preservation Topics, Issues, and Practice
• DCP 6212: Sustainable Design Issues: Ecology, Architecture, and Planning
• DCP 6710: History and Theory of Historic Preservation
• DCP 6711: History of the Built Environment for Preservation Practice
• DCP 6712: Preservation Technology: Conserving Modern Buildings
• DCP 6713: Historic Preservation: Principles, Practice, and Engineering
• DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
• DCP 6715: Preservation Building Technology
• DCP 6716: Cultural Resource Management
• DCP 6730: Preservation Policy
• DCP 6905: Independent Study
• DCP 6931: Special Topics in Design, Construction, and Planning
• DCP 6943: Practicum in Historic Preservation
• DCP 6971: Research for Master's Thesis
• DCP 7790: Doctoral Core I
• DCP 7792: Doctoral Core II
• DCP 7794: Doctoral Seminar
• DCP 7911: Advanced Design, Construction, and Planning Research I
• DCP 7940: Supervised Teaching
• DCP 7949: Professional Internship
• DCP 7979: Advanced Research
• DCP 7980: Research for Doctoral Dissertation

Design, Construction, and Planning (Ph.D.)

College

College of Design, Construction, and Planning

Degrees Offered with a Major in Design, Construction, and Planning

Doctor of Philosophy

without a concentration

concentration in Construction Management

optional second concentration in Geographic Information Systems

concentration in Geographic Information Systems

concentration in Historic Preservation
optional second concentration in Geographic Information Systems

concentration in Interior Design

optional second concentration in Geographic Information Systems

concentration in Landscape Architecture

optional second concentration in Geographic Information Systems

concentration in Urban and Regional Planning

optional second concentration in Geographic Information Systems

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6357: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Connections
- ARC 6399: Advanced Topics in Urban Design
- ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
- ARC 6576: Architectural Structures
- ARC 6611: Advanced Topics in Architectural Technology
- ARC 6621: Graduate Environmental Technology 2
- ARC 6642: Architectural Acoustic Design Laboratory
- ARC 6643: Architectural Acoustics
- ARC 6670: Lighting Design Seminar
- ARC 6685: Life Safety, Sanitation, and Plumbing Systems
- ARC 6705: Graduate Architectural History 3
- ARC 6711: Architecture of the Ancient World
- ARC 6720: Architectural History: America
- ARC 6773: Strains of Modernism
- ARC 6793: Advanced Topics in Regional Architecture
- ARC 6805: Architectural Conservation
- ARC 6821: Preservation Problems and Processes
- ARC 6822: Preservation Programming and Design
- ARC 6851: Technology of Preservation: Materials and Methods I
- ARC 6852: Technology of Preservation: Materials and Methods II
- ARC 6883: Vernacular Architecture & Sustainability
- ARC 6911: Architectural Research
- ARC 6912: Architectural Research II
- ARC 6913: Architectural Research III
- ARC 6932: Advanced Topics in Architectural Methods
- ARC 6933: Sustainable Site Design
- ARC 6934: European Approach to Sustainable Design
- ARC 6935: Seminar in Sustainable Design
- ARC 6940: Supervised Teaching
- ARC 6971: Research for Master’s Thesis
- ARC 6979: Master’s Research Project

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
• BCN 5737: Advanced Issues in Construction Safety and Health
• BCN 5754C: Site Development
• BCN 5776: International Construction Business Management
• BCN 5778: Facilities Operation and Maintenance
• BCN 5789C: Construction Project Delivery
• BCN 5884: Equipment and Methods for Heavy Construction
• BCN 5885: Methods and Management for Heavy Construction
• BCN 5905: Special Studies in Construction
• BCN 5949: Graduate Construction Management Internship
• BCN 5957: Advanced International Studies in Construction
• BCN 6036: Research Methods in Construction
• BCN 6038: High-Performance Green Building Delivery Systems
• BCN 6058: Sustainable Construction
• BCN 6066: Construction Ecology and Metabolism
• BCN 6621: Bidding Strategy
• BCN 6641: Construction Value Engineering
• BCN 6748: Construction Law
• BCN 6755: Construction Financial Management
• BCN 6756: Housing Economics and Policy
• BCN 6777: Construction Management Processes
• BCN 6785: Construction Information Systems
• BCN 6805: Directed Independent Study in Construction
• BCN 6910: Supervised Research
• BCN 6933: Advanced Construction Management
• BCN 6934: Construction Research
• BCN 6940: Supervised Teaching
• BCN 6971: Research for Master's Thesis
• FES 6724: Fire and Emergency Services Response Planning
• FES 6726: Hazard Mitigation and Preparedness
• FES 6735: International Emergency/Disaster Management
• FES 6736: Homeland Security and Emergency Management
• FES 6766: Research Methods in FES
• FES 6806: Disaster Response and Recovery
• FES 6826: Emergency Services - Disaster Planning
• FES 6827: Business Continuity and Disaster Planning
• FES 6836: Impacts of Natural and Man-made Disasters on Buildings
• FES 6916: Research for Master's Report
• FES 6940: Practicum in FES
• ICM 5905: Special Studies
• ICM 6420: Commercial Management and Cost Control
• ICM 6440: Construction Value Management
• ICM 6680: Principles of International Sustainable Construction
• ICM 6682: Construction Ecology and Metabolism
• ICM 6684: High-Performance Green Building Delivery Systems
• ICM 6710: Construction Human Resource Management
• ICM 6750: Managing Construction Information Technology
• ICM 6751: International Construction Management
• ICM 6752: Construction Finance and Investment
• ICM 6761: Advanced Planning, Scheduling, and Logistics
• ICM 6782: Construction Risk Management
• ICM 6770: Advanced Project Safety Management
• ICM 6772: International Strategic Management
• ICM 6905: Directed Independent Study in International Construction
• ICM 6910: Supervised Research
• ICM 6930: Construction Communication and Research
• ICM 6934: International Construction Research

Interior Design Departmental Courses

• IND 5023: Introduction to Architectural Interiors
• IND 5106: History of Interior Design I
• IND 5136: History of Interior Design II
• IND 5212C: Architectural Interiors I
• IND 5213C: Introduction to Architectural Interiors Lab
• IND 5227C: Advanced Architectural Interiors I
• IND 5231C: Architectural Interiors II
• IND 5232C: Advanced Architectural Interiors II
• IND 5317C: Interior Design Communication Systems
• IND 5427C: Interior Design Construction Documents
• IND 5428: Materials for Interior Design
• IND 5434C: Interior Lighting
• IND 5445C: Furniture Design
• IND 5454C: Advanced Interior Design Detailing and Construction Documents
• IND 5464C: Computer Applications in Three-Dimensional Design
• IND 5466: Interior Environmental Technology
• IND 5508: Business and Professional Practices for Interior Designers
• IND 5638: Design Environments and Human Interaction
• IND 5937: Current Topics in Interior Design
• IND 6239: Advanced Topics in Interior Design Studio
• IND 6638: Methods of Interior Design Research
• IND 6906: Independent Studies and Readings
• IND 6940: Supervised Teaching
• IND 6941: Interior Design Internship
• IND 6971: Research for Master's Thesis

Landscape Architecture Departmental Courses

• LAA 5331: Site Design Methodologies
• LAA 5366: Principles of Landscape Architecture
• LAA 6231: Landscape Architecture Theory
• LAA 6322: Project Management for Landscape Architects
• LAA 6342: Landscape Architecture Criticism
• LAA 6349C: Design Communications for Landscape Architects
• LAA 6382: Ecological and Environmental Policy
• LAA 6525L: Advanced Landscape Construction Design
• LAA 6536: Landscape Management
• LAA 6656C: Advanced Landscape Architectural Design
• LAA 6713: Cultural Landscapes
• LAA 6716: History of Landscape Architecture
• LAA 6905: Directed Study
• LAA 6931: Water Conservation through Site Design and Green Roofs
• LAA 6931C: Special Topics
• LAA 6933: Topics in European Design: Paris, France
• LAA 6935: Gardens of the World
• LAA 6941: Supervised Internship
• LAA 6952C: European Landscape Architecture Studio
• LAA 6971: Research for Master's Thesis
• LAA 6979: Terminal Project

Urban and Regional Planning Departmental Courses

• URP 6042: Urban Economy
• URP 6061: Planning Administration and Ethics
• URP 6100: Planning Theory and History
• URP 6122: Alternative Conflict Management
• URP 6131: Growth Management Powers I
• URP 6132: Growth Management Seminar
• URP 6203: Planning Research Design
• URP 6231: Quantitative Data Analysis for Planners
• URP 6270: Survey of Planning Information Systems
• URP 6271: Planning Information Systems
• URP 6272: Advanced Planning Information Systems
• URP 6274: GPS for Planners: Introduction to Global Positioning System
• URP 6275: Spatial Database Design and Development
• URP 6312: Land Development Planning and Evaluation
• URP 6341: Urban Planning Project
• URP 6421: Environmental Impact Statements
• URP 6424: Sustainable Urbanism in the Americas
• URP 6428: Advanced Environmental Planning
• URP 6429: Natural Resources Planning and Management
• URP 6445: Planning for Climate Change
• URP 6526: Health and the Built Environment
• URP 6541: Economic Development Planning
• URP 6542: Urban Land Economics
• URP 6543: Seminar in Capital Improvement Finance
• URP 6547: Local Public Finance for Urban Planners
• URP 6601: State Planning
• URP 6603: Development Review
• URP 6610: International Development Planning
• URP 6716: Transportation Policy and Planning
• URP 6718: Bikeways Planning and Design
• URP 6745: Housing, Public Policy, and Planning
• URP 6746: Topical Debates in Housing
• URP 6821: Transportation and Land-Use Modeling
• URP 6871: Planning and Design I
• URP 6872: Planning and Design II
• URP 6880: Defensible Space and CPTED in Urban Design
• URP 6884: Community Conservation and Revitalization
• URP 6905: Exploration and Directed Study
• URP 6910: Supervised Research
• URP 6920: Colloquium
• URP 6931: Topical Seminar
• URP 6933: Planning Information Seminar
• URP 6940: Supervised Teaching
• URP 6941: Urban Planning Internship
• URP 6971: Research for Master's Thesis
• URP 6979: Terminal Project

College of Design, Construction, and Planning Courses
Fire and Emergency Services

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr. School of Construction Management

Fire and Emergency Services Program Information

The Master of Fire and Emergency Services degree program focuses on Emergency Services/Disaster Management (ES/DM) and is designed for individuals who are seeking knowledge in emergency planning, hazard mitigation and preparedness, disaster response and recovery, and homeland security. The goal is to create broad experience that includes the many elements of current cases in ES/DM and emphasizes both the critical thinking and leadership skills necessary to advance in the field.

The M.F.E.S. degree provides post-professional advancement for the critical technical issues beyond the initial fire science practices and administrative studies. Major research topics include interdisciplinary studies in material sciences, suppression systems, advanced planning and geographic systems, pre- and post-disaster mitigation planning, computer applications, and technological innovations.

The M.F.E.S. is an online distance education program. All courses are conveniently delivered utilizing a web-based e-Learning system.

For more information, please see our website: [http://www.bcn.ufl.edu/academics/masters/msfesesdm](http://www.bcn.ufl.edu/academics/masters/msfesesdm).

 Degrees Offered with a Major in Fire and Emergency Services

Master of Fire and Emergency Services

without a concentration

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5726: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Historic Preservation
College

College of Design, Construction, and Planning

Degrees Offered with a Major in Historic Preservation

Master of Historic Preservation

Architecture Departmental Courses

- ARC 5791: Topics in Architectural History
- ARC 5800: Survey of Architectural Preservation, Restoration, and Reconstruction
- ARC 5810: Techniques of Architectural Documentation
- ARC 6176: Advanced Computer-Aided Design
- ARC 6212: Topics in Phenomena and Architecture
- ARC 6226: Intercultural Perspectives in Architecture
- ARC 6228: Film and Architecture
- ARC 6241: Advanced Studio I
- ARC 6242: Research Methods
- ARC 6280: Advanced Topics in Architectural Practice
- ARC 6281: Professional Practice
- ARC 6355: Advanced Studio II
- ARC 6356: Advanced Studio III
- ARC 6367: Advanced Topics in Architectural Design
- ARC 6391: Architecture, Energy, and Ecology
- ARC 6393: Advanced Architectural Connections
- ARC 6399: Advanced Topics in Urban Design
- ARC 6505: Architectural Structural Systems: Wood, Steel, and Concrete
- ARC 6576: Architectural Structures
- ARC 6611: Advanced Topics in Architectural Technology
- ARC 6621: Graduate Environmental Technology 2
- ARC 6642: Architectural Acoustic Design Laboratory
- ARC 6643: Architectural Acoustics
- ARC 6670: Lighting Design Seminar
- ARC 6685: Life Safety, Sanitation, and Plumbing Systems
- ARC 6705: Graduate Architectural History 3
- ARC 6711: Architecture of the Ancient World
- ARC 6750: Architectural History: America
- ARC 6773: Strains of Modernism
- ARC 6793: Advanced Topics in Regional Architecture
- ARC 6805: Architectural Conservation
- ARC 6821: Preservation Problems and Processes
- ARC 6822: Preservation Programming and Design
- ARC 6851: Technology of Preservation: Materials and Methods I
- ARC 6852: Technology of Preservation: Materials and Methods II
- ARC 6883: Vernacular Architecture & Sustainability
- ARC 6911: Architectural Research
- ARC 6912: Architectural Research II
- ARC 6913: Architectural Research III
- ARC 6932: Advanced Topics in Architectural Methods
- ARC 6933: Sustainable Site Design
- ARC 6934: European Approach to Sustainable Design
- ARC 6935: Seminar in Sustainable Design
- ARC 6940: Supervised Teaching
- ARC 6971: Research for Master's Thesis
- ARC 6979: Master's Research Project

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6786: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
- ICM 5905: Special Studies
- ICM 6420: Commercial Management and Cost Control
- ICM 6440: Construction Value Management
- ICM 6680: Principles of International Sustainable Construction
- ICM 6682: Construction Ecology and Metabolism
- ICM 6684: High-Performance Green Building Delivery Systems
- ICM 6710: Construction Human Resource Management
- ICM 6750: Managing Construction Information Technology
- ICM 6751: International Construction Management
- ICM 6752: Construction Finance and Investment
- ICM 6761: Advanced Planning, Scheduling, and Logistics
- ICM 6762: Construction Risk Management
- ICM 6770: Advanced Project Safety Management
- ICM 6772: International Strategic Management
- ICM 6905: Directed Independent Study in International Construction
- ICM 6910: Supervised Research
- ICM 6930: Construction Communication and Research
- ICM 6934: International Construction Research

Interior Design Departmental Courses

- IND 5023: Introduction to Architectural Interiors
- IND 5106: History of Interior Design I
- IND 5136: History of Interior Design II
- IND 5212C: Architectural Interiors I
- IND 5213C: Introduction to Architectural Interiors Lab
- IND 5227C: Advanced Architectural Interiors I
- IND 5231C: Architectural Interiors II
- IND 5232C: Advanced Architectural Interiors II
- IND 5317C: Interior Design Communication Systems
- IND 5427C: Interior Design Construction Documents
- IND 5438: Materials for Interior Design
- IND 5434C: Interior Lighting
- IND 5445C: Furniture Design
- IND 5454C: Advanced Interior Design Detailing and Construction Documents
- IND 5464C: Computer Applications in Three-Dimensional Design
- IND 5468: Interior Environmental Technology
- IND 5508: Business and Professional Practices for Interior Designers
- IND 5638: Design Environments and Human Interaction
- IND 5937: Current Topics in Interior Design
- IND 6239: Advanced Topics in Interior Design Studio
- IND 6639: Methods of Interior Design Research
- IND 6906: Independent Studies and Readings
- IND 6940: Supervised Teaching
IND 6941: Interior Design Internship
IND 6971: Research for Master's Thesis

Landscape Architecture Departmental Courses

- LAA 5331: Site Design Methodologies
- LAA 5366: Principles of Landscape Architecture
- LAA 6231: Landscape Architecture Theory
- LAA 6322: Project Management for Landscape Architects
- LAA 6342: Landscape Architecture Criticism
- LAA 6349C: Design Communications for Landscape Architects
- LAA 6525L: Advanced Landscape Construction Design
- LAA 6536: Landscape Management
- LAA 6656C: Advanced Landscape Architectural Design
- LAA 6713: Cultural Landscapes
- LAA 6716: History of Landscape Architecture
- LAA 6905: Directed Study
- LAA 6931: Water Conservation through Site Design and Green Roofs
- LAA 6931C: Special Topics
- LAA 6933: Topics in European Design: Paris, France
- LAA 6935: Gardens of the World
- LAA 6941: Supervised Internship
- LAA 6952C: European Landscape Architecture Studio
- LAA 6971: Research for Master's Thesis
- LAA 6979: Terminal Project

Urban and Regional Planning Departmental Courses

- URP 6042: Urban Economy
- URP 6061: Planning Administration and Ethics
- URP 6100: Planning Theory and History
- URP 6122: Alternative Conflict Management
- URP 6131: Growth Management Powers I
- URP 6132: Growth Management Seminar
- URP 6203: Planning Research Design
- URP 6231: Quantitative Data Analysis for Planners
- URP 6270: Survey of Planning Information Systems
- URP 6271: Planning Information Systems
- URP 6272: Advanced Planning Information Systems
- URP 6274: GPS for Planners: Introduction to Global Positioning System
- URP 6275: Spatial Database Design and Development
- URP 6312: Land Development Planning and Evaluation
- URP 6341: Urban Planning Project
- URP 6421: Environmental Impact Statements
- URP 6424: Sustainable Urbanism in the Americas
- URP 6428: Advanced Environmental Planning
- URP 6429: Natural Resources Planning and Management
- URP 6445: Planning for Climate Change
- URP 6526: Health and the Built Environment
- URP 6541: Economic Development Planning
- URP 6542: Urban Land Economics
- URP 6543: Seminar in Capital Improvement Finance
- URP 6547: Local Public Finance for Urban Planners
- URP 6601: State Planning
- URP 6603: Development Review
- URP 6610: International Development Planning
- URP 6716: Transportation Policy and Planning
- URP 6718: Bikeways Planning and Design
- URP 6745: Housing, Public Policy, and Planning
- URP 6746: Topical Debates in Housing
- URP 6821: Transportation and Land-Use Modeling
- URP 6871: Planning and Design I
- URP 6872: Planning and Design II
- URP 6880: Defensible Space and CPTED in Urban Design
- URP 6884: Community Conservation and Revitalization
- URP 6905: Exploration and Directed Study
- URP 6910: Supervised Research
- URP 6920: Colloquium
- URP 6931: Topical Seminar
- URP 6933: Planning Information Seminar
- URP 6940: Supervised Teaching
- URP 6941: Urban Planning Internship
- URP 6971: Research for Master's Thesis
- URP 6979: Terminal Project

College of Design, Construction, and Planning Courses
Interior Design

College

College of Design, Construction, and Planning

Department/School

Interior Design Department

Degrees Offered with a Major in Interior Design

Master of Interior Design

without a concentration

concentration in Historic Preservation

concentration in Sustainable Design

Courses

- IND 5326: Color Theory Planning and Practice

Interior Design Departmental Courses
- IND 5023: Introduction to Architectural Interiors
- IND 5106: History of Interior Design I
- IND 5136: History of Interior Design II
- IND 5212C: Architectural Interiors I
- IND 5231C: Architectural Interiors II
- IND 5213C: Introduction to Architectural Interiors Lab
- IND 5227C: Advanced Architectural Interiors I
- IND 5233C: Advanced Architectural Interiors II
- IND 5271C: Interior Design Communication Systems
- IND 5427C: Interior Design Construction Documents
- IND 5428: Materials for Interior Design
- IND 5434C: Interior Lighting
- IND 5445C: Furniture Design
- IND 5454C: Advanced Interior Design Detailing and Construction Documents
- IND 5464C: Computer Applications in Three-Dimensional Design
- IND 5466: Interior Environmental Technology
- IND 5508: Business and Professional Practices for Interior Designers
- IND 5638: Design Environments and Human Interaction
- IND 5937: Current Topics in Interior Design
- IND 6239: Advanced Topics in Interior Design Studio
- IND 6339: Methods of Interior Design Research
- IND 6906: Independent Studies and Readings
- IND 6940: Supervised Teaching
- IND 6941: Interior Design Internship
- IND 6971: Research for Master's Thesis

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7791: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7975: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

International Construction Management

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr. School of Construction Management

Degrees Offered with a Major in International Construction Management

Master of International Construction Management
without a concentration

concentration in Historic Preservation

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5618C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5796C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6080: High-Performance Green Building Delivery Systems
- BCN 6085: Sustainable Construction
- BCN 6086: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905C: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6766: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
- ICM 5905: Special Studies
- ICM 6420: Commercial Management and Cost Control
- ICM 6440: Construction Value Management
- ICM 6680: Principles of International Sustainable Construction
- ICM 6682: Construction Ecology and Metabolism
- ICM 6684: High-Performance Green Building Delivery Systems
- ICM 6710: Construction Human Resource Management
- ICM 6750: Managing Construction Information Technology
- ICM 6751: International Construction Management
- ICM 6752: Construction Finance and Investment
- ICM 6761: Advanced Planning, Scheduling, and Logistics
- ICM 6762: Construction Risk Management
- ICM 6770: Advanced Project Safety Management
- ICM 6772: International Strategic Management
- ICM 6905: Directed Independent Study in International Construction
- ICM 6910: Supervised Research
- ICM 6930: Construction Communication and Research
- ICM 6934: International Construction Research

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
Landscape Architecture

College

College of Design, Construction, and Planning

Department/School

Landscape Architecture Department

Landscape Architecture Program

The Department of Landscape Architecture offers graduate programs leading to the Master of Landscape Architecture (M.L.A.) degree in Landscape Architecture. A Ph.D. degree with a concentration in Landscape Architecture is also offered through the College of Design, Construction and Planning. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

Master of Landscape Architecture: The MLA is a Landscape Architecture Accreditation Board (LAAB) accredited professional Master's degree in Landscape Architecture. Graduation from an accredited program is an essential first step toward licensing in Florida and other states that regulate the practice of landscape architecture.

For more information, please see our website: http://www.dcp.ufl.edu/landscape.

Degrees Offered with a Major in Landscape Architecture

Master of Landscape Architecture

without a concentration

concentration in Geographic Information Systems

concentration in Historic Preservation

concentration in Sustainable Design
concentration in Wetland Sciences

Landscape Architecture Departmental Courses

- LAA 5331: Site Design Methodologies
- LAA 5366: Principles of Landscape Architecture
- LAA 6231: Landscape Architecture Theory
- LAA 6322: Project Management for Landscape Architects
- LAA 6342: Landscape Architecture Criticism
- LAA 6349C: Design Communications for Landscape Architects
- LAA 6382: Ecological and Environmental Policy
- LAA 6525L: Advanced Landscape Construction Design
- LAA 6536: Landscape Management
- LAA 6656C: Advanced Landscape Architectural Design
- LAA 6713: Cultural Landscapes
- LAA 6716: History of Landscape Architecture
- LAA 6905: Directed Study
- LAA 6931: Water Conservation through Site Design and Green Roofs
- LAA 6931C: Special Topics
- LAA 6933: Topics in European Design: Paris, France
- LAA 6935: Gardens of the World
- LAA 6941: Supervised Internship
- LAA 6952C: European Landscape Architecture Studio
- LAA 6971: Research for Master's Thesis
- LAA 6979: Terminal Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, and Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
- DCP 7792: Doctoral Core II
- DCP 7794: Doctoral Seminar
- DCP 7911: Advanced Design, Construction, and Planning Research I
- DCP 7940: Supervised Teaching
- DCP 7949: Professional Internship
- DCP 7979: Advanced Research
- DCP 7980: Research for Doctoral Dissertation

Sustainable Construction

College

College of Design, Construction, and Planning

Department/School

M.E. Rinker, Sr. School of Construction Management

Degrees Offered with a Major in Sustainable Construction
Master of Science in Construction Management

Construction Management Departmental Courses

- BCN 5470: Construction Methods Improvements
- BCN 5518C: Comprehensive Estimating
- BCN 5625: Construction Cost Analysis
- BCN 5705C: Project Management for Construction
- BCN 5715: Advanced Construction Labor Problems
- BCN 5722: Advanced Construction Planning and Control
- BCN 5729: Design-Build Delivery Methods
- BCN 5737: Advanced Issues in Construction Safety and Health
- BCN 5754C: Site Development
- BCN 5776: International Construction Business Management
- BCN 5778: Facilities Operation and Maintenance
- BCN 5789C: Construction Project Delivery
- BCN 5874: Equipment and Methods for Heavy Construction
- BCN 5885: Methods and Management for Heavy Construction
- BCN 5905: Special Studies in Construction
- BCN 5949: Graduate Construction Management Internship
- BCN 5957: Advanced International Studies in Construction
- BCN 6036: Research Methods in Construction
- BCN 6580: High-Performance Green Building Delivery Systems
- BCN 6585: Sustainable Construction
- BCN 6586: Construction Ecology and Metabolism
- BCN 6621: Bidding Strategy
- BCN 6641: Construction Value Engineering
- BCN 6748: Construction Law
- BCN 6755: Construction Financial Management
- BCN 6756: Housing Economics and Policy
- BCN 6777: Construction Management Processes
- BCN 6785: Construction Information Systems
- BCN 6905: Directed Independent Study in Construction
- BCN 6910: Supervised Research
- BCN 6933: Advanced Construction Management
- BCN 6934: Construction Research
- BCN 6940: Supervised Teaching
- BCN 6971: Research for Master's Thesis
- FES 6705: Communications in Emergency Management
- FES 6724: Fire and Emergency Services Response Planning
- FES 6726: Hazard Mitigation and Preparedness
- FES 6735: International Emergency/Disaster Management
- FES 6736: Homeland Security and Emergency Management
- FES 6768: Research Methods in FES
- FES 6806: Disaster Response and Recovery
- FES 6826: Emergency Services - Disaster Planning
- FES 6827: Business Continuity and Disaster Planning
- FES 6836: Impacts of Natural and Man-made Disasters on Buildings
- FES 6916: Research for Master's Report
- FES 6940: Practicum in FES
- ICM 5905: Special Studies
- ICM 6420: Commercial Management and Cost Control
- ICM 6440: Construction Value Management
- ICM 6680: Principles of International Sustainable Construction
- ICM 6682: Construction Ecology and Metabolism
- ICM 6684: High-Performance Green Building Delivery Systems
- ICM 6710: Construction Human Resource Management
- ICM 6750: Managing Construction Information Technology
- ICM 6751: International Construction Management
- ICM 6752: Construction Finance and Investment
- ICM 6761: Advanced Planning, Scheduling, and Logistics
- ICM 6782: Construction Risk Management
- ICM 6770: Advanced Project Safety Management
- ICM 6772: International Strategic Management
- ICM 6905: Directed Independent Study in International Construction
- ICM 6910: Supervised Research
- ICM 6930: Construction Communication and Research
- ICM 6934: International Construction Research

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
Urban and Regional Planning

College

College of Design, Construction, and Planning

Department/School

Urban and Regional Planning Department

Degrees Offered with a Major in Urban and Regional Planning

Master of Arts in Urban and Regional Planning

without a concentration

concentration in Geographic Information Systems

concentration in Historic Preservation

concentration in Sustainable Design

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses
Urban and Regional Planning Departmental Courses

- URP 6042: Urban Economy
- URP 6061: Planning Administration and Ethics
- URP 6100: Planning Theory and History
- URP 6122: Alternative Conflict Management
- URP 6131: Growth Management Powers I
- URP 6132: Growth Management Seminar
- URP 6203: Planning Research Design
- URP 6231: Quantitative Data Analysis for Planners
- URP 6270: Survey of Planning Information Systems
- URP 6271: Planning Information Systems
- URP 6272: Advanced Planning Information Systems
- URP 6274: GPS for Planners: Introduction to Global Positioning System
- URP 6275: Spatial Database Design and Development
- URP 6312: Land Development Planning and Evaluation
- URP 6341: Urban Planning Project
- URP 6421: Environmental Impact Statements
- URP 6424: Sustainable Urbanism in the Americas
- URP 6428: Advanced Environmental Planning
- URP 6429: Natural Resources Planning and Management
- URP 6445: Planning for Climate Change
- URP 6526: Health and the Built Environment
- URP 6541: Economic Development Planning
- URP 6542: Urban Land Economics
- URP 6543: Seminar in Capital Improvement Finance
- URP 6547: Local Public Finance for Urban Planners
- URP 6601: State Planning
- URP 6603: Development Review
- URP 6610: International Development Planning
- URP 6616: Transportation Policy and Planning
- URP 6618: Bikeways Planning and Design
- URP 6645: Housing, Public Policy, and Planning
- URP 6646: Topical Debates in Housing
- URP 6821: Transportation and Land-Use Modeling
- URP 6871: Planning and Design I
- URP 6872: Planning and Design II
- URP 6880: Defensible Space and CPTED in Urban Design
- URP 6884: Community Conservation and Revitalization
- URP 6905: Exploration and Directed Study
- URP 6910: Supervised Research
- URP 6920: Colloquium
- URP 6931: Topical Seminar
- URP 6933: Planning Information Seminar
- URP 6940: Supervised Teaching
- URP 6941: Urban Planning Internship
- URP 6971: Research for Master's Thesis
- URP 6973: Terminal Project

College of Design, Construction, and Planning Courses

- DCP 6205: Ecological Issues in Sustainability and the Built Environment
- DCP 6211: Preservation Topics, Issues, and Practice
- DCP 6710: History and Theory of Historic Preservation
- DCP 6711: History of the Built Environment for Preservation Practice
- DCP 6712: Preservation Technology: Conserving Modern Buildings
- DCP 6713: Historic Preservation: Principles, Practice, and Engineering
- DCP 6714: Built Heritage Resources: Research, Documentation, And Conservation
- DCP 6715: Preservation Building Technology
- DCP 6716: Cultural Resource Management
- DCP 6730: Preservation Policy
- DCP 6905: Independent Study
- DCP 6931: Special Topics in Design, Construction, and Planning
- DCP 6943: Practicum in Historic Preservation
- DCP 6971: Research for Master's Thesis
- DCP 7790: Doctoral Core I
College of Education

Dear: G. Good.

Complete faculty listings: Follow this link

Graduate study in education, allows individuals with bachelor's degrees in agriculture, business, education, engineering, mathematics, sciences, humanities, foreign languages, preprofessional studies and other fields to prepare for rewarding professional careers in education and related fields.

The College of Education offers 19 master's or specialist programs, 12 doctoral programs, and a J.D./Ph.D. program with the College of Law through its three schools: Human Development and Organizational Studies in Education; Special Education, School Psychology and Early Childhood Studies; and School of Teaching and Learning.

Follow these links for more information about UF's College of Education graduate programs:
http://education.ufl.edu/graduate-studies
http://education.ufl.edu/programs

Departments and Programs within the College of Education

College of Education Courses

Other

Counseling and Counselor Education

College

Human Development and Organizational Studies in Education Department

Counseling and Counselor Education Program

The doctoral program in Counseling and Counselor Education prepares students for careers in academia and advanced clinical and administrative positions. Our program aligns with the University of Florida mission to prepare the next generation of scholars and professional leaders. Thus, our doctoral program is a good fit for individuals who want to fulfill the roles of counselor educators – research, writing, teaching, service, securing external funding to support scholarship, assuming professional leadership positions, etc. The doctoral program is ideally suited for individuals with previously earned masters and at least two years of clinical experience. Doctoral students complete coursework, a doctoral clinical internship, participate in teaching and supervision, and conduct research leading to the completion of a dissertation. Students average 3 to 5 years to complete the doctorate, many of whom balance work and school commitments.

Degrees Offered with a Major in Counseling and Counselor Education

Doctor of Education

without a concentration

centration in Marriage and Family Counseling
concentration in Mental Health Counseling

concentration in School Counseling and Guidance

Doctor of Philosophy

without a concentration

concentration in Marriage and Family Counseling

concentration in Mental Health Counseling

concentration in School Counseling and Guidance

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7215: Leading Change in Educational Organizations
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7422: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7222: Curriculum: Theory and Research
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7665: Bases of Curriculum and Instruction Theory
- EDG 7646: Diversity Issues in Higher Education
- EDG 6049: Domestic and International College Student Services
- EDG 6051: Educational Outcomes of American Colleges and Universities
- EDG 6053: The Community Junior College in America
- EDG 6066: American Higher Education
- EDG 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7942: Group Supervision in Student Personnel
- EDH 7948: Internship in Student Personnel
- EDS 6140: Supervision of Instruction
- MHS 6000: Assessment and Treatment of Family Violence
- MHS 6020: Counseling in Community Settings
- MHS 6061: Spiritual Issues in Multicultural Counseling
- MHS 6071: Diagnosis and Treatment of Mental Disorders
- MHS 6200: Assessment in Counseling
- MHS 6340: Career Development
- MHS 6401: Counseling Theories and Applications
- MHS 6421: Play Counseling and Play Process with Children
- MHS 6428: Multicultural Counseling
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marriage Counseling
- MHS 6450: Substance Abuse Counseling
- MHS 6464: Introduction to Disaster Mental Health Counseling
- MHS 6466: Trauma and Crisis Intervention: Theory and Practice
- MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
- MHS 6468: Multicultural issues in disaster mental health counseling
- MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
- MHS 6471: Sexuality and Mental Health
- MHS 6480: Developmental Counseling Over the Life Span
- MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
- MHS 6500: Group Counseling: Theories and Procedures
- MHS 6602: Educational Mediation
- MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
- MHS 6720: Professional Identity and Ethics in Counseling
- MHS 6831: Supervision for a Split Internship
- MHS 6905: Individual Work
- MHS 6910: Supervised Research
- MHS 6940: Supervised Teaching
- MHS 6971: Research for Master's Thesis
- MHS 7402: Brief Therapy
- MHS 7407: Advanced Counseling Theories
- MHS 7431: Advanced Family Counseling
- MHS 7600: Consultation Procedures
- MHS 7610: Practicum in Counseling Supervision
- MHS 7730: Seminar in Counseling Research
- MHS 7740: Research in Counseling
- MHS 7800: Practicum in Counseling
- MHS 7804: Group Supervision in Agency Counseling
- MHS 7805: Practicum in Agency Counseling
- MHS 7806: Practicum in Marriage and Family Counseling
- MHS 7807: Group Supervision in Marriage and Family Counseling
- MHS 7830: Internship in Counseling and Development-600 Hours
- MHS 7840: Internship in Counselor Education
- MHS 7946: Internship in Agency Program Management
- MHS 7979: Advanced Research
- MHS 7980: Research for Doctoral Dissertation
- SDS 6401: Counseling Skills for Non-Counselors
- SDS 6411: Counseling with Children
- SDS 6413: Counseling Adolescents
- SDS 6436: Family-School Intervention
- SDS 6520: Family, Student Development and Role of Teacher as Adviser
Curriculum and Instruction (CCD)

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Curriculum and Instruction

Doctor of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education
EDE 5940: Integrated Teaching and Learning
EDE 6225: Practices in Childhood Education
EDE 6266: Teaching and Learning in Elementary Classrooms
EDE 6325: Teacher Inquiry/Action Research
EDE 6905: Individual Work
EDE 6910: Supervised Research
EDE 6932: Special Topics
EDE 6948: Internship in Elementary Schools
EDE 7047: Issues in Teacher Education
EDE 7935: Seminar in Curriculum & Instruction
EDG 6356: Teaching, Learning and Assessment
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

EME 5054: Foundations of Educational Technology
EME 5207: Designing Technology-Rich Curricula
EME 5315: Communicating with Technology
EME 5316: Educational Technology Management Issues
EME 5403: Instructional Computing I
EME 5404: Instructional Computing II
EME 5405: Internet in K-12 Instruction
EME 5431: Integrating Technology in the Mathematics Classroom
EME 5432: Integrating Technology into Social Science Classroom
EME 5433: Integrating Technology into Science Classroom
EME 6066: Issues and Trends in Educational Technology Research
EME 6205: Digital Photography and Visual Literacy
EME 6208: Designing Integrated Media Environments I
EME 6209: Designing Integrated Media Environments II
EME 6405: Educational Technology and Teaching
EME 6458: Distance Teaching and Learning
EME 6505: Educational Television Design and Production
EME 6602: Human-Computer Interactivity and the Learner
EME 6606: Advanced Instructional Design
EME 6609: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

FLE 6165: Bilingual-Bicultural Education
FLE 6167: Cross-Cultural Communication for Teachers
FLE 6336: Teaching Foreign Languages in Elementary Schools
FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
FLE 6385: Foreign Languages Teaching Methods
FLE 6406: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
TSL 5142: ESOL Curriculum, Methods, and Assessment
TSL 5325: Secondary ESOL Teaching Strategies
TSL 6145: Curriculum and Materials Development for ESOL K-12
TSL 6171: TESL I: Materials and Techniques
TSL 6172: TESL II: Materials for Special Purposes
TSL 6245: Language Principles for ESOL Teachers
TSL 6373: Methods of Teaching ESOL K-12
TSL 6440: Testing and Evaluation of ESOL
TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

LAE 6298: Literacy & Language Instruction
LAE 6319: Language Arts in the Elementary School
LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
LAE 6348: Teaching Multiliteracies
LAE 6365: Language Arts: Language and Composition
LAE 6366: Language Arts: Literature
LAE 6407: Early Childhood Children's Literature
LAE 6446: Multicultural Literature for Children and Adolescents
LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
LAE 6455: International Children's Literature
LAE 6616: Seminar in Children's Literature
LAE 6635: Teaching Adolescent Literature in the Secondary School
LAE 6714: Children's Literature in the Childhood Curriculum
LAE 6861: Technology and Media Literacy
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>LAE 6865</td>
<td>Teaching Media Literacy with the Internet</td>
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<td>LAE 6869</td>
<td>Teaching Digital Storytelling</td>
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<tr>
<td>LAE 6939</td>
<td>Literacy, Family, and Culture</td>
</tr>
<tr>
<td>LAE 6945</td>
<td>Practicum and Assessment for Teachers of Secondary School English</td>
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<tr>
<td>LAE 6946</td>
<td>Children's Literature in Educational Settings</td>
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<tr>
<td>LAE 7006</td>
<td>Language Acquisition and Education</td>
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<td>LAE 7519</td>
<td>Language and Inquiry</td>
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<td>LAE 7715</td>
<td>Research in Children's Literature</td>
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<tr>
<td>LAE 7934</td>
<td>Seminar in Composition Theory and Practice</td>
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<tr>
<td>LAE 7936</td>
<td>Seminar in English Language Arts</td>
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**Mathematics Education**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MAE 5327</td>
<td>Middle School Mathematics Methods</td>
</tr>
<tr>
<td>MAE 5332</td>
<td>Secondary School Mathematics Methods and Assessment</td>
</tr>
<tr>
<td>MAE 5395</td>
<td>Multicultural Mathematics Methods</td>
</tr>
<tr>
<td>MAE 5396</td>
<td>Using Formative Assessment to Improve Mathematical Learning</td>
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<tr>
<td>MAE 5347</td>
<td>Teaching K-8 Mathematics for Understanding</td>
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<tr>
<td>MAE 5945</td>
<td>Secondary School Mathematics Practicum</td>
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<tr>
<td>MAE 6313</td>
<td>Problem Solving in School Mathematics</td>
</tr>
<tr>
<td>MAE 6615</td>
<td>Individualizing Instruction in Mathematics</td>
</tr>
<tr>
<td>MAE 6641</td>
<td>Readings and Research in Mathematics Education</td>
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<tr>
<td>MAE 7899</td>
<td>Mathematics Education Seminar</td>
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**Reading Education**

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<th>Course Code</th>
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<tr>
<td>RED 5046</td>
<td>Foundations of Reading in Grades PreK-12</td>
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<tr>
<td>RED 5316</td>
<td>Reading in the Primary Grades</td>
</tr>
<tr>
<td>RED 5337</td>
<td>Reading in the Secondary School</td>
</tr>
<tr>
<td>RED 5355</td>
<td>Reading Instruction in the Intermediate Grades</td>
</tr>
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<td>RED 5399</td>
<td>Practices in Beginning Reading Instruction</td>
</tr>
<tr>
<td>RED 6346</td>
<td>Seminar in Reading</td>
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<tr>
<td>RED 6520</td>
<td>Classroom Literacy Assessment and Instruction</td>
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<tr>
<td>RED 6546C</td>
<td>Diagnosis of Reading Difficulties</td>
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<tr>
<td>RED 6548C</td>
<td>Remediation of Reading Difficulties</td>
</tr>
<tr>
<td>RED 6647</td>
<td>Trends in Reading</td>
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<tr>
<td>RED 6911</td>
<td>Practicum in Diagnosis and Remediation of Reading Difficulties</td>
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<tr>
<td>RED 7019</td>
<td>Foundations of Literacy</td>
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<tr>
<td>RED 7817</td>
<td>Understanding Reading Difficulties</td>
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**Science Education**

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<th>Course Code</th>
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<tr>
<td>SCE 5316</td>
<td>Inquiry-Based Science Teaching</td>
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<tr>
<td>SCE 5355</td>
<td>Foundations of Science Teaching</td>
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<td>SCE 5695</td>
<td>Diversity and Equity in Science Teaching</td>
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<td>SCE 5765</td>
<td>Data-Driven Science Instruction</td>
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<td>SCE 6045</td>
<td>Environmental Education Methods and Materials</td>
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<td>SCE 6117</td>
<td>Science Education in the Elementary School</td>
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<td>SCE 6246</td>
<td>Science Instruction in Informal Settings</td>
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<td>SCE 6338</td>
<td>Secondary Science Methods and Assessment</td>
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<tr>
<td>SCE 6647</td>
<td>Global Studies Methods in Science Education</td>
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<td>SCE 6947</td>
<td>Practicum in Secondary Science Teaching and Assessment</td>
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**Secondary Education**

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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>EDM 6005</td>
<td>The Emergent Middle School</td>
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<td>EDM 6235</td>
<td>Interdisciplinary Planning, Teaching, and Assessment</td>
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<tr>
<td>ESE 6215</td>
<td>The Secondary School Curriculum</td>
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<tr>
<td>ESE 6344</td>
<td>Classroom Practices and Assessment in Secondary Education</td>
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<tr>
<td>ESE 6345</td>
<td>Effective Teaching and Classroom Management</td>
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<td>ESE 6906</td>
<td>Individual Work</td>
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<td>ESE 6939</td>
<td>Special Topics</td>
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<td>ESE 6945</td>
<td>Student Teaching in Secondary School</td>
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</tbody>
</table>

**Social Foundations of Education**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>EDF 5552</td>
<td>Role of School in Democratic Society</td>
</tr>
<tr>
<td>EDF 6520</td>
<td>History of Education</td>
</tr>
<tr>
<td>EDF 6544</td>
<td>Philosophical Foundations of Education</td>
</tr>
<tr>
<td>EDF 6606</td>
<td>Socioeconomic Foundations of Education</td>
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<tr>
<td>EDF 6616</td>
<td>Education and American Culture</td>
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<tr>
<td>EDF 6630</td>
<td>Educational Sociology</td>
</tr>
<tr>
<td>EDF 6812</td>
<td>Comparative Education</td>
</tr>
</tbody>
</table>
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Curriculum and Instruction (ISC)

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Curriculum and Instruction

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6517: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher InquiryAction Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDE 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6615: Organization and Administration of Educational Media Centers
- EME 6936: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education
- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6365: Foreign Languages Teaching Methods
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6338: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6946: Practicum and Assessment for Teachers of Secondary School English
- LAE 6947: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7938: Seminar in English Language Arts

**Language and Literacy Education**

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

**Mathematics Education**

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6548C: Diagnosis of Reading Difficulties
- RED 6648C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

**Reading Education**
• SCE 5316: Inquiry-Based Science Teaching
• SCE 5355: Foundations of Science Teaching
• SCE 5695: Diversity and Equity in Science Teaching
• SCE 5765: Data-Driven Science Instruction
• SCE 6045: Environmental Education Methods and Materials
• SCE 6117: Science Education in the Elementary School
• SCE 6246: Science Instruction in Informal Settings
• SCE 6338: Secondary Science Methods and Assessment
• SCE 6647: Global Studies Methods in Science Education
• SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

• EDM 6005: The Emergent Middle School
• EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
• ESE 6215: The Secondary School Curriculum
• ESE 6344: Classroom Practices and Assessment in Secondary Education
• ESE 6345: Effective Teaching and Classroom Management
• ESE 6905: Individual Work
• ESE 6939: Special Topics
• ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

• EDF 5552: Role of School in Democratic Society
• EDF 6520: History of Education
• EDF 6544: Philosophical Foundations of Education
• EDF 6606: Socioeconomic Foundations of Education
• EDF 6616: Education and American Culture
• EDF 6630: Educational Sociology
• EDF 6812: Comparative Education
• EDF 6820: Education in Latin America
• EDF 7555: Values and Ethics in Education
• EDF 7934: Seminar in Educational Foundations

Social Studies Education

• SSE 5320: Middle School Social Studies Methods
• SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
• SSE 6046: Perspectives in Social Studies Education
• SSE 6117: Social Studies Education—Elementary School
• SSE 6133: Secondary School Social Studies Methods and Assessment
• SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

• EDE 6325: Teacher InquiryAction Research
• EDG 6047: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6415: Culturally Responsive Classroom Management
• EDG 6953: TLSI Online Portfolio Preparation

Early Childhood Education

College

College of Education

Department/School

Special Education, School Psychology, and Early Childhood Studies Department

Degrees Offered with a Major in Early Childhood Education
Master of Arts in Education

Master of Education

Early Childhood Education Courses

- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7666: Theory and Research in Early Childhood Studies
- EEC 7979: Advanced Research

Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7666: Theory and Research in Early Childhood Studies
- EEX 6053: Foundations of Special Education
- EEX 6098: Students with Disabilities in Higher Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6269: Understanding Assessment for Postsecondary Students with Disabilities
- EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
- EEX 6785: Introduction to Education-Healthcare Transition
- EEX 6786: Transdisciplinary and Transition Services in Special Education
- EEX 6788: Legal Aspects and Policy in Education-Healthcare Transition
- EEX 6789: Methods for Integrating Education-Health Care Transition
- EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
- EEX 6841: Practicum in Special Education: Mild Disabilities
- EEX 6883: Supervised Practice in Special Education
- EEX 7709: Social-Emotional Learning & Play in Early Childhood
- SPS 7980: Research for Doctoral Dissertation

Educational Leadership

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Educational Leadership Program Information
Programs in Educational Leadership provide opportunities for professional educators and those who would like to be professional educators to receive quality coursework, mentorship, and degrees in educational administration, policy, and leadership. The programs provided are ideal for vice principals, principals, district directors and supervisors, assistant superintendents, school business managers, teachers aspiring to acquire administrative roles within the K-12 system and educational leaders of other organizations.

Degrees Offered with a Major in Educational Leadership

Doctor of Education

without a concentration

concentration in Educational Policy

Doctor of Philosophy

without a concentration

concentration in Educational Policy

Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6061: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA6192: Educational Leadership: The Individual
- EDA6193: Educational Leadership: Instruction
- EDA6195: Educational Policy Development
- EDA6215: Communications in Educational Leadership
- EDA6222: Administration of School Personnel
- EDA6225: Labor Relations in Public Education
- EDA6232: Public School Law
- EDA6242: Public School Finance
- EDA6271: Technology/Leadership for Educational Administrators
- EDA6423: Data-Driven Decision Making in Educational Organizations
- EDA6503: The Principalship
EDA 6905: Individual Work
EDA 6931: Special Topics
EDA 6948: Supervised Practice in School Administration
EDA 6971: Research for Master's Thesis
EDA 7206: Organizational Leadership in Education
EDA 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDA 7265: Bases of Curriculum and Instruction Theory
EDA 7411: Field Experience in Curriculum and Instruction
EDA 7979: Advanced Research
EDA 7980: Research for Doctoral Dissertation
EDH 6040: Theory of College Student Development
EDH 6046: Diversity Issues in Higher Education
EDH 6049: Domestic and International College Student Services
EDH 6051: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community Junior College in America
EDH 6066: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6503: Resource Development in Higher Education
EDH 6632: Current Issues in Community College Leadership
EDH 6637: Crisis Management in Higher Education
EDH 6931: Special Topics in Higher Education
EDH 6935: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7506: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDS 6140: Supervision of Instruction
MHS 5005: Introduction to Counseling
MHS 6000: Assessment and Treatment of Family Violence
MHS 6020: Counseling in Community Settings
MHS 6061: Spiritual Issues in Multicultural Counseling
MHS 6071: Diagnosis and Treatment of Mental Disorders
MHS 6200: Assessment in Counseling
MHS 6340: Career Development
MHS 6401: Counseling Theories and Applications
MHS 6421: Play Counseling and Play Process with Children
MHS 6428: Multicultural Counseling
MHS 6430: Introduction to Family Counseling
MHS 6440: Marriage Counseling
MHS 6450: Substance Abuse Counseling
MHS 6464: Introduction to Disaster Mental Health Counseling
MHS 6466: Trauma and Crisis Intervention: Theory and Practice
MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
MHS 6468: Multicultural issues in disaster mental health counseling
MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
MHS 6471: Sexuality and Mental Health
MHS 6482: Developmental Counseling Over the Life Span
MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
MHS 6500: Group Counseling: Theories and Procedures
MHS 6602: Educational Mediation
MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
MHS 6720: Professional Identity and Ethics in Counseling
MHS 6831: Supervision for a Split Internship
MHS 6905: Individual Work
MHS 6910: Supervised Research
MHS 6940: Supervised Teaching
MHS 6971: Research for Master's Thesis
Elementary Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Elementary Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses
EDG 6047: Teacher Leadership for Educational Change
EDG 6207: Transforming the Curriculum
EDG 6226: Foundations of Research in Curriculum & Instruction
EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EME 6076: Virtual School Philosophy and Pedagogy
EME 6156: Games and Simulations for Teaching and Learning
EME 6235: Managing Educational Projects
EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher InquiryAction Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDE 7941: Field Experience in Curriculum and Instruction
- EDE 7979: Advanced Research
- EDE 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6835: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6385: Foreign Languages Teaching Methods
- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
TSL 5142: ESOL Curriculum, Methods, and Assessment
TSL 5325: Secondary ESOL Teaching Strategies
TSL 6145: Curriculum and Materials Development for ESOL K-12
TSL 6171: TESL I: Materials and Techniques
TSL 6172: TESL II: Materials for Special Purposes
TSL 6245: Language Principles for ESOL Teachers
TSL 6373: Methods of Teaching ESOL K-12
TSL 6440: Testing and Evaluation of ESOL
TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5686: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
Secondary Education

- EDM6005: The Emergent Middle School
- EDM6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher InquiryAction Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

English Education

College

School of Teaching and Learning

Degrees Offered with a Major in English Education

Master of Arts in Education
Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MÆ 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7941: Field Experience in Curriculum and Instruction
- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
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- EDE 6266: Teaching and Learning in Elementary Classrooms
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- EDE 6932: Special Topics
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- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5406: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
EME 6209: Designing Integrated Media Environments II
EME 6405: Educational Technology and Teaching
EME 6458: Distance Teaching and Learning
EME 6505: Educational Television Design and Production
EME 6602: Human-Computer Interactivity and the Learner
EME 6606: Advanced Instructional Design
EME 6609: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

FLE 6165: Bilingual-Bicultural Education
FLE 6167: Cross-Cultural Communication for Teachers
FLE 6336: Teaching Foreign Languages in Elementary Schools
FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
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TSL 5142: ESOL Curriculum, Methods, and Assessment
TSL 5325: Secondary ESOL Teaching Strategies
TSL 6145: Curriculum and Materials Development for ESOL K-12
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TSL 6172: TESL II: Materials for Special Purposes
TSL 6245: Language Principles for ESOL Teachers
TSL 6373: Methods of Teaching ESOL K-12
TSL 6440: Testing and Evaluation of ESOL
TSL 6700: Issues in ESOL for School Counselors and Psychologists

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LAE 6348: Teaching Multiliteracies
LAE 6365: Language Arts: Language and Composition
LAE 6366: Language Arts: Literature
LAE 6407: Early Childhood Children's Literature
LAE 6446: Multicultural Literature for Children and Adolescents
LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
LAE 6455: International Children's Literature
LAE 6616: Seminar in Children's Literature
LAE 6635: Teaching Adolescent Literature in the Secondary School
LAE 6714: Children's Literature in the Childhood Curriculum
LAE 6861: Technology and Media Literacy
LAE 6865: Teaching Media Literacy with the Internet
LAE 6869: Teaching Digital Storytelling
LAE 6939: Literacy, Family, and Culture
LAE 6945: Practicum and Assessment for Teachers of Secondary School English
LAE 6946: Children's Literature in Educational Settings
LAE 7006: Language Acquisition and Education
LAE 7519: Language and Inquiry
LAE 7715: Research in Children's Literature
LAE 7934: Seminar in Composition Theory and Practice
LAE 7936: Seminar in English Language Arts

Mathematics Education

MAE 5327: Middle School Mathematics Methods
MAE 5332: Secondary School Mathematics Methods and Assessment
MAE 5395: Multicultural Mathematics Methods
MAE 5396: Using Formative Assessment to Improve Mathematical Learning
MAE 5347: Teaching K-8 Mathematics for Understanding
MAE 5945: Secondary School Mathematics Practicum
MAE 6313: Problem Solving in School Mathematics
MAE 6615: Individualizing Instruction in Mathematics
MAE 6641: Readings and Research in Mathematics Education
MAE 7899: Mathematics Education Seminar

Reading Education

RED 5046: Foundations of Reading in Grades PreK-12
RED 5316: Reading in the Primary Grades
RED 5337: Reading in the Secondary School
RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
- SCE 5355: Foundations of Science Teaching
- SCE 5695: Diversity and Equity in Science Teaching
- SCE 5765: Data-Driven Science Instruction
- SCE 6045: Environmental Education Methods and Materials
- SCE 6117: Science Education in the Elementary School
- SCE 6246: Science Instruction in Informal Settings
- SCE 6338: Secondary Science Methods and Assessment
- SCE 6647: Global Studies Methods in Science Education
- SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

- EDM 6005: The Emergent Middle School
- EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
- ESE 6215: The Secondary School Curriculum
- ESE 6344: Classroom Practices and Assessment in Secondary Education
- ESE 6345: Effective Teaching and Classroom Management
- ESE 6905: Individual Work
- ESE 6939: Special Topics
- ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Higher Education Administration

College
Higher Education Administration Program Information

The Higher Education Administration program has been established for students aspiring to become community college and university administrators, deans, presidents, and professors. America's community colleges and universities will soon face a critical leadership gap. As the baby boom generation approaches retirement age, many provosts, deans and college presidents are getting ready to add "emeritus" to their titles. As a result, openings in top leadership positions are expected to exceed the number of appropriately-trained individuals for many years to come.

The University of Florida's College of Education is helping fill the gap. Our nationally recognized Higher Education Administration Program prepares future leaders for their roles in administrative positions in higher education. Our faculty and alumni shaped the community and state college systems as we know it, and our graduates have gone on to crucial administrative positions at two- and four-year institutions. Join us in shaping the future of higher education.

Degrees Offered with a Major in Higher Education Administration

Doctor of Education

without a concentration

concentration in Educational Policy

Doctor of Philosophy

without a concentration

concentration in Educational Policy

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6061: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA6192: Educational Leadership: The Individual
- EDA6193: Educational Leadership: Instruction
- EDA6196: Educational Policy/Development
- EDA6215: Communications in Educational Leadership
- EDA6222: Administration of School Personnel
- EDA6225: Labor Relations in Public Education
- EDA6232: Public School Law
- EDA6242: Public School Finance
- EDA6271: Technology/Leadership for Educational Administrators
- EDA6423: Data-Driven Decision Making in Educational Organizations
- EDA6503: The Principalship
- EDA6905: Individual Work
- EDA6931: Special Topics
• EDA 6935: Problems in School Administration and Supervision
• EDA 6948: Supervised Practice in School Administration
• EDA 6971: Research for Master's Thesis
• EDA 7206: Organizational Leadership in Education
• EDA 7945: Practicum in Supervision and Administration
• EDA 7979: Advanced Research
• EDA 7980: Research for Doctoral Dissertation
• EDA 7985: Research Design in Educational Administration
• EDF 7413: Advanced Topics in Structural Equation Modeling
• EDF 7482: Quasi-experimental Design and Analysis in Educational Research
• EDG 6250: The School Curriculum
• EDG 6265: Evaluation in the School Program
• EDG 6356: Teaching, Learning and Assessment
• EDG 6905: Individual Work
• EDG 6910: Supervised Research
• EDG 6931: Special Topics
• EDG 6940: Supervised Teaching
• EDG 6971: Research for Master's Thesis
• EDG 6973: Project in Lieu of Thesis
• EDG 7222: Curriculum: Theory and Research
• EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
• EDG 7665: Bases of Curriculum and Instruction Theory
• EDG 7914: Field Experience in Curriculum and Instruction
• EDG 7979: Advanced Research
• EDG 7980: Research for Doctoral Dissertation
• EDH 6040: Theory of College Student Development
• EDH 6046: Diversity Issues in Higher Education
• EDH 6049: Domestic and International College Student Services
• EDH 6051: Educational Outcomes of American Colleges and Universities
• EDH 6053: The Community College in America
• EDH 6066: American Higher Education
• EDH 6067: Seminar: International Higher Education
• EDH 6305: College and University Teaching
• EDH 6360: Foundations and Functions of College Student Personnel
• EDH 6361: Theories and Assessment of Higher Educational Environments
• EDH 6503: Resource Development in Higher Education
• EDH 6832: Current Issues in Community College Leadership
• EDH 6837: Crisis Management in Higher Education
• EDH 6931: Special Topics in Higher Education
• EDH 6935: Seminar in College Student Personnel Administration
• EDH 6945: Practicum in College Teaching I
• EDH 6946: Practicum in College Teaching II
• EDH 6947: Practicum in Student Personnel
• EDH 7225: Seminar: Curriculum in Higher Education
• EDH 7405: The Law and Higher Education
• EDH 7505: The Financing of Higher Education
• EDH 7631: Administration of Instruction in Higher Education
• EDH 7634: Student Affairs Administration in Higher Education
• EDH 7635: Higher Education Administration
• EDH 7916: Contemporary Research on Higher Education
• EDH 7942: Group Supervision in Student Personnel
• EDH 7948: Internship in Student Personnel
• EDS 6140: Supervision of Instruction
• MHS 5005: Introduction to Counseling
• MHS 6000: Assessment and Treatment of Family Violence
• MHS 6020: Counseling in Community Settings
• MHS 6061: Spiritual Issues in Multicultural Counseling
• MHS 6071: Diagnosis and Treatment of Mental Disorders
• MHS 6200: Assessment in Counseling
• MHS 6340: Career Development
• MHS 6401: Counseling Theories and Applications
• MHS 6421: Play Counseling and Play Process with Children
• MHS 6428: Multicultural Counseling
• MHS 6430: Introduction to Family Counseling
• MHS 6440: Marriage Counseling
• MHS 6450: Substance Abuse Counseling
• MHS 6464: Introduction to Disaster Mental Health Counseling
• MHS 6466: Trauma and Crisis Intervention: Theory and Practice
• MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
• MHS 6468: Multicultural issues in disaster mental health counseling
• MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
• MHS 6471: Sexuality and Mental Health
• MHS 6480: Developmental Counseling Over the Life Span
• MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
• MHS 6500: Group Counseling: Theories and Procedures
• MHS 6602: Educational Mediation
• MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
• MHS 6720: Professional Identity and Ethics in Counseling
• MHS 6831: Supervision for a Split Internship
• MHS 6905: Individual Work
• MHS 6910: Supervised Research
• MHS 6940: Supervised Teaching
• MHS 6971: Research for Master's Thesis
• MHS 7402: Brief Therapy
• MHS 7407: Advanced Counseling Theories
Marriage and Family Counseling

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Marriage and Family Counseling Program Information

The Marriage & Family Counseling/Therapy program specialization emphasizes an eco-systemic approach to understanding human problems and generating solution opportunities: Students learn to moderate solution-oriented conversations among interested parties (i.e., stakeholders) who are invited to seek “double descriptions” of mutual concerns and problems, to listen carefully to each other, to entertain and invent multiple solution possibilities, and to construct new narratives of cooperation and commitment.

Degrees Offered with a Major in Marriage and Family Counseling

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education
Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology/Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7205: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDA 7985: Research Design in Educational Administration
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDG 6250: The School Curriculum
- EDG 6285: Evaluation in the School Program
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EGD 6910: Supervised Research
- EGD 6931: Special Topics
- EGD 6940: Supervised Teaching
- EGD 6971: Research for Master's Thesis
- EGD 6973: Project in Lieu of Thesis
- EGD 7222: Curriculum: Theory and Research
- EGD 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EGD 7605: Bases of Curriculum and Instruction Theory
- EGD 7941: Field Experience in Curriculum and Instruction
- EGD 7979: Advanced Research
- EGD 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
- EDH 7505: The Financing of Higher Education
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7942: Group Supervision in Student Personnel
- EDH 7948: Internship in Student Personnel
- EDS 6140: Supervision of Instruction
- MHS 5005: Introduction to Counseling
- MHS 6000: Assessment and Treatment of Family Violence
- MHS 6020: Counseling in Community Settings

University of Florida » 2014-2015 Graduate Catalog 2/2/2015
Mathematics Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Mathematics Education

Master of Arts in Education
Master of Education

Teaching and Learning Departmental Courses

- EDG 5866: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
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- EDG 7326: Differentiated Supervision and Teacher Professional Development
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- EDG 7979: Advanced Research
- EDG 7980: Research for Doctoral Dissertation
- EME 6076: Virtual School Philosophy and Pedagogy
- EME 6156: Games and Simulations for Teaching and Learning
- EME 6235: Managing Educational Projects
- EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher Inquiry/Action Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6365: Foreign Languages Teaching Methods
- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children's Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education
• RED 5046: Foundations of Reading in Grades PreK-12
• RED 5316: Reading in the Primary Grades
• RED 5337: Reading in the Secondary School
• RED 5355: Reading in the Intermediate Grades
• RED 5399: Praxies in Beginning Reading Instruction
• RED 6546: Seminar in Reading
• RED 6532: Classroom Literacy Assessment and Instruction
• RED 6546C: Diagnosis of Reading Difficulties
• RED 6548C: Remediation of Reading Difficulties
• RED 6647: Trends in Reading
• RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
• RED 7019: Foundations of Literacy
• RED 7817: Understanding Reading Difficulties

Science Education

• SCE 5316: Inquiry-Based Science Teaching
• SCE 5355: Foundations of Science Teaching
• SCE 5695: Diversity and Equity in Science Teaching
• SCE 5765: Data-Driven Science Instruction
• SCE 6045: Environmental Education Methods and Materials
• SCE 6117: Science Education in the Elementary School
• SCE 6246: Science Instruction in Informal Settings
• SCE 6338: Secondary Science Methods and Assessment
• SCE 6647: Global Studies Methods in Science Education
• SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

• EDM6005: The Emergent Middle School
• EDM6235: Interdisciplinary Planning, Teaching, and Assessment
• ESE6215: The Secondary School Curriculum
• ESE6344: Classroom Practices and Assessment in Secondary Education
• ESE6345: Effective Teaching and Classroom Management
• ESE6905: Individual Work
• ESE6939: Special Topics
• ESE6945: Student Teaching in Secondary School

Social Foundations of Education

• EDF 5552: Role of School in Democratic Society
• EDF 6520: History of Education
• EDF 6544: Philosophical Foundations of Education
• EDF 6606: Socioeconomic Foundations of Education
• EDF 6616: Education and American Culture
• EDF 6630: Educational Sociology
• EDF 6812: Comparative Education
• EDF 6820: Education in Latin America
• EDF 7555: Values and Ethics in Education
• EDF 7934: Seminar in Educational Foundations

Social Studies Education

• SSE 5320: Middle School Social Studies Methods
• SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
• SSE 6046: Perspectives in Social Studies Education
• SSE 6117: Social Studies Education—Elementary School
• SSE 6133: Secondary School Social Studies Methods and Assessment
• SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

• EDE 6325: Teacher InquiryAction Research
• EDG 6047: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6415: Culturally Responsive Classroom Management
• EDG 6963: TLSI Online Portfolio Preparation

Mental Health Counseling
Mental Health Counseling Program Information

The M.Ed./Ed.S. and M.AE./Ed.S. program in Mental Health Counseling is designed to equip students with the pre-professional competencies required for Registered Intern status and, after a minimum number of years of post-degree supervised clinical experience, (a) licensure in the State of Florida as Mental Health Counselors and (b) clinical membership in NBCC’s Academy of Certified Clinical Mental Health Counselors. Additionally, some students may choose to continue their studies in a doctoral program. These students often elect the thesis option (M.A.E.) to complete their studies.

Degrees Offered with a Major in Mental Health Counseling

- Doctor of Education
- Doctor of Philosophy
- Master of Arts in Education
- Master of Education
- Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
• MHS 7740: Research in Counseling
• MHS 7800: Practicum in Counseling
• MHS 7804: Group Supervision in Agency Counseling
• MHS 7805: Practicum in Agency Counseling
• MHS 7806: Practicum in Marriage and Family Counseling
• MHS 7807: Group Supervision in Marriage and Family Counseling
• MHS 7830: Internship in Counseling and Development-600 Hours
• MHS 7840: Internship in Counselor Education
• MHS 7946: Internship in Agency Program Management
• MHS 7979: Advanced Research
• MHS 7980: Research for Doctoral Dissertation
• SDS 6401: Counseling Skills for Non-Counselors
• SDS 6411: Counseling with Children
• SDS 6413: Counseling Adolescents
• SDS 6436: Family-School Intervention
• SDS 6520: Family, Student Development and Role of Teacher as Adviser
• SDS 6620: Organization and Administration of School Counseling Programs
• SDS 6831: Supervision for a Split Internship
• SDS 6905: Individual Work
• SDS 6936: Seminar in Counselor Education
• SDS 6938: Special Topics
• SDS 7800: Practicum in School Counseling
• SDS 7820: Group Supervision in School Counseling
• SDS 7830: Internship in Counseling and Development-600 Hours

Reading Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Reading Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

• EDG 5666: Knowing and Learning in STEM
• EDG 6017: Writing for Academic Purposes
• EDG 6225: Global Studies Methods in K-12 Education
• EDG 6348: Instructional Coaching for Enhanced Student Learning
• EDG 6445: Meeting the Educational Needs of Students Living in Poverty
• EDG 7359: Professional Development and Teacher Learning
• EEC 6946: Practicum in Early Childhood Education
• EME 6059: Blended Learning Environments
• MAE 6916: Inquiry in Mathematics Teaching

General Courses

• EDG 6047: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6226: Foundations of Research in Curriculum & Instruction
• EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EME 6076: Virtual School Philosophy and Pedagogy
EME 6156: Games and Simulations for Teaching and Learning
EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

EDE 5940: Integrated Teaching and Learning
EDE 6225: Practices in Childhood Education
EDE 6266: Teaching and Learning in Elementary Classrooms
EDE 6325: Teacher InquiryAction Research
EDE 6905: Individual Work
EDE 6910: Supervised Research
EDE 6932: Special Topics
EDE 6948: Internship in Elementary Schools
EDE 7047: Issues in Teacher Education
EDE 7935: Seminar in Curriculum & Instruction
EDG 6356: Teaching, Learning and Assessmment
EDG 7224: Critical Pedagogy
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7303: Teacher Learning and Socialization in High Poverty Schools
EDG 7326: Differentiated Supervision and Teacher Professional Development
EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

EME 5054: Foundations of Educational Technology
EME 5207: Designing Technology-Rich Curricula
EME 5315: Communicating with Technology
EME 5316: Educational Technology Management Issues
EME 5403: Instructional Computing I
EME 5404: Instructional Computing II
EME 5405: Internet in K-12 Instruction
EME 5431: Integrating Technology in the Mathematics Classroom
EME 5432: Integrating Technology into Social Science Classroom
EME 5433: Integrating Technology into Science Classroom
EME 6066: Issues and Trends in Educational Technology Research
EME 6205: Digital Photography and Visual Literacy
EME 6208: Designing Integrated Media Environments I
EME 6209: Designing Integrated Media Environments II
EME 6405: Educational Technology and Teaching
EME 6458: Distance Teaching and Learning
EME 6505: Educational Television Design and Production
EME 6602: Human-Computer Interactivity and the Learner
EME 6606: Advanced Instructional Design
EME 6609: Instructional Design
EME 6716: Organization and Administration of Educational Media Centers
EME 6935: Seminar: Distance Education Issues and Applications
EME 6945: Practicum in Educational Media and Instructional Design
EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

FLE 6165: Bilingual-Bicultural Education
FLE 6167: Cross-Cultural Communication for Teachers
FLE 6336: Teaching Foreign Languages in Elementary Schools
FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
FLE 6385: Foreign Languages Teaching Methods
FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
TSL 5142: ESOL Curriculum, Methods, and Assessment
TSL 5325: Secondary ESOL Teaching Strategies
TSL 6145: Curriculum and Materials Development for ESOL K-12
TSL 6171: TESL I: Materials and Techniques
TSL 6172: TESL II: Materials for Special Purposes
TSL 6245: Language Principles for ESOL Teachers
• TSL 6373: Methods of Teaching ESOL K-12
• TSL 6440: Testing and Evaluation of ESOL
• TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

• LAE 6298: Literacy & Language Instruction
• LAE 6319: Language Arts in the Elementary School
• LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
• LAE 6348: Teaching Multiliteracies
• LAE 6365: Language Arts: Language and Composition
• LAE 6366: Language Arts: Literature
• LAE 6407: Early Childhood Children's Literature
• LAE 6446: Multicultural Literature for Children and Adolescents
• LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
• LAE 6455: International Children's Literature
• LAE 6616: Seminar in Children's Literature
• LAE 6635: Teaching Adolescent Literature in the Secondary School
• LAE 6714: Children's Literature in the Childhood Curriculum
• LAE 6881: Technology and Media Literacy
• LAE 6885: Teaching Media Literacy with the Internet
• LAE 6889: Teaching Digital Storytelling
• LAE 6939: Literacy, Family, and Culture
• LAE 6945: Practicum and Assessment for Teachers of Secondary School English
• LAE 6946: Children's Literature in Educational Settings
• LAE 7006: Language Acquisition and Education
• LAE 7519: Language and Inquiry
• LAE 7715: Research in Children's Literature
• LAE 7934: Seminar in Composition Theory and Practice
• LAE 7936: Seminar in English Language Arts

Mathematics Education

• MAE 5327: Middle School Mathematics Methods
• MAE 5332: Secondary School Mathematics Methods and Assessment
• MAE 5395: Multicultural Mathematics Methods
• MAE 5396: Using Formative Assessment to Improve Mathematical Learning
• MAE 5347: Teaching K-8 Mathematics for Understanding
• MAE 5945: Secondary School Mathematics Practicum
• MAE 6313: Problem Solving in School Mathematics
• MAE 6615: Individualizing Instruction in Mathematics
• MAE 6641: Readings and Research in Mathematics Education
• MAE 7899: Mathematics Education Seminar

Reading Education

• RED 5046: Foundations of Reading in Grades PreK-12
• RED 5316: Reading in the Primary Grades
• RED 5337: Reading in the Secondary School
• RED 5355: Reading Instruction in the Intermediate Grades
• RED 5399: Practices in Beginning Reading Instruction
• RED 6346: Seminar in Reading
• RED 6520: Classroom Literacy Assessment and Instruction
• RED 6546C: Diagnosis of Reading Difficulties
• RED 6548C: Remediation of Reading Difficulties
• RED 6647: Trends in Reading
• RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
• RED 7019: Foundations of Literacy
• RED 7817: Understanding Reading Difficulties

Science Education

• SCE 5316: Inquiry-Based Science Teaching
• SCE 5355: Foundations of Science Teaching
• SCE 5695: Diversity and Equity in Science Teaching
• SCE 5765: Data-Driven Science Instruction
• SCE 6034: Environmental Education Methods and Materials
• SCE 6117: Science Education in the Elementary School
• SCE 6246: Science Instruction in Informal Settings
• SCE 6338: Secondary Science Methods and Assessment
• SCE 6647: Global Studies Methods in Science Education
• SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education
EDM 6005: The Emergent Middle School
EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
ESE 6215: The Secondary School Curriculum
ESE 6344: Classroom Practices and Assessment in Secondary Education
ESE 6345: Effective Teaching and Classroom Management
ESE 6905: Individual Work
ESE 6939: Special Topics
ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7555: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher InquiryAction Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: CulturallyResponsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Research and Evaluation Methodology

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Research and Evaluation Methodology Program Information

The mission of the Research and Evaluation Methodology program is to generate, evaluate, apply and disseminate knowledge about educational research methodology, to prepare exemplary educational research methodologists, and to collaborate with others to provide methodology for the advancement of educational research. This mission aligns with College of Education's and University of Florida's missions because it results in research strategies for knowledge discovery to solve critical educational and human problems in a diverse global community.

- Learn to evaluate educational programs, analyze educational data, develop assessment instruments, and conduct research about the efficacy of research methodologies.
- Work as an educational researcher, an educational data analyst, or a psychometrician (an expert in testing and assessment).
- Find jobs in testing companies; research and evaluation companies; research centers; and assessment centers at universities, school districts, and state and federal agencies.
- Complete a master's degree (M.A.E. or M.Ed.) in two years or a Ph.D. in four years with classes focusing on research methodology, statistics applied to education, program evaluation, and psychometrics.
- We admit students with some undergraduate research experience. Our students come from a variety of backgrounds, including psychology, sociology, statistics, mathematics, mathematics education, political science, marketing, economics, and engineering.

Degrees Offered with a Major in Research and Evaluation Methodology
Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Research and Evaluation Methodology

- EDF 5441: Assessment in General and Exceptional Student Education
- EDF 6113: Educational Psychology: Human Development
- EDF 6211: Educational Psychology: General
- EDF 6215: Educational Psychology: Learning Theory
- EDF 6232: Principles of Learning and Instructional Practice
- EDF 6400: Quantitative Foundations of Education Research Overview
- EDF 6401: Educational Statistics
- EDF 6403: Quantitative Foundations of Educational Research
- EDF 6434: Educational Measurement
- EDF 6436: Theory of Measurement
- EDF 6471: Survey Design and Analysis in Educational Research
- EDF 6475: Qualitative Foundations of Educational Research
- EDF 6481: Quantitative Research Methods in Education
- EDF 6905: Individual Study
- EDF 6910: Supervised Research
- EDF 6938: Special Topics
- EDF 6940: Supervised Teaching
- EDF 6941: Practicum in Educational Research
- EDF 6971: Research for Master's Thesis
- EDF 7117: Affective Development and Education
- EDF 7405: Advanced Quantitative Foundations of Educational Research
- EDF 7412: Structural Equation Models
- EDF 7435: Rating Scale Design and Analysis in Educational Research
- EDF 7439: Item Response Theory
- EDF 7474: Multilevel Models
- EDF 7479: Qualitative Data Analysis: Approaches and Techniques
- EDF 7483: Qualitative Data Collection: Approaches and Techniques
- EDF 7486: Methods of Educational Research
- EDF 7491: Evaluation of Educational Products and Systems
- EDF 7639: Research in Educational Sociology
- EDF 7931: Seminar in Educational Research
- EDF 7932: Multivariate Analysis in Educational Research
- EDF 7979: Advanced Research
- EDF 7980: Research for Doctoral Dissertation
- EDP 6052: Cognitive Psychology Applied to Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6196: Educational Policy/Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
EDA 6232: Public School Law
EDA 6242: Public School Finance
EDA 6271: Technology Leadership for Educational Administrators
EDA 6423: Data-Driven Decision Making in Educational Organizations
EDA 6503: The Principalship
EDA 6905: Individual Work
EDA 6931: Special Topics
EDA 6935: Problems in School Administration and Supervision
EDA 6948: Supervised Practice in School Administration
EDA 6971: Research for Master's Thesis
EDA 7206: Organizational Leadership in Education
EDA 7945: Practicum in Supervision and Administration
EDA 7979: Advanced Research
EDA 7980: Research for Doctoral Dissertation
EDA 7985: Research Design in Educational Administration
EDF 7413: Advanced Topics in Structural Equation Modeling
EDF 7482: Quasi-experimental Design and Analysis in Educational Research
EDG 6250: The School Curriculum
EDG 6285: Evaluation in the School Program
EDG 6356: Teaching, Learning and Assessment
EDG 6905: Individual Work
EDG 6910: Supervised Research
EDG 6931: Special Topics
EDG 6940: Supervised Teaching
EDG 6971: Research for Master's Thesis
EDG 6973: Project in Lieu of Thesis
EDG 7222: Curriculum: Theory and Research
EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
EDG 7665: Bases of Curriculum and Instruction Theory
EDG 7941: Field Experience in Curriculum and Instruction
EDG 7979: Advanced Research
EDG 7980: Research for Doctoral Dissertation
EDH 6040: Theory of College Student Development
EDH 6046: Diversity Issues in Higher Education
EDH 6049: Domestic and International College Student Services
EDH 6051: Educational Outcomes of American Colleges and Universities
EDH 6053: The Community Junior College in America
EDH 6066: American Higher Education
EDH 6067: Seminar: International Higher Education
EDH 6305: College and University Teaching
EDH 6360: Foundations and Functions of College Student Personnel
EDH 6361: Theories and Assessment of Higher Educational Environments
EDH 6931: Special Topics in Higher Education
EDH 6935: Seminar in College Student Personnel Administration
EDH 6945: Practicum in College Teaching I
EDH 6946: Practicum in College Teaching II
EDH 6947: Practicum in Student Personnel
EDH 7225: Seminar: Curriculum in Higher Education
EDH 7405: The Law and Higher Education
EDH 7505: The Financing of Higher Education
EDH 7631: Administration of Instruction in Higher Education
EDH 7634: Student Affairs Administration in Higher Education
EDH 7635: Higher Education Administration
EDH 7916: Contemporary Research on Higher Education
EDH 7942: Group Supervision in Student Personnel
EDH 7948: Internship in Student Personnel
EDS 6140: Supervision of Instruction
MHS 5005: Introduction to Counseling
MHS 6000: Assessment and Treatment of Family Violence
MHS 6020: Counseling in Community Settings
MHS 6061: Spiritual Issues in Multicultural Counseling
MHS 6071: Diagnosis and Treatment of Mental Disorders
MHS 6200: Assessment in Counseling
MHS 6340: Career Development
MHS 6401: Counseling Theories and Applications
MHS 6421: Play-Counseling and Play Process with Children
MHS 6428: Multicultural Counseling
MHS 6430: Introduction to Family Counseling
MHS 6440: Marriage Counseling
MHS 6450: Substance Abuse Counseling
MHS 6464: Introduction to Disaster Mental Health Counseling
MHS 6466: Trauma and Crisis Intervention: Theory and Practice
MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
MHS 6468: Multicultural issues in disaster mental health counseling
MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
MHS 6471: Sexuality and Mental Health
MHS 6480: Developmental Counseling Over the Life Span
MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
MHS 6500: Group Counseling: Theories and Procedures
MHS 6602: Educational Mediation
MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
MHS 6720: Professional Identity and Ethics in Counseling
- MHS 6831: Supervision for a Split Internship
- MHS 6905: Individual Work
- MHS 6910: Supervised Research
- MHS 6940: Supervised Teaching
- MHS 6971: Research for Master's Thesis
- MHS 7402: Brief Therapy
- MHS 7407: Advanced Counseling Theories
- MHS 7431: Advanced Family Counseling
- MHS 7600: Consultation Procedures
- MHS 7610: Practicum in Counseling Supervision
- MHS 7730: Seminar in Counseling Research
- MHS 7740: Research in Counseling
- MHS 7800: Practicum in Counseling
- MHS 7804: Group Supervision in Agency Counseling
- MHS 7805: Practicum in Agency Counseling
- MHS 7806: Practicum in Marriage and Family Counseling
- MHS 7807: Group Supervision in Marriage and Family Counseling
- MHS 7830: Internship in Counseling and Development-600 Hours
- MHS 7840: Internship in Counselor Education
- MHS 7946: Internship in Agency Program Management
- MHS 7979: Advanced Research
- MHS 7980: Research for Doctoral Dissertation
- SDS 6401: Counseling Skills for Non-Counselors
- SDS 6411: Counseling with Children
- SDS 6413: Counseling Adolescents
- SDS 6436: Family-School Intervention
- SDS 6520: Family, Student Development and Role of Teacher as Adviser
- SDS 6620: Organization and Administration of School Counseling Programs
- SDS 6831: Supervision for a Split Internship
- SDS 6905: Individual Work
- SDS 6936: Seminar in Counselor Education
- SDS 6938: Special Topics
- SDS 7800: Practicum in School Counseling
- SDS 7820: Group Supervision in School Counseling
- SDS 7830: Internship in Counseling and Development-600 Hours

School Counseling and Guidance

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

School Counseling and Guidance Program Information

The M.Ed./Ed.S. and M.AE./Ed.S. program in School Counseling is designed to equip students with the pre-professional competencies required for Florida Department of Education Certification in School Counseling. The 72-credit hour program provides students with the specialized knowledge and skills required for placements as school counselors in public or private elementary, middle, or secondary schools.

Students enrolled in the School Counseling program, a state-approved and NCATE (National Council for the Accreditation of Teacher Education) and CACREP (Council for the Accreditation of Counseling and Related Educational Programs) accredited school counselor preparation program, must provide passing scores for all pertinent sections of the Florida Teacher Certification Examination (FTCE) including the General Knowledge test (math, English language skills, reading comprehension, and essay), the Professional Education examination, and the Subject Area Examination in Guidance and Counseling K-12 prior to graduation from the program. Questions about this requirement or any other certification related questions may be addressed to the College of Education Office of Student Services.

Degrees Offered with a Major in School Counseling and Guidance

Doctor of Education

Doctor of Philosophy
Master of Arts in Education

Master of Education

Specialist in Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA 5938: Special Topics
- EDA 6061: Educational Organization and Administration
- EDA 6107: Leading Change in Educational Organizations
- EDA 6192: Educational Leadership: The Individual
- EDA 6193: Educational Leadership: Instruction
- EDA 6195: Educational Policy Development
- EDA 6215: Communications in Educational Leadership
- EDA 6222: Administration of School Personnel
- EDA 6225: Labor Relations in Public Education
- EDA 6232: Public School Law
- EDA 6242: Public School Finance
- EDA 6271: Technology Leadership for Educational Administrators
- EDA 6423: Data-Driven Decision Making in Educational Organizations
- EDA 6503: The Principalship
- EDA 6905: Individual Work
- EDA 6931: Special Topics
- EDA 6935: Problems in School Administration and Supervision
- EDA 6948: Supervised Practice in School Administration
- EDA 6971: Research for Master's Thesis
- EDA 7206: Organizational Leadership in Education
- EDA 7945: Practicum in Supervision and Administration
- EDA 7979: Advanced Research
- EDA 7980: Research for Doctoral Dissertation
- EDF 7413: Advanced Topics in Structural Equation Modeling
- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EDF 6250: The School Curriculum
- EDF 6285: Evaluation in the School Program
- EGD 6356: Teaching, Learning and Assessment
- EGD 6905: Individual Work
- EGD 6910: Supervised Research
- EGD 6931: Special Topics
- EGD 6940: Supervised Teaching
- EGD 6971: Research for Master's Thesis
- EGD 6973: Project in Lieu of Thesis
- EGD 7222: Curriculum: Theory and Research
- EGD 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EGD 7665: Bases of Curriculum and Instruction Theory
- EGD 7941: Field Experience in Curriculum and Instruction
- EGD 7979: Advanced Research
- EGD 7980: Research for Doctoral Dissertation
- EDH 6040: Theory of College Student Development
- EDH 6046: Diversity Issues in Higher Education
- EDH 6049: Domestic and International College Student Services
- EDH 6051: Educational Outcomes of American Colleges and Universities
- EDH 6053: The Community Junior College in America
- EDH 6066: American Higher Education
- EDH 6067: Seminar: International Higher Education
- EDH 6305: College and University Teaching
- EDH 6360: Foundations and Functions of College Student Personnel
- EDH 6361: Theories and Assessment of Higher Educational Environments
- EDH 6503: Resource Development in Higher Education
- EDH 6632: Current Issues in Community College Leadership
- EDH 6637: Crisis Management in Higher Education
- EDH 6931: Special Topics in Higher Education
- EDH 6935: Seminar in College Student Personnel Administration
- EDH 6945: Practicum in College Teaching I
- EDH 6946: Practicum in College Teaching II
- EDH 6947: Practicum in Student Personnel
- EDH 7225: Seminar: Curriculum in Higher Education
- EDH 7405: The Law and Higher Education
- EDH 7505: The Financing of Higher Education
- EDH 7631: Administration of Instruction in Higher Education
- EDH 7634: Student Affairs Administration in Higher Education
- EDH 7635: Higher Education Administration
- EDH 7916: Contemporary Research on Higher Education
- EDH 7942: Group Supervision in Student Personnel
- EDH 7948: Internship in Student Personnel
- EDS 6140: Supervision of Instruction
- MHS 5005: Introduction to Counseling
- MHS 6000: Assessment and Treatment of Family Violence
- MHS 6020: Counseling in Community Settings
- MHS 6061: Spiritual Issues in Multicultural Counseling
- MHS 6071: Diagnosis and Treatment of Mental Disorders
- MHS 6200: Assessment in Counseling
- MHS 6340: Career Development
- MHS 6401: Counseling Theories and Applications
- MHS 6421: Play Counseling and Play Process with Children
- MHS 6428: Multicultural Counseling
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marital Counseling
- MHS 6450: Substance Abuse Counseling
- MHS 6464: Introduction to Disaster Mental Health Counseling
- MHS 6466: Trauma and Crisis Intervention: Theory and Practice
- MHS 6467: Disaster Mental Health Counseling and Vulnerable Populations
- MHS 6468: Multicultural issues in disaster mental health counseling
- MHS 6469: Traumatic Stress and Disaster Mental Health Counseling
- MHS 6471: Sexuality and Mental Health
- MHS 6480: Developmental Counseling Over the Life Span
- MHS 6495: Counseling Lesbian, Gay, Bisexual, and Transgender Clients
- MHS 6500: Group Counseling: Theories and Procedures
- MHS 6602: Educational Mediation
- MHS 6705: Professional, Ethical, and Legal Issues in Marriage and Family Counseling
- MHS 6720: Professional Identity and Ethics in Counseling
- MHS 6831: Supervision for a Split Internship
- MHS 6905: Individual Work
- MHS 6910: Supervised Research
- MHS 6940: Supervised Teaching
- MHS 6971: Research for Master's Thesis
- MHS 7402: Brief Therapy
- MHS 7407: Advanced Counseling Theories
- MHS 7431: Advanced Family Counseling
- MHS 7600: Consultation Procedures
- MHS 7610: Practicum in Counseling Supervision
- MHS 7730: Seminar in Counseling Research
- MHS 7740: Research in Counseling
- MHS 7900: Practicum in Counseling
- MHS 7804: Group Supervision in Agency Counseling
- MHS 7805: Practicum in Agency Counseling
- MHS 7806: Practicum in Marriage and Family Counseling
- MHS 7807: Group Supervision in Marriage and Family Counseling
- MHS 7930: Internship in Counseling and Development-600 Hours
- MHS 7940: Internship in Counselor Education
- MHS 7946: Internship in Agency Program Management
- MHS 7979: Advanced Research
- MHS 7980: Research for Doctoral dissertation
- SDS 6401: Counseling Skills for Non-Counselors
- SDS 6411: Counseling with Children
- SDS 6413: Counseling Adolescents
- SDS 6436: Family-School Intervention
- SDS 6520: Family, Student Development and Role of Teacher as Adviser
- SDS 6620: Organization and Administration of School Counseling Programs
- SDS 6831: Supervision for a Split Internship
- SDS 6905: Individual Work
- SDS 6936: Seminar in Counselor Education
- SDS 6938: Special Topics
- SDS 7800: Practicum in School Counseling
- SDS 7820: Group Supervision in School Counseling
- SDS 7830: Internship in Counseling and Development-600 Hours

School Psychology

College

College of Education

Department/School
Degrees Offered with a Major in School Psychology

Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

School Psychology Courses

- SPS 6052: Issues and Problems in School Psychology
- SPS 6191: Psychoeducational Assessment I
- SPS 6192: Psychoeducational Assessment II
- SPS 6193: Academic Assessment & Intervention
- SPS 6195: Developmental Psychopathology
- SPS 6197: Psychoeducational Assessment III
- SPS 6410: Direct Interventions I: Applied Behavior Analysis for School Psychologists
- SPS 6707: Interventions in School Psychology II: Cognitive Behavioral Interventions
- SPS 6708: Interventions in School Psychology III: System Level Interventions for Children and Youths
- SPS 6815: Law and Ethics in Psychology
- SPS 6937: Special Topics in School Psychology
- SPS 6941: Practicum in School Psychology
- SPS 6942: School Psychology Practicum II
- SPS 6945: Advanced Practicum in School Psychology
- SPS 7205: School Psychology Consultation
- SPS 7931: Seminar in School Psychology
- SPS 7949: Internship in School Psychology
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation

Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
- EEC 7617: Early Childhood Assessment & Evaluation
- EEC 7666: Theory and Research in Early Childhood Studies
- EEX 6053: Foundations of Special Education
- EEX 6098: Students with Disabilities in Higher Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6269: Academic Strategies for Postsecondary Students with Disabilities
- EEX 6299: Understanding Assessment for Postsecondary Students with Disabilities
- EEX 6777: Organizational and Life Skills for Postsecondary Students with Disabilities
- EEX 6766: Introduction to Education-Healthcare Transition
- EEX 6769: Transdisciplinary and Transition Services in Special Education
- EEX 6768: Methods for Integrating Education-Healthcare Transition
- EEX 6769: Legal Aspects and Policy in Education-Healthcare Transition
- EEX 6817: Seminar in Education-Healthcare Transition (E-HCT)
- EEX 6841: Practicum in Special Education: Mild Disabilities
- EEX 6863: Supervised Practice in Special Education
- EEX 7709: Social-Emotional Learning & Play in Early Childhood
- SPS 7980: Research for Doctoral Dissertation

### Science Education

#### College

#### College of Education

#### Department/School

School of Teaching and Learning

#### Degrees Offered with a Major in Science Education

- Master of Arts in Education
- Master of Education

#### Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
- EEC 6946: Practicum in Early Childhood Education
- EME 6059: Blended Learning Environments
- MAE 6916: Inquiry in Mathematics Teaching

#### General Courses

- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6226: Foundations of Research in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 6905: Individual Work
- EDG 6910: Supervised Research
- EDG 6931: Special Topics
- EDG 6940: Supervised Teaching
- EDG 6971: Research for Master's Thesis
- EDG 6973: Project in Lieu of Thesis
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
Curriculum, Teaching, and Teacher Education

- EDE 5940: Integrated Teaching and Learning
- EDE 6225: Practices in Childhood Education
- EDE 6266: Teaching and Learning in Elementary Classrooms
- EDE 6325: Teacher InquiryAction Research
- EDE 6905: Individual Work
- EDE 6910: Supervised Research
- EDE 6932: Special Topics
- EDE 6948: Internship in Elementary Schools
- EDE 7047: Issues in Teacher Education
- EDE 7935: Seminar in Curriculum & Instruction
- EDG 6356: Teaching, Learning and Assessment
- EDG 7224: Critical Pedagogy
- EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
- EDG 7303: Teacher Learning and Socialization in High Poverty Schools
- EDG 7326: Differentiated Supervision and Teacher Professional Development
- EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

- EME 5054: Foundations of Educational Technology
- EME 5207: Designing Technology-Rich Curricula
- EME 5315: Communicating with Technology
- EME 5316: Educational Technology Management Issues
- EME 5403: Instructional Computing I
- EME 5404: Instructional Computing II
- EME 5405: Internet in K-12 Instruction
- EME 5431: Integrating Technology in the Mathematics Classroom
- EME 5432: Integrating Technology into Social Science Classroom
- EME 5433: Integrating Technology into Science Classroom
- EME 6066: Issues and Trends in Educational Technology Research
- EME 6205: Digital Photography and Visual Literacy
- EME 6208: Designing Integrated Media Environments I
- EME 6209: Designing Integrated Media Environments II
- EME 6405: Educational Technology and Teaching
- EME 6458: Distance Teaching and Learning
- EME 6505: Educational Television Design and Production
- EME 6602: Human-Computer Interactivity and the Learner
- EME 6606: Advanced Instructional Design
- EME 6609: Instructional Design
- EME 6716: Organization and Administration of Educational Media Centers
- EME 6935: Seminar: Distance Education Issues and Applications
- EME 6945: Practicum in Educational Media and Instructional Design
- EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education

- FLE 6165: Bilingual-Bicultural Education
- FLE 6167: Cross-Cultural Communication for Teachers
- FLE 6336: Teaching Foreign Languages in Elementary Schools
- FLE 6337: Methods of Teaching and Assessing Foreign Language in Secondary School
- FLE 6395: Foreign Languages Teaching Methods
- FLE 6946: Practicum in Teaching and Assessing Foreign Languages at Secondary Level
- TSL 5142: ESOL Curriculum, Methods, and Assessment
- TSL 5325: Secondary ESOL Teaching Strategies
- TSL 6145: Curriculum and Materials Development for ESOL K-12
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes
- TSL 6245: Language Principles for ESOL Teachers
- TSL 6373: Methods of Teaching ESOL K-12
- TSL 6440: Testing and Evaluation of ESOL
- TSL 6700: Issues in ESOL for School Counselors and Psychologists

Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
LAE 6348: Teaching Multiliteracies
LAE 6365: Language Arts: Language and Composition
LAE 6366: Language Arts: Literature
LAE 6407: Early Childhood Children's Literature
LAE 6446: Multicultural Literature for Children and Adolescents
LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
LAE 6455: International Children's Literature
LAE 6616: Seminar in Children's Literature
LAE 6635: Teaching Adolescent Literature in the Secondary School
LAE 6714: Children's Literature in the Childhood Curriculum
LAE 6865: Teaching Media Literacy with the Internet
LAE 6869: Teaching Digital Storytelling
LAE 6939: Literacy, Family, and Culture
LAE 6945: Practicum and Assessment for Teachers of Secondary School English
LAE 6946: Children's Literature in Educational Settings
LAE 7006: Language Acquisition and Education
LAE 7519: Language and Inquiry
LAE 7715: Research in Children's Literature
LAE 7934: Seminar in Composition Theory and Practice
LAE 7936: Seminar in English Language Arts

Mathematics Education

MAE 5327: Middle School Mathematics Methods
MAE 5332: Secondary School Mathematics Methods and Assessment
MAE 5395: Multicultural Mathematics Methods
MAE 5396: Using Formative Assessment to Improve Mathematical Learning
MAE 5347: Teaching K-8 Mathematics for Understanding
MAE 5945: Secondary School Mathematics Practicum
MAE 6313: Problem Solving in School Mathematics
MAE 6615: Individualizing Instruction in Mathematics
MAE 6641: Readings and Research in Mathematics Education
MAE 7899: Mathematics Education Seminar

Reading Education

RED 5046: Foundations of Reading in Grades PreK-12
RED 5316: Reading in the Primary Grades
RED 5337: Reading in the Secondary School
RED 5355: Reading Instruction in the Intermediate Grades
RED 5399: Practices in Beginning Reading Instruction
RED 6346: Seminar in Reading
RED 6520: Classroom Literacy Assessment and Instruction
RED 6546C: Diagnosis of Reading Difficulties
RED 6548C: Remediation of Reading Difficulties
RED 6647: Trends in Reading
RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
RED 7019: Foundations of Literacy
RED 7817: Understanding Reading Difficulties

Science Education

SCE 5316: Inquiry-Based Science Teaching
SCE 5355: Foundations of Science Teaching
SCE 5695: Diversity and Equity in Science Teaching
SCE 5765: Data-Driven Science Instruction
SCE 6045: Environmental Education Methods and Materials
SCE 6117: Science Education in the Elementary School
SCE 6246: Science Instruction in Informal Settings
SCE 6338: Secondary Science Methods and Assessment
SCE 6647: Global Studies Methods in Science Education
SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

EDM6005: The Emergent Middle School
EDM6235: Interdisciplinary Planning, Teaching, and Assessment
ESE 6215: The Secondary School Curriculum
ESE 6344: Classroom Practices and Assessment in Secondary Education
ESE 6345: Effective Teaching and Classroom Management
ESE 6906: Individual Work
ESE 6939: Special Topics
ESE 6945: Student Teaching in Secondary School
Social Foundations of Education

- EDF 5552: Role of School in Democratic Society
- EDF 6520: History of Education
- EDF 6544: Philosophical Foundations of Education
- EDF 6606: Socioeconomic Foundations of Education
- EDF 6616: Education and American Culture
- EDF 6630: Educational Sociology
- EDF 6812: Comparative Education
- EDF 6820: Education in Latin America
- EDF 7556: Values and Ethics in Education
- EDF 7934: Seminar in Educational Foundations

Social Studies Education

- SSE 5320: Middle School Social Studies Methods
- SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
- SSE 6046: Perspectives in Social Studies Education
- SSE 6117: Social Studies Education—Elementary School
- SSE 6133: Secondary School Social Studies Methods and Assessment
- SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

- EDE 6325: Teacher Inquiry/Action Research
- EDG 6047: Teacher Leadership for Educational Change
- EDG 6207: Transforming the Curriculum
- EDG 6415: Culturally Responsive Classroom Management
- EDG 6953: TLSI Online Portfolio Preparation

Social Studies Education

College

College of Education

Department/School

School of Teaching and Learning

Degrees Offered with a Major in Social Studies Education

Master of Arts in Education

Master of Education

Teaching and Learning Departmental Courses

- EDG 5666: Knowing and Learning in STEM
- EDG 6017: Writing for Academic Purposes
- EDG 6225: Global Studies Methods in K-12 Education
- EDG 6348: Instructional Coaching for Enhanced Student Learning
- EDG 6445: Meeting the Educational Needs of Students Living in Poverty
- EDG 7359: Professional Development and Teacher Learning
• EEC 6946: Practicum in Early Childhood Education
• EME 6059: Blended Learning Environments
• MAE 6916: Inquiry in Mathematics Teaching

General Courses

• EDG 6047: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6226: Foundations of Research in Curriculum & Instruction
• EDG 6356: Teaching, Learning and Assessment
• EDG 6905: Individual Work
• EDG 6910: Supervised Research
• EDG 6931: Special Topics
• EDG 6940: Supervised Teaching
• EDG 6971: Research for Master's Thesis
• EDG 6973: Project in Lieu of Thesis
• EDG 7224: Critical Pedagogy
• EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
• EDG 7303: Teacher Learning and Socialization in High Poverty Schools
• EDG 7326: Differentiated Supervision and Teacher Professional Development
• EDG 7941: Field Experience in Curriculum and Instruction
• EDG 7979: Advanced Research
• EDG 7980: Research for Doctoral Dissertation
• EME 6076: Virtual School Philosophy and Pedagogy
• EME 6156: Games and Simulations for Teaching and Learning
• EME 6235: Managing Educational Projects
• EME 6236: Distance Education Leadership and Management

Curriculum, Teaching, and Teacher Education

• EDE 5940: Integrated Teaching and Learning
• EDE 6225: Practices in Childhood Education
• EDE 6266: Teaching and Learning in Elementary Classrooms
• EDE 6325: Teacher InquiryAction Research
• EDE 6905: Individual Work
• EDE 6910: Supervised Research
• EDE 6932: Special Topics
• EDE 6948: Internship in Elementary Schools
• EDE 7047: Issues in Teacher Education
• EDE 7935: Seminar in Curriculum & Instruction
• EDG 6356: Teaching, Learning and Assessment
• EDG 7224: Critical Pedagogy
• EDG 7252: Perspectives in Curriculum, Teaching, and Teacher Education
• EDG 7303: Teacher Learning and Socialization in High Poverty Schools
• EDG 7326: Differentiated Supervision and Teacher Professional Development
• EDG 7982: Practitioner Research: Theory & Practice

Educational Technology

• EME 5054: Foundations of Educational Technology
• EME 5207: Designing Technology-Rich Curricula
• EME 5315: Communicating with Technology
• EME 5316: Educational Technology Management Issues
• EME 5403: Instructional Computing I
• EME 5404: Instructional Computing II
• EME 5405: Internet in K-12 Instruction
• EME 5431: Integrating Technology in the Mathematics Classroom
• EME 5432: Integrating Technology into Social Science Classroom
• EME 5433: Integrating Technology into Science Classroom
• EME 5606: Issues and Trends in Educational TechnologyResearch
• EME 6205: Digital Photography and Visual Literacy
• EME 6208: Designing Integrated Media Environments I
• EME 6209: Designing Integrated Media Environments II
• EME 6405: Educational Technology and Teaching
• EME 6458: Distance Teaching and Learning
• EME 6505: Educational Television Design and Production
• EME 6602: Human-Computer Interactivity and the Learner
• EME 6606: Advanced Instructional Design
• EME 6609: Instructional Design
• EME 6716: Organization and Administration of Educational Media Centers
• EME 6935: Seminar: Distance Education Issues and Applications
• EME 6945: Practicum in Educational Media and Instructional Design
• EME 7938: Seminar in Educational Media and Instructional Design

ESOL/Bilingual Education
Language and Literacy Education

- LAE 6298: Literacy & Language Instruction
- LAE 6319: Language Arts in the Elementary School
- LAE 6339: Curriculum, Methods, and Assessment in Secondary English Language Arts
- LAE 6348: Teaching Multiliteracies
- LAE 6365: Language Arts: Language and Composition
- LAE 6366: Language Arts: Literature
- LAE 6407: Early Childhood Children's Literature
- LAE 6446: Multicultural Literature for Children and Adolescents
- LAE 6447: Immigrant Experiences in Children's and Adolescent Literature
- LAE 6455: International Children's Literature
- LAE 6616: Seminar in Children's Literature
- LAE 6635: Teaching Adolescent Literature in the Secondary School
- LAE 6714: Children's Literature in the Childhood Curriculum
- LAE 6861: Technology and Media Literacy
- LAE 6865: Teaching Media Literacy with the Internet
- LAE 6869: Teaching Digital Storytelling
- LAE 6939: Literacy, Family, and Culture
- LAE 6945: Practicum and Assessment for Teachers of Secondary School English
- LAE 6946: Children’s Literature in Educational Settings
- LAE 7006: Language Acquisition and Education
- LAE 7519: Language and Inquiry
- LAE 7715: Research in Children's Literature
- LAE 7934: Seminar in Composition Theory and Practice
- LAE 7936: Seminar in English Language Arts

Mathematics Education

- MAE 5327: Middle School Mathematics Methods
- MAE 5332: Secondary School Mathematics Methods and Assessment
- MAE 5395: Multicultural Mathematics Methods
- MAE 5396: Using Formative Assessment to Improve Mathematical Learning
- MAE 5347: Teaching K-8 Mathematics for Understanding
- MAE 5945: Secondary School Mathematics Practicum
- MAE 6313: Problem Solving in School Mathematics
- MAE 6615: Individualizing Instruction in Mathematics
- MAE 6641: Readings and Research in Mathematics Education
- MAE 7899: Mathematics Education Seminar

Reading Education

- RED 5046: Foundations of Reading in Grades PreK-12
- RED 5316: Reading in the Primary Grades
- RED 5337: Reading in the Secondary School
- RED 5355: Reading Instruction in the Intermediate Grades
- RED 5399: Practices in Beginning Reading Instruction
- RED 6346: Seminar in Reading
- RED 6520: Classroom Literacy Assessment and Instruction
- RED 6546C: Diagnosis of Reading Difficulties
- RED 6548C: Remediation of Reading Difficulties
- RED 6647: Trends in Reading
- RED 6941: Practicum in Diagnosis and Remediation of Reading Difficulties
- RED 7019: Foundations of Literacy
- RED 7817: Understanding Reading Difficulties

Science Education

- SCE 5316: Inquiry-Based Science Teaching
• SCE 5355: Foundations of Science Teaching
• SCE 5695: Diversity and Equity in Science Teaching
• SCE 5765: Data-Driven Science Instruction
• SCE 6045: Environmental Education Methods and Materials
• SCE 6117: Science Education in the Elementary School
• SCE 6246: Science Instruction in Informal Settings
• SCE 6338: Secondary Science Methods and Assessment
• SCE 6647: Global Studies Methods in Science Education
• SCE 6947: Practicum in Secondary Science Teaching and Assessment

Secondary Education

• EDM 6005: The Emergent Middle School
• EDM 6235: Interdisciplinary Planning, Teaching, and Assessment
• ESE 6215: The Secondary School Curriculum
• ESE 6344: Classroom Practices and Assessment in Secondary Education
• ESE 6345: Effective Teaching and Classroom Management
• ESE 6905: Individual Work
• ESE 6939: Special Topics
• ESE 6945: Student Teaching in Secondary School

Social Foundations of Education

• EDF 5552: Role of School in Democratic Society
• EDF 6520: History of Education
• EDF 6544: Philosophical Foundations of Education
• EDF 6606: Socioeconomic Foundations of Education
• EDF 6616: Education and American Culture
• EDF 6630: Educational Sociology
• EDF 6812: Comparative Education
• EDF 6820: Education in Latin America
• EDF 7556: Values and Ethics in Education
• EDF 7934: Seminar in Educational Foundations

Social Studies Education

• SSE 5320: Middle School Social Studies Methods
• SSE 5945C: Practicum in Secondary Social Studies Teaching and Assessment
• SSE 6046: Perspectives in Social Studies Education
• SSE 6117: Social Studies Education—Elementary School
• SSE 6133: Secondary School Social Studies Methods and Assessment
• SSE 6478: Global Studies Methods in Social Studies

Teacher Leadership for School Improvement

• EDE 6325: Teacher Inquiry/Action Research
• EDG 6047: Teacher Leadership for Educational Change
• EDG 6207: Transforming the Curriculum
• EDG 6415: Culturally Responsive Classroom Management
• EDG 6953: TLSI Online Portfolio Preparation

Special Education

College

College of Education

Department/School

Special Education, School Psychology and Early Childhood Studies Department

Degrees Offered with a Major in Special Education
Doctor of Education

Doctor of Philosophy

Master of Arts in Education

Master of Education

Specialist in Education

Special Education Courses

- EEX 5940: Supervised Student Teaching in Special Education
- EEX 6053: Foundations of Special Education
- EEX 6072: Accessing Academic and Social Communities for Students with Disabilities
- EEX 6125: Interventions for Language and Learning Disabilities
- EEX 6219: Reading Assessment and Intervention for Students with Disabilities
- EEX 6222: Evaluation in Special Education
- EEX 6233: Designing Instruction for Inclusive Classrooms
- EEX 6234: Assessment, Curriculum, and Instruction for Students with Severe Disabilities
- EEX 6249: Advanced Strategies for Teaching Students with Disabilities
- EEX 6661: Teaching and Managing Behavior for Student Learning
- EEX 6750: Families and Transition for Students with Disabilities
- EEX 6776: Transdisciplinary and Transition Services in Special Education
- EEX 6835: Practicum in Special Education: Severe Disabilities
- EEX 6841: Practicum in Special Education: Mild Disabilities
- EEX 6863: Supervised Practice in Special Education
- EEX 6905: Individual Work
- EEX 6910: Supervised Research
- EEX 6936: Special Topics
- EEX 6940: Supervised Teaching
- EEX 6971: Research for Master's Thesis
- EEX 6973: Project in Lieu of Thesis
- EEX 6996: Differentiated Instruction
- EEX 7303: Inquiry in Special Education: Analysis of the Literature
- EEX 7304: Introduction to Field of Inquiry in Special Education
- EEX 7526: Grant Writing Seminar in Education
- EEX 7767: School Improvement for All Students
- EEX 7865: Internship: Special Education
- EEX 7428: Teacher Education in Special Education
- EEX 7934: Seminar: Trends in Special Education
- EEX 7979: Advanced Research
- EEX 7980: Research for Doctoral Dissertation
- EGI 6051: Education of the Gifted Child
- EGI 6245: Program Development for the Gifted

Special Education, School Psychology and Early Childhood Studies Departmental Courses

- EDF 7482: Quasi-experimental Design and Analysis in Educational Research
- EEC 6205: Early Childhood Curriculum
- EEC 6304: Creativity in the Early Childhood Curriculum
- EEC 6525: Issues in Child Care Administration
- EEC 6615: Early Childhood Education: Background and Concepts
- EEC 6905: Individual Work
- EEC 6910: Supervised Research
- EEC 6933: Special Topics
- EEC 6946: Practicum in Early Childhood Education
Student Personnel in Higher Education

College

College of Education

Department/School

Human Development and Organizational Studies in Education Department

Student Personnel in Higher Education Program Information

The University of Florida Student Personnel in Higher Education program is a master's program designed to prepare students to enter Student Affairs leadership positions in two- and four-year institutions of higher education. The program integrates academic coursework with practitioner-based experience. The SPHE master's degree consists of 36 credit hours of core classes and 10 credit hours of supervised practicum and internship experiences (total = 46 credit hours). Students enter the graduate program in the fall semester as members of a cohort group. The group provides support and builds a sense of community for the students. All students are assigned a faculty advisor at the time of admission.

The student affairs profession is increasingly diverse and is engaged in a variety of activities and programs. The emphasis in UF's master's degree program in SPHE is upon the promotion, design, and assessment of student learning in a variety of campus and community settings.

Degrees Offered with a Major in Student Personnel in Higher Education

Master of Arts in Education

Master of Education

Human Development and Organizational Studies in Education Departmental Courses

- EDA5938: Special Topics
- EDA6061: Educational Organization and Administration
- EDA6107: Leading Change in Educational Organizations
- EDA6192: Educational Leadership: The Individual
- EDA6193: Educational Leadership: Instruction
- EDA6195: Educational Policy Development
- EDA6215: Communications in Educational Leadership
- EDA6222: Administration of School Personnel
- EDA6225: Labor Relations in Public Education
- EDA6232: Public School Law
- EDA6242: Public School Finance
- EDA6271: Technology Leadership for Educational Administrators
- EDA6423: Data-Driven Decision Making in Educational Organizations
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| Mechanical and Aerospace Engineering Department | Degrees Offered with a Major in Aerospace Engineering

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Master of Science

Mechanical and Aerospace Engineering Departmental Courses

- BME 5580: Introduction to Microfluidics and BioMEMS
- EAS 5938: Special Topics in Aerospace Engineering
- EAS 6135: Molecular Theory of Fluid Flows
- EAS 6138: Gasdynamics
- EAS 6242: Advanced Structural Composites
- EAS 6415: Guidance and Control of Aerospace Vehicles
- EAS 6905: Aerospace Research
- EAS 6910: Supervised Research
- EAS 6935: Graduate Seminar
- EAS 6939: Special Topics in Aerospace Engineering
- EAS 6971: Research for Master's Thesis
- EAS 7979: Advanced Research
- EAS 7980: Research for Doctoral Dissertation
- EGM 5005: Laser Principles and Applications
- EGM 5111L: Experimental Stress Analysis
- EGM 5121C: Data Measurement and Analysis
- EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
- EGM 5584: Biomechanics of Soft Tissue
- EGM 5816: Intermediate Fluid Dynamics
- EGM 5903: Special Topics in Engineering Science and Mechanics
- EGM 6066: Laser-Based Diagnostics
- EGM 6321: Principles of Engineering Analysis I
- EGM 6322: Principles of Engineering Analysis II
- EGM 6323: Principles of Engineering Analysis III
- EGM 6341: Numerical Methods of Engineering Analysis I
- EGM 6342: Fundamentals of Computational Fluid Dynamics
- EGM 6352: Advanced Finite Element Methods
- EGM 6365: Structural Optimization
- EGM 6570: Principles of Fracture Mechanics
- EGM 6611: Continuum Mechanics
- EGM 6687: Inelastic Materials
- EGM 6812: Fluid Mechanics I
- EGM 6813: Fluid Mechanics II
- EGM 6855: Bio-Fluid Mechanics and Bio-Heat Transfer
- EGM 6905: Individual Study
- EGM 6910: Supervised Research
- EGM 6934: Special Topics in Engineering Mechanics
- EGM 6936: Graduate Seminar
- EGM 6971: Research for Master's Thesis
- EGM 7819: Computational Fluid Dynamics
- EGM 7845: Turbulent Fluid Flow
- EGM 7979: Advanced Research
- EGM 7980: Research for Doctoral Dissertation
- EML 5045: Computational Methods for Design and Manufacturing
- EML 5104: Classical and Statistical Thermodynamics
- EML 5124: Two-Phase Flow and Boiling Heat Transfer
- EML 5131: Combustion
- EML 5215: Analytical Dynamics I
- EML 5223: Structural Dynamics
- EML 5224: Acoustics
- EML 5233: Failure of Materials in Mechanical Design
- EML 5311: Control System Theory
- EML 5318: Computer Control of Machines and Processes
- EML 5455: Clean Combustion Technology
- EML 5465: Energy Management for Mechanical Engineers
- EML 5515: Gas Turbines and Jet Engines
- EML 5516: Design of Thermal Systems
- EML 5526: Finite Element Analysis and Application
- EML 5595: Mechanics of the Human Locomotor System
- EML 5598: Orthopedic Biomechanics
- EML 5605: Advanced Refrigeration
- EML 5714: Introduction to Compressible Flow
- EML 6146: Microscale Heat Transfer
- EML 6154: Conduction Heat Transfer
- EML 6155: Convective Heat Transfer I
- EML 6156: Multiphase Convection Heat Transfer
- EML 6157: Radiation Heat Transfer
- EML 6216: Analytical Dynamics II
- EML 6229: Introduction to Random Dynamical Systems
- EML 6267: Structural Dynamics of Production Machinery
- EML 6278: Advanced Rotor Dynamics
- EML 6281: Geometry of Mechanisms and Robots I
Agricultural and Biological Engineering Program

The degrees of Master of Science, Master of Engineering, and Doctor of Philosophy are offered with graduate programs in agricultural and biological engineering through the College of Engineering. The Master of Science and Doctor of Philosophy degrees in agricultural and biological engineering are offered in the areas of agricultural operations management and applied science through the College of Agricultural and Life Sciences.

Requirements for these degrees are given in the Graduate Degrees section of this catalog. Additional information can also be found on the graduate studies pages on the department website at www.abe.ufl.edu.

A combined B.S./M.S. program allows up to 12 graduate credits to be double counted toward fulfillment of both degrees. Contact the graduate coordinator for qualifications and details. A 30-credit, 3-semester nonthesis master's degree program is also available to students interested in completing the requirements in 1 year.

The Master of Science, Master of Engineering, and Doctor of Philosophy degrees are offered in the following areas of research:

- Agricultural production includes development and application of precision agriculture concepts and tools, climate risk in agriculture, pesticide application, robotics and other machine systems and environmental control systems. Applications to space agriculture are included in cooperation with NASA at Kennedy Space Center.
- Biological engineering includes post-harvest operations, bioprocess design, plant biotechnology, process microbiology, food process engineering, environmental biotechnology, bioreactors, and packaging science.
- Information systems includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.
- Land and water resources includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological restoration, environmental fate and transport of nanoparticles, waste management, ecological and risk modeling and water reuse.

Students also may choose to participate in interdisciplinary concentrations in hydrologic sciences, geographic information sciences, particle science and technology, and interdisciplinary ecology.

The Master of Science and Doctor of Philosophy in the agricultural operations management area of specialization provide for scientific training and research in technical agricultural management. Typical plans of study focus on advanced training in environmental systems management, production systems management, construction and process management and technical sales management.

For students with basic science degrees, the Doctor of Philosophy program with a specialization in applied sciences through the College of Agricultural and Life Sciences provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real-world problems and issues. Typical emphasis is on (1) the use of engineering methods and approaches, such as mathematical modeling, optimization, and information technologies, in application of science to problems of various spatial and temporal scales; and (2) an
The requirements for a master’s degree normally take 2 years to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, but normally takes 3 to 4 years.

Degrees Offered with a Major in Agricultural and Biological Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration
concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Agricultural and Biological Engineering Courses

- ABE 5015: Empirical Models of Crop Growth and Yield Response
- ABE 5038: Recent Developments and Applications in Biosensors
- ABE 5152: Electro-Hydraulic Circuits and Controls
- ABE 5332: Advanced Agricultural Structures
- ABE 5442: Advanced Agricultural Process Engineering
- ABE 5643C: Biological Systems Modeling
- ABE 5646: Biological and Agricultural Systems Simulation
- ABE 5653: Rheology and Mechanics of Agricultural and Biological Materials
- ABE 5663: Advanced Applied Microbial Biotechnology
- ABE 5707C: Agricultural Waste Management
- ABE 5815C: Food and Bioprocess Engineering Design
- ABE 6005: Applied Control for Automation and Robots
- ABE 6031: Instrumentation in Agricultural Engineering Research
- ABE 6035: Advanced Remote Sensing: Science and Sensors
- ABE 6037C: Remote Sensing in Hydrology
- ABE 6252: Advanced Soil and Water Management Engineering
- ABE 6254: Simulation of Agricultural Watershed Systems
- ABE 6265: Vadose Zone Modeling
- ABE 6266: Nanotechnology in Water Research
- ABE 6615: Advanced Heat and Mass Transfer in Biological Systems
- ABE 6644: Agricultural Decision Systems
- ABE 6816: Food and Bioprocess Sterilization
- ABE 6905: Individual Work in Agricultural and Biological Engineering
- ABE 6910: Supervised Research
- ABE 6931: Seminar
- ABE 6933: Special Topics in Agricultural and Biological Engineering
- ABE 6940: Supervised Teaching
- ABE 6971: Research for Master's Thesis
- ABE 6972: Research for Engineer's Thesis
- ABE 6974: Nonthesis Project
- ABE 6986: Applied Mathematics in Agricultural and Biological Engineering
- ABE 7979: Advanced Research
- ABE 7980: Research for Doctoral Dissertation
- AOM5334C: Agricultural Chemical Application Technology
- AOM5431: GIS and Remote Sensing in Agriculture and Natural Resources
- AOM5435: Advanced Precision Agriculture
- AOM6905: Individual Work in Agricultural Operations Management
- AOM6932: Special Topics in Agricultural Operations Management
- CWR 6536: Stochastic Subsurface Hydrology
- PKG 5003: Advanced Distribution and Transport Packaging
- PKG 5006: Advanced Packaging Principles
- PKG 5105: Advanced Consumer Products Packaging
- PKG 5206C: Advanced Package Decoration
- PKG 5256C: Advanced Analytical Packaging Methods
- PKG 6100: Advanced Computer Tools for Packaging
- PKG 6905: Individual Work in Packaging
- PKG 6932: Special Topics in Packaging Sciences

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6842: Engineering Innovation
- EGN 6939: Engineering Leadership

Biomedical Engineering
Biomedical Engineering Program Information

The master's degree (thesis or nonthesis) requires at least 30 semester hours. The Ph.D. degree requires at least 90 semester credit hours beyond the bachelor's degree. No more than 30 hours of a master's degree from another institution will be transferred to the Ph.D. degree. If a student holds a master's degree in a discipline different from the doctoral program, the master's work will not be counted toward the doctoral degree unless the BME Department successfully petitions the Dean of the Graduate School. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Complete BME program details and courses available are listed in the Biomedical Engineering Graduate Guidelines, on the BME website (which also offers information on available areas of study). Graduate-level courses in either the College of Engineering or the College of Medicine may be applied toward the BME degree programs with the approval of the supervisory committee chair and the graduate coordinator.

Combined program: Biomedical Engineering also offers a combined bachelor's/master's degree program in collaboration with the other departments in the College of Engineering. This program allows qualified students to earn both a bachelor's degree and a master's degree within 5 years for a net savings of 1 year. Contact the BME academic services office for more information or see http://www.bme.ufl.edu/academics/combined.

Degrees Offered with a Major in Biomedical Engineering

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

concentration in Medical Physics

Master of Engineering

Master of Science

without a concentration

concentration in Medical Physics
Courses

- BME 5052L: Biomedical Engineering Laboratory
- BME 5085: Patents, Product Development, and Technology Transfer
- BME 5401: Biomedical Engineering and Physiology I
- BME 5407: Molecular Biomedical Engineering
- BME 5500: Biomedical Instrumentation
- BME 5703: Statistical Methods for Biomedical Engineering
- BME 5704: Advanced Computational Methods for Biomedical Engineering
- BME 5937: Special Topics
- BME 6010: Clinical Preceptorship
- BME 6324: Stem Cell Engineering
- BME 6330: Cell and Tissue Engineering
- BME 6360: Neural Engineering
- BME 6502: Introduction to Medical Imaging
- BME 6505: Advanced Diagnostic Radiological Physics
- BME 6522: Biomedical Multivariate Signal Processing
- BME 6533: Radiologic Anatomy
- BME 6534: Advanced Therapeutic Radiological Physics
- BME 6535: Radiological Physics, Measurements and Dosimetry
- BME 6590: Medical Physics
- BME 6591: Therapeutic Radiological Physics I
- BME 6592: Therapeutic Radiological Physics II
- BME 6593: Therapeutic Radiological Physics III
- BME 6705: Mathematical Modeling of Biological and Physiological Systems
- BME 6905: Individual Work in Biomedical Engineering
- BME 6907: BME Project
- BME 6910: Supervised Research
- BME 6938: Biomedical Engineering Seminar
- BME 6938: Special Topics in Biomedical Engineering
- BME 6940: Supervised Teaching
- BME 6971: Research for Master's Thesis
- BME 7979: Advanced Research
- BME 7980: Research for Doctoral Dissertation
- EEE 6504: Adaptive Signal Processing
- EEE 6512: Image Processing and Computer Vision
- ENU 5615C: Nuclear Radiation Detection and Instrumentation
- ENU 5615L: Nuclear Radiation Detection and Instrumentation Lab
- ENU 5626: Radiation Biology
- ENU 5657: Diagnostic Radiological Physics
- ENU 5658: Imaging System Analysis with Medical Physics Applications
- ENU 6051: Radiation Interaction Basics and Applications I
- ENU 6052: Radiation Transport Basics and Applications
- ENU 6627: Therapeutic Radiological Physics
- ENU 6636: Medical Radiation Shielding & Protection
- ENU 6657: Diagnostic Radiological Physics
- ENU 6659: Nuclear Medicine Instrumentation and Procedure

College of Engineering and College of Medicine Courses

- Click here for information about available College of Engineering courses.

Chemical Engineering

College

College of Engineering

Department/School

Chemical Engineering Department

Degrees Offered with a Major in Chemical Engineering
Doctor of Philosophy

Master of Engineering

Master of Science

Courses

- BME 6221: Biomolecular Cell Mechanics
- BME 6322: Dynamics of Cellular Processes
- ECH 5708: Disinfection, Sterilization, and Preservation
- ECH 5938: Topics in Colloid Science
- ECH 6126: Thermodynamics of Reaction and Phase Equilibria
- ECH 6207: Continuum Basis of Chemical Engineering
- ECH 6222: Molecular Basis of Chemical Engineering
- ECH 6285: Transport Phenomena
- ECH 6326: Computer Control of Processes
- ECH 6506: Chemical Engineering Kinetics
- ECH 6526: Reactor Design and Optimization
- BME 6644: Pharmacokinetics
- ECH 6709: Electrochemical Engineering Fundamentals and Design
- ECH 6726: Interfacial Phenomena I
- ECH 6727: Interfacial Phenomena II
- ECH 6843: Experimental Basis of Chemical Engineering
- ECH 6847: Mathematical Basis of Chemical Engineering
- ECH 6851: Impedance Spectroscopy
- ECH 6905: Individual Work
- ECH 6910: Supervised Research
- ECH 6926: Graduate Seminar
- ECH 6937: Topics in Chemical Engineering I
- ECH 6939: Topics in Chemical Engineering III
- ECH 6940: Supervised Teaching
- ECH 6971: Research for Master's Thesis
- ECH 6XXX
- ECH 7938: Advanced Special Chemical Engineering Topics for Doctoral Candidates
- ECH 7979: Advanced Research
- ECH 7980: Research for Doctoral Dissertation

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Civil Engineering

College

Department/School

Civil and Coastal Engineering Department
Civil Engineering Program

The civil engineering program is offered through the Department of Civil and Coastal Engineering with the following degrees: Master of Engineering, Master of Science, and Doctor of Philosophy. The master's degree in civil engineering is also offered through the Electronic Delivery of Graduate Engineering (EDGE) program, which is a distance learning program delivered either via streaming video or DVD directly to the students. Subject to approval by the supervisory committee, graduate-level courses taken through the Departments of Environmental Engineering Sciences, Geological Sciences, and Mechanical and Aerospace Engineering are considered as major credit.

For courses taken through the Department of Civil and Coastal Engineering, credit hours graded S/U will not count toward graduation except for:
- 6 hours of CGN 6971 or EOC 6971 for thesis students
- 3 hours of CGN 6974 for students working on the M.E. report
- CGN 7979 or EOC 7979
- CGN 7980 or EOC 7980

Degrees Offered with a Major in Civil Engineering

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences
Master of Science

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Courses

- CCE 5035: Construction Planning and Scheduling
- CCE 5405: Construction Equipment and Procedures
- CCE 6037: Civil Engineering Operations I
- CCE 6038: Innovative Construction Techniques
- CCE 6505: Computer Applications in Construction Engineering
- CCE 6507: Computer Applications in Construction Engineering II
- CCE 6516: Topics in Airborne Laser Mapping Technology
- CEG 5105: Geotechnical Engineering
- CEG 5114: Advanced Geotechnical Aspects of Landfill Design
- CEG 5115: Foundation Design
- CEG 5205C: In situ Measurement of Soil Properties
- CEG 5206: Geosensing I
- CEG 5805: Ground Modification Design
- CEG 6015: Advanced Soil Mechanics
- CEG 6116: Advanced Shallow Foundation Design
- CEG 6117: Advanced Deep Foundation Design
- CEG 6201: Experimental Determination of Soil Properties
- CEG 6207: Geosensing II
- CEG 6405: Seepage in Soils
- CEG 6505: Numerical Methods of Geomechanics
- CEG 6515: Earth Retaining Systems and Slope Stability
- CEG 6510: Probabilistic and Stochastic Methods in Civil Engineering
- CEG 5116: Finite Elements in Civil Engineering
- CES 5325: Design of Highway Bridges
- CES 5606: Topics in Steel Design
- CES 5607: Behavior of Steel Structures
- CES 5715: Prestressed Concrete
- CES 5726: Design of Concrete Systems
- CES 5801: Design and Construction in Timber
- CES 5835: Design of Reinforced Masonry Structures
- CES 6106: Advanced Structural Analysis
- CES 6108: Structural Dynamics
- CES 6165: Computer Methods in Structural Engineering
- CES 6551: Design of Folded Plates and Shells
- CES 6588: Protective Structures
- CES 6590: Impact Engineering
- CES 6591: Applied Protective Structures
- CES 6592: Retrofit Protective Structures
- CES 6593: Advanced Protective Structures
- CES 6706: Advanced Reinforced Concrete
- CES 6855: Condition Assessment of Structures
- CGN 5606: Public Works Management
- CGN 5715: Experimentation and Instrumentation in Civil Engineering Materials Research
- CGN 6155: Civil Engineering Practice I
- CGN 6156: Construction Engineering II
- CGN 6505: Properties, Design and Control of Concrete
- CGN 6506: Bituminous Materials
- CGN 6525: Sustainable Materials
- CGN 6905: Special Problems in Civil Engineering
Civil and Coastal Engineering Departmental Courses

- CES 6571: Design of Temporary Structures
- CES 6585: Wind Engineering
- CGN 5125: Legal Aspects of Civil Engineering
- CGN 5315: Civil Engineering Systems
- CGN 5605: Public Works Planning
- CGN 6150: Engineering Project Management
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6240: Mixing and Transport in Turbulent Flow
- TTE 6207: Advanced Highway Capacity Analysis

Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM 5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6441: Water Resources Planning and Management
- ENV 6508: Wetland Hydrology
- ENV 6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6639: Engineering Leadership

Coastal and Oceanographic Engineering

College
Coastal and Oceanographic Engineering Program

The coastal and oceanographic engineering program is offered through the Department of Civil and Coastal Engineering with the following degrees: Master of Engineering, Master of Science, and Doctor of Philosophy degrees. Subject to approval by the supervisory committee, graduate-level courses taken through the Departments of Environmental Engineering Sciences, Geological Sciences, and Mechanical and Aerospace Engineering are considered as major credit.

For courses taken through the Department of Civil and Coastal Engineering, credit hours graded S/U will not count toward graduation except for:

- 6 hours of CGN 6971 or EOC 6971 for thesis students
- 3 hours of CGN 6974 for students working on the M.E. report
- CGN 7979 or EOC 7979
- CGN 7980 or EOC 7980

Degrees Offered with a Major in Coastal and Oceanographic Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Coastal and Oceanographic Engineering Courses

- EGM5816: Intermediate Fluid Dynamics
- EOC 5860: Port and Harbor Engineering
- EOC 6196: Littoral Processes
- EOC 6430: Coastal Structures
- EOC 6850: Numerical Simulation Techniques in Coastal and Ocean Engineering
- EOC 6905: Individual Study in Coastal and Oceanographic Engineering
- EOC 6932: Selected Field and Laboratory Problems
- EOC 6934: Advanced Topics in Coastal and Oceanographic Engineering
- EOC 6939: Graduate Seminar
- EOC 6971: Research for Master's Thesis
- EOC 6972: Research for Engineer's Thesis
- EOC 7979: Advanced Research
- EOC 7980: Research for Doctoral Dissertation
- OCP 5293: Coastal Processes
- OCP 6050: Physical Oceanography
- OCP 6165: Ocean Waves I: Linear Theory
- OCP 6165L: Ocean Waves Laboratory
- OCP 6167: Ocean Waves II: Nonlinear Theory
- OCP 6168: Data Analysis Techniques for Coastal and Ocean Engineers
- OCP 6169: Random Sea Analysis
- OCP 6295: Estuarine and Shelf Hydrodynamics I
- OCP 6297: Coastal and Estuarine Sediment Transport
- OCP 6298: Coastal Sediment Transport Processes
Civil and Coastal Engineering Departmental Courses

- CES 6571: Design of Temporary Structures
- CES 6585: Wind Engineering
- CGN 5125: Legal Aspects of Civil Engineering
- CGN 5315: Civil Engineering Systems
- CGN 5605: Public Works Planning
- CGN 6150: Engineering Project Management
- CVR 6126: Variable-Density Groundwater Flow
- CVR 6240: Mixing and Transport in Turbulent Flow
- TTE 6207: Advanced Highway Capacity Analysis

Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CVR 5125: Groundwater Flow I
- CVR 5127: Evaluation of Groundwater Quality
- CVR 5235: Open Channel Hydraulics
- CVR 6115: Surface Hydrology
- CVR 6126: Variable-Density Groundwater Flow
- CVR 6525: Groundwater Flow II
- CVR 6537: Contaminant Subsurface Hydrology
- EGM 5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5565: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6441: Water Resources Planning and Management
- ENV 6508: Wetland Hydrology
- ENV 6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Computer Engineering

College

Department/School

Computer and Information Science and Engineering Department

Computer Engineering Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science and the Doctor of Philosophy degrees in Computer Engineering through the College of Engineering. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in Algorithms, Computer Vision, Databases, Graphics and Modeling, Machine Learning, Networks, and Systems, with active labs in Bioinformatics, Computational Science and Intelligence; Vision, Graphics and Medical Imaging; Database Systems Research and Development; Data Science Research; Mobile and Pervasive Computing; Human-Centered Computing; and Cybersecurity.

Specific degree requirements and options may be found here: [http://cise.ufl.edu/academics/grad](http://cise.ufl.edu/academics/grad)

Instructions for application for admission may be found here: [http://cise.ufl.edu/admissions/grad](http://cise.ufl.edu/admissions/grad)

Degrees Offered with a Major in Computer Engineering
Doctor of Philosophy

Master of Engineering

Master of Science

without a concentration

concentration in Digital Arts and Sciences

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5805: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6685: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6156: High-Performance Computer Architecture
- CEN 5035: Software Engineering
- CEN 6070: Software Testing and Verification
- CEN 6075: Software Specification
- CIS 6905: Individual Study
- CIS 6910: Supervised Research
- CIS 6930: Special Topics in CIS
- CIS 6905: Graduate Seminar
- CIS 6940: Supervised Teaching
- CIS 6971: Research for Master's Thesis
- CIS 7971: Advanced Research
- CIS 7980: Research for Doctoral Dissertation
- CNT 5106C: Computer Networks
- CNT 5410: Computer and Network Security
- CNT 5517: Mobile Computing
- CNT 6107: Advanced Computer Networks
- CNT 6885: Distributed Multimedia Systems
- COP 5536: Advanced Data Structures
- COP 5555: Programming Language Principles
- COP 5615: Distributed Operating System Principles
- COP 5618: Concurrent Programming
- COP 5625: Programming Language Translators
- COP 5627: Database Management Systems
- COP 6726: Database System Implementation
- COP 6755: Distributed Database Systems
- COT 5405: Analysis of Algorithms
- COT 5442: Approximation Algorithms
- COT 5519: Sparse Matrix Algorithms
- COT 5520: Computational Geometry
Digital Arts and Sciences (Engineering) Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science degree in Digital Arts and Sciences through the College of Engineering. Minimum requirements for this degree are given in the Graduate Degrees section of this catalog.

This specialized program integrates engineering and design and was created for students with an interest in video games, human-computer interaction, 3D modeling and animation, virtual reality, and computer graphics. The curriculum includes core computer science with a special emphasis on human-centered computing and provides students the flexibility to focus on both computer science and design, and to create software that is computationally complex, user friendly and aesthetically pleasing.

Specific degree requirements and options may be found here: [http://cise.ufl.edu/academics/grad](http://cise.ufl.edu/academics/grad)

Instructions for application for admission may be found here: [http://cise.ufl.edu/admissions/grad](http://cise.ufl.edu/admissions/grad)

Degrees

Master of Science

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5805: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6685: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6156: High Performance Computer Architecture
- CEN 5035: Software Engineering
Electrical and Computer Engineering Program Information

The Department of Electrical and Computer Engineering offers the Master of Science and Doctor of Philosophy degrees. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in computer engineering, devices, electromagnetics and energy systems, electronics, and signals and systems. The Department of Electrical and Computer Engineering offers both thesis and nonthesis options for the master's degrees.

In the thesis option a student shall complete a minimum of 30 semester credit hours with a maximum of 6 semester credit hours of EEL 6971 (Research for Master's Thesis). While the Graduate School sets the minimum requirements, the supervisory committee determines the appropriate number of thesis hours a student shall be required to take for the thesis. Other course requirements include a minimum of 18 hours at the 5000 or 6000 level in electrical and computer engineering. Excluded from satisfying these course requirements are EEL 5905 and EEL 6905 (Individual Work), EEL 6910 (Supervised Research), 6932 (Graduate Seminar), EEL 6940 (Supervised Teaching), and EEL 6971 (Research for Master’s Thesis). No more than 6 hours of Individual Work (EEL 5905 or EEL 6905) may be counted toward the degree.

In the nonthesis option a student shall complete a minimum of 30 semester credit hours with a maximum of 6 semester credit hours of Individual Work (EEL 5905 or EEL 6905). The course requirements include a minimum of 21 semester credit hours at the 5000 or 6000 level in electrical and computer engineering. Excluded from satisfying these course requirements are EEL 5905 and EEL 6905 (Individual Work), EEL 6910 (Supervised Research), 6932 (Graduate Seminar), EEL 6940 (Supervised Teaching), and EEL 6971 (Research for Master’s Thesis).

The Department also offers a combined bachelor's/master's degree program. This program allows qualified students to earn both a bachelor's degree and master's degree with a saving of one semester. Qualified students may begin their master's programs while seniors, counting up to 12 hours of specified electrical and computer engineering graduate courses for both bachelor's and master's degree requirements. Bachelor’s/master’s program admission requirements are (1) satisfaction of Graduate School admission requirements for the master’s degree, (2) an upper-division (undergraduate) GPA of at least 3.3, and (3) completion of at least 7 EEL core courses and 2 EEL laboratories. Students with a GPA between 3.3 and 3.59 can double count up to 6
hours, while students with a GPA of 3.6 or higher can double count up to 12 hours.

All prospective doctoral students must take the written part of the Ph.D. qualifying examination within the first year of enrollment. Other requirements for the doctoral degree, as well as requirements for master’s and engineering degrees, are given in the Electrical and Computer Engineering Department’s Graduate Guidelines (see [http://www.ece.ufl.edu/content/graduate-academics](http://www.ece.ufl.edu/content/graduate-academics)) and in the front section of this catalog.

The following course listing indicates the major areas of faculty interest. Special topics courses EEL 5934 and EEE 6935 cover a wide variety of subjects for which there are no present courses.

Degrees Offered with a Major in Electrical and Computer Engineering

Doctor of Philosophy

Master of Engineering

Master of Science

Courses

- CNT 6805: Network Science and Applications
- EEE 5317C: Introduction to Power Electronics
- EEE 5320: Bipolar Analog IC Design
- EEE 5322: VLSI Circuits and Technology
- EEE 5364: Fundamentals of Data Converters
- EEE 5400: Future of Microelectronics Technology
- EEE 5405: Microelectronic Fabrication Technologies
- EEE 5426: Introduction to Nanodevices
- EEE 6287: Brain Machine Interface Engineering
- EEE 6321: MOS Analog IC Design
- EEE 6322: Advanced VLSI Design
- EEE 6325: Computer Simulation of Integrated Circuits and Devices
- EEE 6328C: Microwave IC Design
- EEE 6374: Radio Frequency (RF) Integrated Circuits and Technologies
- EEE 6382: Semiconductors Physical Electronics
- EEE 6390: VLSI Device Design
- EEE 6397: Semiconductor Device Theory I
- EEE 6402: Nonclassical Si-Based Nanoscale CMOS Devices
- EEE 6428: Computational Nanoelectronics
- EEE 6431: Carbon Nanotubes
- EEE 6440: Advanced Microsystem Technology
- EEE 6465: Design of MEMS Transducers
- EEL 5182: State Variable Methods in Linear Systems
- EEL 5225: Principles of Micro-Electro-Mechanical Transducers
- EEL 5400: Airborne Sensors and Instrumentation
- EEL 5401: Airborne Laser Scanning: Data Processing and Analysis
- EEL 5441: Fundamentals of Photonics
- EEL 5462: Advanced Antenna Systems
- EEL 5490: Lightning
- EEE 5502: Foundations of Digital Signal Processing
- EEE 5544: Noise in Linear Systems
- EEE 5556: Electronic Countermeasures
- EEL 5566C: Intelligent Machines Design Laboratory
- EEL 5718: Computer Communications
- EEL 5721: Reconfigurable Computing
- EEL 5737: Principles of Computer System Design
- EEL 5764: Computer Architecture
- EEL 5940: Elements of Machine Intelligence
- EEL 5905: Individual Work
- EEL 5933: Special Topics in Electrical Engineering
- EEL 6065: Electrical & Computer Engineering Technical Writing
- EEL 6264: Advanced Electric Energy Systems I
- EEL 6265: Advanced Electric Energy Systems II
- EEL 6443: Integrated and Fiber Optics
Environmental Engineering Sciences

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Environmental Engineering Sciences

College

Environmental Engineering Sciences Department

Environmental Engineering Sciences Program Information

Graduate study is offered leading to the degrees Master of Engineering, Master of Science, and Doctor of Philosophy in the field of environmental engineering sciences. Our graduate research and education areas are

Air Resources

- Monitoring of air pollutants: indoor, ambient, industrial, and occupational
- Monitoring methodology and instrumentation development
- Formation and fate of air pollutants
- Air quality modeling
- Air pollution control: system, process and materials
- Sustainability of air quality
- Health effects and environmental impact of air pollutant
Biogeochemical Systems
• Green Engineering
• Microbiology of Natural and Engineered Systems
• Environmental Fate and Transport of Pollutants in Soils and Aquatic Systems
• Biological and Chemical Remediation of Contaminated Systems
• Environmental Toxicology and Nanotoxicology
• Effects of Climate and Land Use Changes on Biogeochemical Cycles
• Aqueous Geochemistry and Water Treatment

Environmental Nanotechnology
• Manufacturing and tailoring of nanomaterials and nanodevices for application in environmental and human health research
• Environmental fate and transport of nanomaterials
• Environmental implications of nanomaterials

Solid and Hazardous Waste Management
• Bioreactor Landfills
• Combustion and Thermal Treatment Residuals
• Contaminated Soil Characterization and Treatment
• Construction and Demolition Debris
• Electronic Waste
• Hazardous Waste
• Landfill Design and Operations
• Landfill Gas and Leachate
• Recycling and Beneficial Use of Wastes
• Treated Wood
• Waste Characterization and Leaching
• Solid Waste Management in Developing Countries

Stormwater, Water Supply and Wastewater
• Fundamental characterization of aqueous and particulate-phase contaminants including emerging contaminants, representative ambient monitoring, methodology and load quantification.
• Sourcing and generation of aqueous and particulate phase contaminants, physics and chemistry of contaminant transport and fate.
• Water contaminant control: systems, unit operation and processes, and materials development, in particular innovative mass transfer materials and low impact development materials.
• Water reuse as part of the urban water cycle: volumetric and contaminant load impacts.
• Unit operation and process modeling: scalable physical models and computational fluid dynamics (CFD).
• Integrated physical, chemical, biological and thermal treatment phenomena for water cycle components.
• Coupling fundamental monitoring and material balance testing with urban water modeling.
• Fundamental and applied studies of physical-chemical water treatment processes, such as adsorption, coagulation, ion exchange, and oxidation, for a wide range of water qualities including surface water, groundwater, membrane concentrate, leachate, and human urine.
• Innovative applications of ion exchange for water treatment.
• Fundamental studies in aquatic chemistry with a focus on the role of natural organic matter.
• Fundamental and applied studies of adsorption and photocatalysis, including surface optimization.
• Bottom up integrated urban water system simulation and optimization

Sustainability Science & Engineering
• Rational design of nanomaterial through acute and full-life-cycle toxicity assessment
• Life cycle assessment calculations and comparisons of alternative energy and materials options
• Industrial ecology
• Corporate water resources sustainability
• Campus green building codes
• Green laboratory techniques
• Operation of buildings to meet green energy requirements

Systems Ecology and Ecological Engineering
• Ecological Engineering
• Emergy Analysis
• Wetlands ecosystem research
• Ecological Modeling
• Estuarine Systems

Water Resources
• Contaminant transport and fate
• Decision support systems
• Ecohydrology and hydrologic restoration
• Hydrology
• Stormwater control
• Water resources planning and management
• Water conservation
• Urban water infrastructure

Graduate students can also combine one or more of the above areas with specialties in other departments at the University of Florida.

The department participates in the hydrologic sciences interdisciplinary concentration that is offered through 9 departments in 3 colleges. This concentration is described under Interdisciplinary Graduate Studies.

Direct admission into the Master of Science and Doctor of Philosophy programs requires a bachelor’s degree in engineering or in a basic science such as chemistry, geology, physics, biology, or mathematics. Persons with a degree in a nontechnical field may also be admitted into this program after completing appropriate technical courses. Direct admission into the Master of Engineering program requires a bachelor’s degree in engineering.

Requirements for a master’s degree normally take 12 to 24 months to complete. The length of time required for the Doctor of Philosophy degree depends partly on the research topic, and may be completed in 3 years, but often takes longer, depending on prior academic experience.

Concurrent program: The department offers a combined bachelor’s/master’s degree program. This program allows qualified students to earn both a bachelor’s degree and a master’s degree, with a savings of 12 credits.

Joint program: The Environmental Engineering Sciences Department, in partnership with the Levin College of Law, offers a joint program leading to the M.S. or M.E. degree in environmental engineering sciences and the Juris Doctor degree. Twelve credits of appropriate course work are counted toward both degrees.
Degrees Offered with a Major in Environmental Engineering Sciences

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Engineering

without a concentration

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Geographic Information Systems
concentration in Hydrologic Sciences

concentration in Wetland Sciences

Courses

- CEG 5206: Geosensing I
- CWR 6115: Surface Hydrology
- CWR 6116: Advanced Surface Hydrology
- CWR 6252: Environmental Biochemistry of Trace Metals
- CWR 6536: Stochastic Subsurface Hydrology
- CWR 6537: Contaminant Subsurface Hydrology
- EES 5105: Advanced Wastewater Microbiology
- EES 5107: Ecological and Biological Systems
- EES 5207: Environmental Chemistry
- EES 5245: Water Quality Analysis
- EES 5305C: Ecological and General Systems
- EES 5306: Energy Analysis
- EES 5307: Ecological Engineering
- EES 5315: Ecology and the Environment
- EES 5415: Environmental Health
- EES 6007: Advanced Energy and Environment
- EES 6009: Ecological Economics
- EES 6028C: Environmental Systems Dynamics
- EES 6028: Spatial Modeling Using Geographic Information Systems
- EES 6051: Advanced Environmental Planning and Design
- EES 6135: Aquatic Microbiology
- EES 6136: Aquatic Autotrophs
- EES 6137: Aquatic Heterotrophs
- EES 6140: Biology of Exotic Species
- EES 6371: Environmental Meteorology and Oceanography
- EES 6208: Principles of Water Chemistry I
- EES 6209: Principles of Water Chemistry II
- EES 6225: Atmospheric Chemistry
- EES 6246: Advanced Water Analysis
- EES 6301: Comparative Approaches in Systems Ecology
- EES 6308C: Wetland Ecology
- EES 6309: Wetland Treatment Systems
- EES 6318: Principles of Industrial Ecology
- EES 6335: Springs Ecosystems
- EES 6356: Estuarine Systems
- EES 6405: Environmental Toxicology
- ENV 6439: Activated Carbon: Environmental Design and Application
- ENV 5072: Pollution Control and Prevention
- ENV 5075: Environmental Policy
- ENV 5105: Foundations of Air Pollution
- ENV 5305: Advanced Solid Waste Treatment Design
- ENV 5306: Municipal Refuse Disposal
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5520: Fluid Flow in Environmental Systems
- ENV 5555: Wastewater Treatment
- ENV 5565: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6116: Air Pollution Sampling and Analysis
- ENV 6126: Air Pollution Control Design
- ENV 6130: Aerosol Mechanics
- ENV 6146: Atmospheric Dispersion Modeling
- ENV 6215: Health Physics
- ENV 6216: Radioactive Wastes
- ENV 6301: Advanced Solid Waste Containment Design
- ENV 6435: Advanced Water Treatment Process Design
- ENV 6435C: Advanced Water Treatment Process Design
- ENV 6435L: Water Treatment Process Design Laboratory
- ENV 6437: Advanced Wastewater System Design
- ENV 6438: Advanced Potable Water Systems Design
- ENV 6441: Water Resources Planning and Management
- ENV 6416: Advanced Stormwater Control Systems
- ENV 6508: Wetland Hydrology
- ENV 6510: Groundwater Restoration
- ENV 6511: Biological Wastewater Treatment
Hydrology / Water Resources Shared Courses

- CGN 6905: Special Problems in Civil Engineering
- CWR 5125: Groundwater Flow I
- CWR 5127: Evaluation of Groundwater Quality
- CWR 5235: Open Channel Hydraulics
- CWR 6115: Surface Hydrology
- CWR 6126: Variable-Density Groundwater Flow
- CWR 6525: Groundwater Flow II
- CWR 6537: Contaminant Subsurface Hydrology
- EGM5816: Intermediate Fluid Dynamics
- ENV 5518: Field Methods in Environmental Hydrology
- ENV 5585: Hydraulic Systems Design
- ENV 6050: Advanced Pollutant Transport
- ENV 6052: Immiscible Fluids in Porous Media
- ENV 6441: Water Resources Planning and Management
- ENV 6508: Wetland Hydrology
- ENV 6932: Special Problems in Environmental Engineering

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Industrial and Systems Engineering

College

College of Engineering

Department/School

Industrial and Systems Engineering Department

Degrees Offered with a Major in Industrial and Systems Engineering

Doctor of Philosophy

without a concentration

concentration in Quantitative Finance
Engineer

Master of Engineering

Master of Science

Industrial and Systems Engineering Courses

- EIN 6227: Advanced Quality Management and Engineering for Business Processes
- EIN 6336: Advanced Production and Inventory Control
- EIN 6357: Advanced Engineering Economy
- EIN 6367: Facilities Layout and Location
- EIN 6392: Manufacturing Management
- EIN 6905: Special Problems
- EIN 6910: Supervised Research
- EIN 6918: Graduate Seminar
- EIN 6940: Supervised Teaching
- EIN 6971: Research for Master's Thesis
- EIN 6972: Research for Engineer's Thesis
- EIN 7933: Special Problems
- EIN 7979: Advanced Research
- EIN 7980: Research for Doctoral Dissertation
- ESI 5236: Reliability Engineering
- ESI 6162C: Advanced Industrial Applications of Microprocessors
- ESI 6314: Deterministic Methods in Operations Research
- ESI 6321: Applied Probability/Methods in Engineering
- ESI 6323: Models for Supply Chain Management
- ESI 6341: Intro to Stochastic Optimization
- ESI 6355: Decision Support Systems for Industrial and Systems Engineers
- ESI 6417: Linear Programming and Network Optimization
- ESI 6418: Linear Programming Extensions and Applications
- ESI 6420: Fundamentals of Mathematical Programming
- ESI 6429: Introduction to Nonlinear Optimization
- ESI 6448: Discrete Optimization Theory
- ESI 6449: Integer Programming
- ESI 6470: Principles of Manufacturing Systems Engineering
- ESI 6492: Global Optimization
- ESI 6529: Digital Simulation Techniques
- ESI 6533: Advanced Simulation Design and Analysis
- ESI 6546: Stochastic Modeling and Analysis
- ESI 6552: Systems Architecture
- ESI 6553: Systems Design
- ESI 6555: Systems Management
- ESI 6912: Advanced Topics in ISE

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6659: Engineering Leadership

Materials Science and Engineering

College
Materials Science and Engineering Department

Degrees Offered with a Major in Materials Science and Engineering

Doctor of Philosophy

without a concentration

in concentration in Clinical and Translational Science

Master of Engineering

Master of Science

Courses

- EMA 5008: Particle Science and Technology: Theory and Practice
- EMA 5095: Critical Analysis of Research in Materials Science & Engineering
- EMA 5108: Vacuum Science and Technology
- EMA 5365: Biomimetic Synthesis
- EMA 6005: Thin and Thick Films
- EMA 6105: Fundamental and Applications of Surface Science
- EMA 6106: Advanced Phase Diagrams
- EMA 6107: High Temperature Materials
- EMA 6109: Physical Chemistry of High Temperature Materials
- EMA 6110: Electron Theory of Solids for Materials Scientists I
- EMA 6111: Electron Theory of Solids for Materials Scientists II
- EMA 6114: Advanced Materials Principles 2
- EMA 6128: Materials Microstructures
- EMA 6136: Diffusion, Kinetics, and Transport Phenomena
- EMA 6165: Polymer Physical Science
- EMA 6166: Polymer Composites
- EMA 6226: Synthesis and Properties of Metallic Nanostructures
- EMA 6227: Advanced Mechanical Metallurgy II
- EMA 6265: Mechanical Properties of Polymers
- EMA 6313: Advanced Materials Principles I
- EMA 6315: Colloidal Hydrodynamics
- EMA 6316: Materials Thermodynamics
- EMA 6319: Applied Colloid and Interfacial Chemistry for Engineers
- EMA 6412: Synthesis and Characterization of Electronic Materials
- EMA 6416: Organic Electronics
- EMA 6445: Electroceramics
- EMA 6446: Solid State Ionic Materials
- EMA 6448: Ceramic Processing
- EMA 6461: Polymer Characterization
- EMA 6507: Scanning Electron Microscopy and Microanalysis
  + EMA 6007C
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Mechanical Engineering

College

College of Engineering

Department/School

Mechanical and Aerospace Engineering Department

Degrees Offered with a Major in Mechanical Engineering

Doctor of Philosophy

Master of Engineering

Master of Science
Mechanical and Aerospace Engineering Departmental Courses

- BME 5580: Introduction to Microfluidics and BioMEMS
- EAS 5938: Special Topics in Aerospace Engineering
- EAS 6135: Molecular Theory of Fluid Flows
- EAS 6138: Geodynamics
- EAS 6242: Advanced Structural Composites
- EAS 6415: Guidance and Control of Aerospace Vehicles
- EAS 6905: Aerospace Research
- EAS 6910: Supervised Research
- EAS 6935: Graduate Seminar
- EAS 6939: Special Topics in Aerospace Engineering
- EAS 6971: Research for Master's Thesis
- EAS 7979: Advanced Research
- EAS 7980: Research for Doctoral Dissertation
- EGM 5005: Laser Principles and Applications
- EGM 5111: Experimental Stress Analysis
- EGM 5121C: Data Measurement and Analysis
- EGM 5533: Applied Elasticity and Advanced Mechanics of Solids
- EGM 5581: Biomechanics of Soft Tissue
- EGM 5593: Special Topics in Engineering Science and Mechanics
- EGM 6006: Laser-Based Diagnostics
- EGM 6321: Principles of Engineering Analysis I
- EGM 6322: Principles of Engineering Analysis II
- EGM 6323: Principles of Engineering Analysis III
- EGM 6341: Numerical Methods of Engineering Analysis I
- EGM 6342: Fundamentals of Computational Fluid Dynamics
- EGM 6352: Advanced Finite Element Methods
- EGM 6365: Structural Optimization
- EGM 6570: Principles of Fracture Mechanics
- EGM 6611: Continuum Mechanics
- EGM 6671: Inelastic Materials
- EGM 6812: Fluid Mechanics I
- EGM 6813: Fluid Mechanics II
- EGM 6855: Bio-Fluid Mechanics and Bio-Heat Transfer
- EGM 6905: Individual Study
- EGM 6910: Supervised Research
- EGM 6934: Special Topics in Engineering Mechanics
- EGM 6936: Graduate Seminar
- EGM 6971: Research for Master's Thesis
- EGM 7819: Computational Fluid Dynamics
- EGM 7845: Turbulent Fluid Flow
- EGM 7979: Advanced Research
- EGM 7980: Research for Doctoral Dissertation
- EML 5045: Computational Methods for Design and Manufacturing
- EML 5104: Classical and Statistical Thermodynamics
- EML 5124: Two-Phase Flow and Boiling Heat Transfer
- EML 5131: Combustion
- EML 5215: Analytical Dynamics I
- EML 5223: Structural Dynamics
- EML 5224: Acoustics
- EML 5233: Failure of Materials in Mechanical Design
- EML 5311: Control System Theory
- EML 5318: Computer Control of Machines and Processes
- EML 5455: Clean Combustion Technology
- EML 5465: Energy Management for Mechanical Engineers
- EML 5515: Gas Turbines and Jet Engines
- EML 5516: Design of Thermal Systems
- EML 5526: Finite Element Analysis and Application
- EML 5556: Mechanics of the Human Locomotor System
- EML 5558: Orthopedic Biomechanics
- EML 5605: Advanced Refrigeration
- EML 5714: Introduction to Compressible Flow
- EML 6146: Microscale Heat Transfer
- EML 6154: Conduction Heat Transfer
- EML 6155: Convective Heat Transfer I
- EML 6156: Multiphase Convection Heat Transfer
- EML 6157: Radiation Heat Transfer
- EML 6216: Analytical Dynamics II
- EML 6229: Introduction to Random Dynamical Systems
- EML 6267: Structural Dynamics of Production Machinery
- EML 6278: Advanced Rotor Dynamics
- EML 6281: Geometry of Mechanisms and Robots I
- EML 6282: Geometry of Mechanisms and Robots II
- EML 6323: Nontraditional Manufacturing
- EML 6324: Fundamentals of Production Engineering
- EML 6350: Introduction to Nonlinear Control
- EML 6351: Nonlinear Control II: Adaptive Control
College of Engineering Courses

- EML 6352: Optimal Estimation
- EML 6365: Robust Control Synthesis
- EML 6417: Solar Energy Utilization
- EML 6451: Energy Conversion
- EML 6606: Advanced Air Conditioning
- EML 6905: Individual Projects in Mechanical Engineering
- EML 6934: Special Topics in Mechanical Engineering
- EML 6936: Nonthesis Project
- EML 6971: Research for Master's Thesis
- EML 7979: Advanced Research
- EML 7980: Research for Doctoral Dissertation

College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Nuclear Engineering Sciences

College

College of Engineering

Department/School

Nuclear and Radiological Engineering Department

Degrees Offered with a Major in Nuclear Engineering Sciences

Doctor of Philosophy

without a concentration

concentration in Imaging Science and Technology

Master of Engineering

Master of Science

Courses
College of Engineering Courses

- ENU 5142: Reliability and Risk Analysis for Nuclear Facilities
- ENU 5176L: Principles of Nuclear Reactor Operations Laboratory
- ENU 5186: Nuclear Fuel Cycles
- ENU 5196: Nuclear Reactor Power Plant System Dynamics and Control
- ENU 5516L: Nuclear Engineering Laboratory II
- ENU 5615C: Nuclear Radiation Detection and Instrumentation
- ENU 5615L: Nuclear Radiation Detection and Instrumentation Lab
- ENU 5626: Radiation Biology
- ENU 5658: Imaging System Analysis with Medical Physics Applications
- ENU 5705: Advanced Concepts for Nuclear Energy
- ENU 6051: Radiation Interaction Basics and Applications I
- ENU 6052: Radiation Transport Basics and Applications
- ENU 6053: Radiation Interaction Basics and Applications II
- ENU 6061: Survey of Medical Radiological Physics
- ENU 6106: Nuclear Reactor Analysis I
- ENU 6107: Nuclear Reactor Analysis II
- ENU 6126: Fundamentals of Reactor Kinetics
- ENU 6135: Nuclear Thermal Hydraulics
- ENU 6623: Radiation Dosimetry
- ENU 6627: Therapeutic Radiological Physics
- ENU 6636: Medical Radiation Shielding & Protection
- ENU 6651: Clinical Rotation in Radiation Therapy
- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6655: Advanced Diagnostic Radiological Physics
- ENU 6657: Diagnostic Radiological Physics
- ENU 6659: Nuclear Medicine Instrumentation and Procedure
- ENU 6635: Nuclear Fuels
- ENU 6905: Individual Work
- ENU 6910: Supervised Research
- ENU 6935: Nuclear and Radiological Engineering Seminar
- ENU 6936: Special Projects in Nuclear and Radiological Engineering Sciences
- ENU 6937: Special Topics in Nuclear and Radiological Engineering Sciences
- ENU 6971: Research for Master's Thesis
- ENU 6972: Research for Engineer's Thesis
- ENU 7979: Advanced Research
- ENU 7980: Research for Doctoral Dissertation

College of Health and Human Performance

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6039: Engineering Leadership
- EGN 6042: Engineering Innovation
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6640: Engineering Leadership

Dear: M. Reid

Complete faculty listings: Follow this link.

Research and teaching in HHP has an impact on almost every aspect of the human condition. The college's four centers – the Florida Center for Health Promotion, Center for Exercise Science, and the Eric Friedheim Tourism Institute – as well as its three primary departments – Applied Physiology and Kinesiology, Health Education and Behavior, and Tourism, Recreation, and Sport Management Department – place the college firmly in a position to influence and improve an array of societal problems and challenges.

For more information about the College of Health and Human Performance, please see our website: http://hhp.ufl.edu

Departments and Programs within the College of Health and Human Performance

College of Health and Human Performance Courses

Other

Applied Physiology and Kinesiology

College

Applied Physiology and Kinesiology Department
Applied Physiology and Kinesiology Program Information

Graduate study in Applied Physiology and Kinesiology (APK) is focused on research in concentration areas including: athletic training, biomechanics, motor control and learning, exercise physiology, and exercise and performance psychology. Graduate students are exposed to and directly involved in research covering the full multidisciplinary spectrum of human potential from young to old, fit to unfit, healthy to diseased, able-bodied to disabled, and from the casual recreational participant to the high-level athlete. In addition to human performance issues, APK faculty and students study the immediate and lasting effects of exercise and its use in disease prevention and rehabilitation.

For more information, please see our website: http://apk.hhp.ufl.edu/index.php/current-students/prospective-students.

Degrees Offered with a Major in Applied Physiology and Kinesiology

Master of Science

without a concentration

concentration in Athletic Training/Sports Medicine

concentration in Biobehavioral Science

concentration in Clinical Exercise Physiology

concentration in Exercise Physiology

concentration in Human Performance

Applied Physiology and Kinesiology Departmental Courses

- APK 5127: Assessment in Exercise Science
- APK 5404: Sport Psychology
- APK 6111L: Practicum in Exercise Physiology
- APK 6116C: Physiological Bases of Exercise and Sport Sciences
- APK 6118: Neuromuscular Adaptation to Exercise
- APK 6126: Cardiopulmonary Pathologies
- APK 6128: EKG Interpretation
- APK 6205C: Nature and Bases of Motor Performance
- APK 6206: Planning Motor Actions
- APK 6210: Controlling Motor Actions
- APK 6225: Biomechanical Instrumentation
- APK 6226C: Biomechanics of Human Motion
- APK 6406: Exercise Psychology
- APK 6408: Performance Enhancement
- APK 6410: Seminar in Exercise Psychology
- APK 6415: Seminar in Sport Psychology: Current Topics
- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- APK 7107: Cardiovascular Exercise Physiology
- APK 7108: Environmental Stress Exercise Physiology
Health and Human Performance

College

College of Health and Human Performance

Health and Human Performance Program Information

The Ph.D. in Health and Human Performance is a single college-wide Ph.D. program with 6 concentrations that are housed and administered by the three departments, according to the following organizational structure:

- **Applied Physiology and Kinesiology (APK)**: Ph.D. students in APK study the immediate and lasting effects of exercise and its use in disease prevention and rehabilitation. APK concentrations include Exercise Physiology and Biobehavioral Science, with further specializations in biomechanics, motor control and learning, exercise and performance psychology, and sports medicine/athletic training.

- **Health Education & Behavior (HEB)**: Ph.D. students in HEB systematically investigate health promotion strategies aimed at modifying behaviors which will improve individual, family, workplace, and community health and well-being. The HEB Ph.D. concentration is in Health Behavior.

- **Tourism, Recreation, and Sport Management (TRSM)**: TRSM Ph.D. students study the impact of tourism, recreation activities, professional and amateur sports, ecotourism, parks and beaches on the personal, social, economic, environmental and resource infrastructures of society. Ph.D. concentrations in TRSM include Natural Resource Recreation, Sport Management, and Tourism.

Students are expected to be involved in research throughout their Ph.D. program, which requires approximately three to five years of full-time study for completion. Graduates of the program are trained to assume positions as post-doctoral research scientists, or entry level professorships at colleges and universities throughout the country. The program of study is developed by the student and the supervisory committee based on the student's background, interests, and career goals, as well as faculty expertise. By design, the program is multidisciplinary and flexible, permitting students to tailor their scholarly experience to the development of research skills in their areas of concentration.

For more information, please see our website: [http://gradprograms.hhp.ufl.edu/index.php/doctoral-program](http://gradprograms.hhp.ufl.edu/index.php/doctoral-program).

Degrees Offered with a Major in Health and Human Performance

Doctor of Philosophy

without a concentration

concentration in Applied Physiology and Kinesiology

optional second concentration in Clinical and Translational Science

concentration in Biobehavioral Science
concentration in Clinical and Translational Science

concentration in Exercise Physiology

concentration in Health Behavior

optional second concentration in Clinical and Translational Science

concentration in Historic Preservation

concentration in Recreation, Parks, and Tourism

concentration in Sport Management

Applied Physiology and Kinesiology Departmental Courses

- APK 5127: Assessment in Exercise Science
- APK 5404: Sport Psychology
- APK 6111L: Practicum in Exercise Physiology
- APK 6116C: Physiological Bases of Exercise and Sport Sciences
- APK 6118: Neuromuscular Adaptation to Exercise
- APK 6126: Cardiopulmonary Pathologies
- APK 6128: EKG Interpretation
- APK 6205C: Nature and Bases of Motor Performance
- APK 6206: Planning Motor Actions
- APK 6210: Controlling Motor Actions
- APK 6225: Biomechanical Instrumentation
- APK 6226C: Biomechanics of Human Motion
- APK 6406: Exercise Psychology
- APK 6408: Performance Enhancement
- APK 6410: Seminar in Exercise Psychology
- APK 6415: Seminar in Sport Psychology: Current Topics
- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- APK 7107: Cardiovascular Exercise Physiology
- APK 7108: Environmental Stress Exercise Physiology
- APK 7117: Exercise Metabolism
- APK 7124: Free Radicals in Aging, Exercise and Disease
- APK 7129: Pulmonary Function during Exercise
- ATR 6124: Clinical Anatomy for the Exercise Sciences
- ATR 6145: Human Pathophysiology for the Exercise Sciences
- ATR 6215: Evidence-Based Orthopedic Exam I: Upper-Extremity
- ATR 6216: Evidence-Based Orthopedic Exam II: Lower-Extremity
- ATR 6304: Rehabilitation and Modalities of Athletic Injuries
- ATR 6524: Athletic Training Research and Technology I
- ATR 6625: Athletic Training Research and Technology II
- ATR 6934: Seminar in Athletic Training
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 6935: Variable International Topics
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- PET 5936: Special Topics/Seminars
- PET 6910: Supervised Research
- PET 6940: Supervised Teaching
- PET 6947: Graduate Internship in Exercise and Sport Sciences
- PET 6971: Research for Master's Thesis
Health Education and Behavior Departmental Courses

- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 6935: Variable International Topics
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- HSC 5135: Emotional Health Education
- HSC 5138: Drug Education
- HSC 5142: Drug Education
- HSC 5315C: Teaching Health in Elementary Schools
- HSC 5536C: Medical Terminology for the Health Professions
- HSC 5576: Nutrition Education for Special Populations
- HSC 5606: Spirituality and Health
- HSC 5618: Advanced Exercise Therapy, Adapted Physical Activity, & Health
- HSC 5626: Minority Health Issues
- HSC 5657: Health and End-of-Life Issues
- HSC 5925: Seminar in Health Education
- HSC 5956: Writing for Professional Publications
- HSC 6037: Philosophy and Principles of Health Education
- HSC 6216: Environmental Health
- HSC 6235: Patient Health Education
- HSC 6318: Planning Health Education Programs
- HSC 6506: Epidemiology
- HSC 6567: Health Promotion and Programming in Gerontology
- HSC 6571: Contemporary Issues in Health Promotion
- HSC 6575: Women's Health Issues
- HSC 6595: HIV/AIDS Education
- HSC 6603: Theories of Health Behavior and Practice in Health Education
- HSC 6605: Scientific Foundations of Holistic Health
- HSC 6625: Trends in International Health
- HSC 6629: Health Promotion for Priority Populations
- HSC 6637: Social Marketing and Health
- HSC 6646: Community Health Methods in Injury Prevention & Control
- HSC 6665: Health Communication
- HSC 6667: Health Communication Programs
- HSC 6668: Interpersonal Communication and Health
- HSC 6695: Worksite Health Promotion
- HSC 6712: Evaluating Health Education Programs
- HSC 6735: Research Methods in Health Education
- HSC 6850: Internship in Health Education
- HSC 6904: Readings in Health Education
- HSC 6905: Independent Study
- HSC 6910: Supervised Research
- HSC 6935: Current Topics in Health Education
- HSC 6940: Supervised Teaching
- HSC 6971: Research for Master's Thesis
- HSC 6973: Project in Lieu of Thesis
- HSC 7904: Advanced Readings in Health Education
- HSC 7905: Advanced Independent Study in Health Education
- HSC 7937: Advanced Seminar in Health Education
- PEQ 5127: Advanced Instructors of Adapted Aquatics
- PET 5936: Special Topics/Seminars
- PET 6910: Supervised Research
- PET 6940: Supervised Teaching
- PET 6947: Graduate Internship in Exercise and Sport Sciences
- PET 6971: Research for Master's Thesis
- PHC 6105: Health Promotion Policy and Practice

Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMD 6076: Introduction to Hospitality and Tourism
- HMD 6608: Hospitality Law and Risk Management
- HMD 6747: Marketing in Hospitality Tourism
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- LEI 5188: Trends in Leisure Studies
- LEI 5121: Outdoor Recreation and Park Management
- LEI 6108: Contemporary Theories of Recreation and Leisure
- LEI 6326: Ecotourism
- LEI 6326: Sport Tourism
- LEI 6336: Tourism Planning and Development
Health Education and Behavior

College

College of Health and Human Performance

Department/School

Department of Health Education & Behavior

Health Education and Behavior Program Information

The 30-credit hour, non-thesis in the Master of Science in Health Education and Behavior degree program is designed for students seeking an advanced practitioner's degree. A distinctive feature of this option allows students to choose a minimum of 15 credit hours of major elective coursework that matches their interests with faculty expertise to plan a program that achieves their professional goals. The degree prepares health promotion specialists to work in local, state, and federal health agencies, nongovernmental health organizations, patient care settings, and the private sector.

The 30-credit, non-thesis Pre-Professional Health Science Track is designed for students seeking a career in health care. This option allows you to choose a minimum of 12 credits of basic science elective coursework which are prerequisites for dental, medical, nursing, occupational therapy, physician assistant, physical therapy, and other health professional programs including 6 credits of undergraduate science courses (3000-4999). This degree track prepares students who are interested in graduate studies in the health sciences and or pursuing health professional training. Full-time students can complete the 30-credit hour M.S. options in one year.

The 36-credit Thesis Option, and the 36-credit Project In Lieu Of Thesis Option, in the Master of Science in Health Education and Behavior degree programs are designed for students interested in improving their research skills through conducting evaluation projects and empirical studies, as well as pursuing advanced graduate study, particularly the doctoral degree. Students typically complete these options in about 4 semesters.

For more information, please see our website: http://heb.hhp.ufl.edu/index.php/academia/graduate-programs/masters-programs.

Degrees Offered with a Major in Health Education and Behavior
Master of Science

Health Education and Behavior Departmental Courses

- APK 6900: Directed Independent Study
- APK 6940: Advanced Practicum in Exercise and Sport Science
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 6935: Variable International Topics
- HLP 7980: Research for Doctoral Dissertation
- HSC 5135: Emotional Health Education
- HSC 5138: Human Sexuality
- HSC 5142: Drug Education
- HSC 5315C: Teaching Health in Elementary Schools
- HSC 5369C: Medical Terminology for the Health Professions
- HSC 5576: Nutrition Education for Special Populations
- HSC 5606: Spirituality and Health
- HSC 5618: Advanced Exercise Therapy, Adapted Physical Activity, & Health
- HSC 5626: Minority Health Issues
- HSC 5657: Health and End-of-Life Issues
- HSC 5925: Seminar in Health Education
- HSC 5956: Writing for Professional Publications
- HSC 6037: Philosophy and Principles of Health Education
- HSC 6216: Environmental Health
- HSC 6235: Patient Health Education
- HSC 6318: Planning Health Education Programs
- HSC 6506: Epidemiology
- HSC 6567: Health Promotion and Programming in Gerontology
- HSC 6571: Contemporary Issues in Health Promotion
- HSC 6575: Women's Health Issues
- HSC 6595: HIV/AIDS Education
- HSC 6603: Theories of Health Behavior and Practice in Health Education
- HSC 6605: Scientific Foundations of Holistic Health
- HSC 6625: Trends in International Health
- HSC 6629: Health Promotion for Priority Populations
- HSC 6637: Social Marketing and Health
- HSC 6646: Community Health Methods in Injury Prevention & Control
- HSC 6665: Health Communication
- HSC 6667: Health Communication Programs
- HSC 6668: Interpersonal Communication and Health
- HSC 6695: Worksite Health Promotion
- HSC 6712: Evaluating Health Education Programs
- HSC 6735: Research Methods in Health Education
- HSC 6850: Internship in Health Education
- HSC 6904: Readings in Health Education
- HSC 6905: Independent Study
- HSC 6910: Supervised Research
- HSC 6935: Current Topics in Health Education
- HSC 6940: Supervised Teaching
- HSC 6971: Research for Master's Thesis
- HSC 6973: Project in Lieu of Thesis
- HSC 7904: Advanced Readings in Health Education
- HSC 7905: Advanced Independent Study in Health Education
- HSC 7937: Advanced Seminar in Health Education
- PEQ 5127: Advanced Instructors of Adapted Aquatics
- PET 5936: Special Topics/Seminars
- PET 6910: Supervised Research
- PET 6940: Supervised Teaching
- PET 6947: Graduate Internship in Exercise and Sport Sciences
- PET 6971: Research for Master's Thesis
- PHC 6105: Health Promotion Policy and Practice

Recreation, Parks, and Tourism

College

Recreation, Parks, and Tourism

College of Health and Human Performance

Department/School
Recreation, Parks, and Tourism Program Information

The Master of Science in Recreation, Parks and Tourism offers the following four areas of concentration:

1. **Tourism and Commercial Recreation**
   - Travel activities to and staying outside one's usual environment; hospitality, transportation
   - Recreation activities covered by fees, charges or other non-tax revenues; theme/amusement/water parks, movie theaters, sport/fitness/health clubs, resorts
   - Examples of employers include: travel agencies, cruise lines, dance studios, special event companies, resorts, multi-purpose sports clubs and health & fitness clubs

2. **Natural Resource Recreation**
   - Park(s) management, protected areas, wilderness conservation
   - State parks, river floating, horseback riding, hiking trails
   - Beach management, rivers and lakes, sustainability
   - Outdoor recreation leadership
   - Conservation management, planning, and policy
   - Federal agencies (National Parks, U.S. Army Corp of Engineers)

3. **Recreation Administration and Supervision**
   - City/state public parks
   - City pools
   - City skate parks, family parks
   - Public tennis courts
   - City sports teams/leagues, youth sports
   - Organized group and youth camps
   - Military recreation departments (Morale, Welfare & Recreation [MWR] programs)

4. **Campus Recreation Programming & Administration**
   - College campus intramural recreation programs
   - Campus fitness/exercise centers

Graduates of the Master of Science in Recreation, Parks & Tourism will be trained for middle and/or upper level management positions, in their respective fields mentioned above. Students can choose between three options: 1.) Thesis, or 2.) Non-Thesis Internship, or 3.) Non-Thesis with Paper.

For more information, please see our website: [http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/recreation-parks-and-tourism](http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/recreation-parks-and-tourism)

**Degrees Offered with a Major in Recreation, Parks, and Tourism**

**Master of Science**

- without a concentration

- concentration in Historic Preservation

- concentration in Natural Resource Recreation

- concentration in Therapeutic Recreation

- concentration in Tourism
Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMG 6076: Introduction to Hospitality and Tourism
- HMG 6608: Hospitality Law and Risk Management
- HMG 6747: Marketing in Hospitality and Tourism
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- LEI 5188: Trends in Leisure Studies
- LEI 5121: Outdoor Recreation and Park Management
- LEI 6108: Contemporary Theories of Recreation and Leisure
- LEI 6325: Ecotourism
- LEI 6326: Sport Tourism
- LEI 6336: Tourism Planning and Development
- LEI 6351: Heritage Tourism
- LEI 6439: Campus Recreation Administration and Programming
- LEI 6513: Administrative Procedures in Leisure Services
- LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
- LEI 6557: Recreation Management Development in the Coastal Zone
- LEI 6562: Advanced Marketing for Recreation, Parks, and Tourism
- LEI 6895: Tourism Theory and Concepts
- LEI 6903: Readings in Recreation, Parks, and Tourism
- LEI 6905: Directed Independent Study
- LEI 6910: Supervised Research
- LEI 6931: Special Topics in Recreation, Parks, and Tourism
- LEI 6936: Seminar in Recreation, Parks, and Tourism
- LEI 6940: Supervised Teaching
- LEI 6944: Practicum in Leisure Studies
- LEI 6971: Research for Master's Thesis
- LEI 7170: Foundations of Leisure Behavior
- LEI 7901: Recreation, Parks, and Tourism in Higher Education
- LEI 7904: Advanced Readings in Recreation, Parks, and Tourism
- LEI 7905: Advanced Independent Study in Recreation, Parks and Tourism
- LEI 7910: Advanced Supervised Research
- LEI 7933: Advanced Special Topics in Recreation, Parks, and Tourism
- LEI 7936: Advanced Seminar in Recreation, Parks, and Tourism
- PET 6910: Supervised Research
- SPM 5016: Sport Sociology
- SPM 5206: Sport Ethics
- SPM 5309: Sport Marketing
- SPM 5506: Sport Finance
- SPM 5936: Current Topics in Sport Management
- SPM 6006: Contemporary Sport Industry
- SPM 6036: Research Seminar in Sport Management
- SPM 6106: Management and Planning of Sport and Physical Activity Facilities
- SPM 6158: Management and Leadership in Sport
- SPM 6308: Study of Sport Consumer Behaviors
- SPM 6726: Issues in Sport Law
- SPM 6905: Directed Independent Study
- SPM 6910: Supervised Research
- SPM 6947: Graduate Internship in Sport Management
- SPM 6948: Advanced Practicum in Sport Management
- SPM 6971: Research for Master's Thesis

Sport Management

College

College of Health and Human Performance

Department/School

Tourism, Recreation, and Sport Management Department

Sport Management Program Information
Sport Management integrates concepts of management, marketing, finance and law to apply to sport organizations at various levels and prepares students for a variety of volunteer and employment opportunities at the professional, collegiate, community and amateur level sport entities. Its focus is on the business and organization aspects of sport, not coaching or athletic performance.

For more information, please see our website: [http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/sport-management](http://trsm.hhp.ufl.edu/index.php/graduate/masters-programs/sport-management).

Degrees Offered with a Major in Sport Management

Master of Science

without a concentration

concentration in Historic Preservation

concentration in Tropical Conservation and Development

Tourism, Recreation, and Sport Management Departmental Courses

- APK 6900: Directed Independent Study
- HMD 6076: Introduction to Hospitality and Tourism
- HMG 6608: Hospitality Law and Risk Management
- HMD 6747: Marketing in Hospitality/Tourism
- HLP 6515: Evaluation Procedures in Health and Human Performance
- HLP 6535: Research Methods in Health and Human Performance
- HLP 6911: Research Seminar
- HLP 7979: Advanced Research in Health and Human Performance
- HLP 7980: Research for Doctoral Dissertation
- LEI 5186: Trends in Leisure Studies
- LEI 5121: Outdoor Recreation and Park Management
- LEI 6108: Contemporary Theories of Recreation and Leisure
- LEI 6325: Ecotourism
- LEI 6326: Sport Tourism
- LEI 6336: Tourism Planning and Development
- LEI 6351: Heritage Tourism
- LEI 6439: Campus Recreation Administration and Programming
- LEI 6513: Administrative Procedures in Leisure Services
- LEI 6514: Administrative Issues in Recreation, Parks, and Tourism
- LEI 6557: Recreation Management/Development in the Coastal Zone
- LEI 6562: Advanced Marketing for Recreation, Parks, and Tourism
- LEI 6895: Tourism Theory and Concepts
- LEI 6903: Readings in Recreation, Parks, and Tourism
- LEI 6905: Directed Independent Study
- LEI 6910: Supervised Research
- LEI 6931: Special Topics in Recreation, Parks, and Tourism
- LEI 6935: Seminar in Recreation, Parks, and Tourism
- LEI 6940: Supervised Teaching
- LEI 6944: Practicum in Leisure Studies
- LEI 6971: Research for Master's Thesis
- LEI 7176: Foundations of Leisure Behavior
- LEI 7901: Recreation, Parks, and Tourism in Higher Education
- LEI 7904: Advanced Readings in Recreation, Parks, and Tourism
- LEI 7905: Advanced Independent Study in Recreation, Parks and Tourism
- LEI 7910: Advanced Supervised Research
- LEI 7933: Advanced Special Topics in Recreation, Parks, and Tourism
- LEI 7936: Advanced Seminar in Recreation, Parks, and Tourism
- PET 6910: Supervised Research
- SPM 5016: Sport Sociology
- SPM 5206: Sport Ethics
- SPM 5306: Sport Marketing
- SPM 5506: Sport Finance
The Master of Advertising (M.Adv.) program is designed to develop leaders in the profession by providing students with advertising program information.

College of Journalism and Communications

Dean: D. McFarlin
Senior Associate Dean for Graduate Studies and Research: D. Treise

Graduate Coordinators:
(Advertising) J. R. Goodman
(International Communication) M. Leslie
(Journalism) R. Rodgers
(Public Relations) M. A. Ferguson
(Science/Health Communication) D. Treise
(Telecommunication) J. Cleary.

Complete faculty listings: Follow this link.

Through the Division of Graduate Studies and Research, the College of Journalism and Communications offers the Doctor of Philosophy degree, the Master of Arts in Mass Communication (thesis or project option) degree, and the Master of Advertising (thesis) degree. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

Doctoral students work closely with faculty members in research leading to a dissertation embodying a humanities, law/policy, or social sciences approach. Emphases within these approaches for which faculty members have expertise include advertising, journalism, public relations, telecommunications, international communication, and political communication. Details of doctoral faculty research interests and other aspects of the program are given in the College's Ph.D. Handbook.

Master's students may complete a thesis in advertising, journalism, public relations, telecommunications, international communication, or science/health communication. With the approval of the Sr. Associate Dean of Graduate Studies and Research and other faculty members, master's students may develop an individualized program of study, with thesis, to meet their specific needs and interests. A project in lieu of thesis option is available for some specializations.

Mass Communication/Law joint degree programs: Programs leading to the Master of Arts in Mass Communication or the Doctor of Philosophy and the Juris Doctor are offered under the joint auspices of the College of Journalism and Communications and the College of Law. For students interested in scholarship or practice of communication law or in reporting on the law, the programs offer the opportunity to blend relevant work from the two colleges. Students must meet the entrance requirements of both colleges. A thesis or dissertation is required. Interested students should apply for admission to both the Graduate School and the College of Law, noting on the applications the joint nature of the admission requests. Further information on the programs and application procedures is available from the Holland Law Center and from the Division of Graduate Studies and Research of the College of Journalism and Communications.

General admission: Admission is granted to applicants with and without background in mass communication. Students without academic preparation in mass communication or appropriate experience may be required to take articulation work. These courses are taken concurrently with general graduate courses, starting in the first term of registration. Some degree plans require a background course in statistics. Students who have satisfied that requirement must provide written verification. Including articulation courses, the master's degree normally can be earned in one and one-half to two years of full-time study. Doctoral studies require three or more years of full-time study and research. Students who may require articulation courses should contact the Sr. Associate Dean of Graduate Studies and Research.

Grading policy: Any student whose cumulative GPA falls below 3.0 will be placed on probation. Any doctoral student who receives one grade below B- or a Master's student who receives one grade below C+ will be placed on probation, with the exception of courses taken from the Levin College of Law. For these courses, any student receiving one grade below C in any course from the Levin College of Law will be placed on probation. A requirement of the probation is that the student must achieve or maintain a cumulative grade point average of 3.0 or higher at the end of the next academic term in residence. A student who fails to satisfy the requirement will be suspended. A Doctoral student who accumulates two grades below "B-" or a Master's student who accumulates two grades below "C+" during graduate studies will be suspended, as will a student who receives one grade of "D+" or lower at any time. Students will be allowed only one suspension.

Combined degree program: The College offers a combined bachelor's/master's program. For information, contact the Associate Dean for Graduate Studies.

For additional information, please see our website: http://www.jou.ufl.edu/grad.

College of Journalism and Mass Communication Courses

Other

Advertising

College

College of Journalism and Communications

Advertising Program Information

The Master of Advertising (M.Adv.) program is designed to develop leaders in the profession by providing students with

1. the theoretical, research and decision-making skills essential for strategic advertising and integrated communications planning, as well as
2. the opportunity to develop expertise in a specialized area such as account management, research, creative strategy, media planning, new technology and advertising sales management.

Students without basic course background or substantial professional experience in marketing or advertising are required to complete articulation courses before entering the program. These prerequisite courses include Introduction to Advertising and Introduction to Marketing.

A minimum of 33 graduate level credit hours, including a thesis, is required. In some areas of specialization, with permission from the departmental graduate faculty, a terminal project may be elected in lieu of a thesis.

Students select a supervisory committee to guide their course selection as well as thesis topic or project in lieu of thesis and completion of the thesis or project. The student’s supervisory committee is responsible for the evaluation of the document and the final defense.

The deadline for Fall applications is January 30 for international applicants and April 1 for domestic students. Applications may be considered after the April 1 deadline, if space is available. The Master of Advertising program does not accept any applications for Spring.

For admissions information and application materials, contact Sarah G. Lee.

For information about the advertising curriculum and program requirements, contact Dr. Robyn Goodman.

For more information, please see our website: http://www.jou.ufl.edu/academics/masters/master-of-advertising

Degrees Offered with a Major in Advertising

Master of Advertising

College of Journalism and Communications Courses

- ADV 5005: Advertising Planning
- ADV 6006: Theories of Advertising
- ADV 6305: Advanced Media Planning
- ADV 6325: Advertising and Social Media
- ADV 6405: International Advertising
- ADV 6503: Advertising Creative Strategy and Research
- ADV 6505: Advertising Research Methods
- ADV 6602: Advertising Management
- COM 6315: Advanced Research Methods
- COM 6338: Advanced Web Topics I: Advanced Design
- COM 6940: Supervised Teaching
- FIL 601: History of Documentary Film I
- FIL 602: History of Documentary Film II
- FIL 610: Advanced Radio, Television, and Film Writing
- FIL 6315: Writing for Documentary
- FIL 6317: Producing and Writing the Documentary
- FIL 6335: Business of Documentary
- FIL 6340: Issues and Problems in Documentary
- FIL 6365: Documentary Pre-Production Planning
- FIL 6366: Documentary Procedures II
- FIL 6377: Documentary Field Production
- FIL 6378: Documentary Research Methods
- FIL 6380: Advanced Post-Production Techniques
- JOU 5007: History of Journalism
- JOU 5705: Issues and the Press
- JOU 6102: Reporting Workshop
- JOU 6114: Journalist Bootcamp
- JOU 6309: Seminar in Journalism as Literature
- JOU 6344: Journalist Toolkit 1
- JOU 6349: Journalist Toolkit 2
- JOU 6502: Newsroom Management
- MMC 5006: Mass Communication History
- MMC 5006: Introduction to Multimedia Communication
- MMC 5015: Electronic Publishing
- MMC 5206: Advanced Law of Mass Communication
- MMC 5277: Web Design Principles
- MMC 5306: International Communication
- MMC 5315: Survey of Foreign Correspondence
- MMC 5417: Research Methods in Digital Communication
- MMC 5636: Introduction to Social Media
- MMC 5708: Foundations of Intercultural Communication
- MMC 6202: Legal Problems of Mass Communication
- MMC 6278: Advanced Web Topics II
- MMC 6307: Seminar in International Communication
- MMC 6400: Mass Communication Theory
- MMC 6402: Seminar in Mass Communication Theory
- MMC 6405: Seminar in Mass Communication and Public Opinion
- MMC 6409: Science/Health Communication
- MMC 6417: Seminar in Mass Media and Health
- MMC 6421: Research Methods in Mass Communication
Mass Communication

College

College of Journalism and Communications

Mass Communication Program Information

Ph.D. in Mass Communication

The Ph.D. degree is a research degree. The Ph.D. program is designed to help develop knowledge, attitudes, and skills so graduates can make important contributions to understanding mass communication. Faculty members help students lay the foundation for a lifetime of significant, creative work.

The doctoral program prepares students for a variety of opportunities in mass communication. Graduates are expected to teach at colleges and universities; conduct research for organizations in advertising, journalism, public relations, telecommunication, and other mass communication fields; do consulting and conduct research and contribute to policy in government and private organizations. Doctoral students in the College of Journalism and Communications gain valuable experience in both teaching and research. Assistantships help prepare students for academic and other research positions. Students in the program have consistently been among the nation's leaders in winning top-paper awards at national and regional scholarly meetings.

Master of Arts in Mass Communication (M.A.M.C.)

There are several specializations available for the Master of Arts in Mass Communication:

The Journalism specialization program in the UF College of Journalism and Communications combines study of the academic literature on the societal role and effects of mass communication in general and journalism in particular with courses designed to improve students' practice of the journalism craft. The Journalism specialization at the master's level is designed for students interested in all areas of non-broadcast journalism (i.e. newspapers, magazines and online publishing). Those who have an educational and/or professional background in journalism can enhance their understanding of the role of journalism in society, as well as improving reporting and writing skills. However, the program is also well-suited for students with a
The Public Relations specialization at the master's level is a research-based program designed to prepare students for careers and advancement in the industry or for entering doctoral studies. Students learn the conceptual foundations of public relations and develop professional and research competency within the duration of the program. Courses in the public relations specialization focus on conceptual foundations of public relations, including mass communication and society; professional and managerial skills mastery; and research expertise. For more information, please see our website: http://www.jou.ufl.edu/academics/masters/master-of-public-relations.

The Telecommunication specialization program in the UF College of Journalism and Communications combines courses in Mass Communication, Telecommunication, and other areas relevant to the student's goals. There is a thesis track, appropriate for students who will later seek the Ph.D. or who wish to learn the skills and knowledge associated with thesis research or project in lieu of thesis. The Telecommunication track is designed for students with the following interests:

- Operation or management of telecommunication outlets (broadcast stations, cable systems, program distributors, etc.) and emerging media
- Telecommunication regulation and policy
- Audience research
- Preparation for an advanced degree

For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mamc-telecommunication.

The Science and Health Communications specialization program is designed to teach scientists and health specialists to communicate effectively via media, and to teach mass media specialists the background science to translate the language of science and health into meaningful and understandable stories for their audiences. These goals are achieved through theoretical writing and applied courses. At least two aspects of the program make it unique among science communication programs nationwide. First, other existing science communication programs in the U.S. focus on training journalists. UF's program is open to journalists who want to specialize in covering science and health, offers training for people planning to work as public affairs or public information officers for science and health organizations, for other communication specialists, and for scientists who need to be able to communicate with the public about their work. Second, the program focuses on training students to understand and communicate effectively about science and health policy. For more information, please see our website: http://www.jou.ufl.edu/academics/masters/mamc-sciencehealth-communication.

For more help with any of our graduate degree programs, please refer to our website: http://www.jou.ufl.edu/academics.
- FIL 6315: Writing for Documentary
- FIL 6317: Producing and Writing the Documentary
- FIL 6335: Business of Documentary
- FIL 6340: Issues and Problems in Documentary
- FIL 6365: Documentary Pre-Production Planning
- FIL 6386: Documentary Procedures II
- FIL 6377: Documentary Field Production
- FIL 6378: Documentary Research Methods
- FIL 6380: Advanced Post-Production Techniques
- JOU 5007: History of Journalism
- JOU 5705: Issues and the Press
- JOU 6102: Reporting Workshop
- JOU 6114: Journalist Bootcamp
- JOU 6309: Seminar in Journalism as Literature
- JOU 6344: Journalist Toolkit 1
- JOU 6349: Journalist Toolkit 2
- JOU 6502: Newsroom Management
- MMC 5005: Mass Communication History
- MMC 5006: Introduction to Multimedia Communication
- MMC 5015: Electronic Publishing
- MMC 5206: Advanced Law of Mass Communication
- MMC 5277: Web Design Principles
- MMC 5306: International Communication
- MMC 5315: Survey of Foreign Correspondence
- MMC 5427: Research Methods in Digital Communication
- MMC 5636: Introduction to Social Media
- MMC 5708: Foundations of Intercultural Communication
- MMC 6202: Legal Problems of Mass Communication
- MMC 6278: Advanced Web Topics II
- MMC 6307: Seminar in International Communication
- MMC 6400: Mass Communication Theory
- MMC 6402: Seminar in Mass Communication Theory
- MMC 6405: Seminar in Mass Communication and Public Opinion
- MMC 6409: Science/Health Communication
- MMC 6417: Seminar in Mass Media and Health
- MMC 6421: Research Methods in Mass Communication
- MMC 6423: Content-Analysis Methods
- MMC 6426: Seminar in Qualitative Research
- MMC 6428: Collaborative Communication Research
- MMC 6429: News and Numbers
- MMC 6560: Seminar in History of Mass Communication
- MMC 6612: New Media and a Democratic Society
- MMC 6615: Race, Class, Gender, and Media
- MMC 6618: Survey of Political Communication
- MMC 6619: Seminar in Political Advertising
- MMC 6660: Mass Communication and Society
- MMC 6665: Seminar in First Amendment Theory
- MMC 6666: Seminar in Research in Mass Communication Law
- MMC 6667: Seminar in Advanced Topics in Mass Communication Law
- MMC 6668: Seminar in Public Policy Toward Mass Media
- MMC 6706: Covering the Arts
- MMC 6725: Social Media and Society
- MMC 6726: Social Media and Virtual Worlds
- MMC 6727: Social Media Metrics
- MMC 6728: Branding Using Social and Mobile Media
- MMC 6730: Social Media Management
- MMC 6905: Individual Work
- MMC 6910: Supervised Research
- MMC 6920: Communication Proseminar
- MMC 6929: Communication Colloquium
- MMC 6930: Seminar in Mass Communication Teaching
- MMC 6936: Special Topics in Mass Communication
- MMC 6949: Professional Internship
- MMC 6951: Masters Project Seminar
- MMC 6971: Research for Master's Thesis
- MMC 6973: Project in Lieu of Thesis
- MMC 7979: Advanced Research
- MMC 7980: Research for Doctoral Dissertation
- PUR 5507: Persuasion Theory and Research
- PUR 6005: Theories of Public Relations
- PUR 6006: Public Relations Foundations
- PUR 6403: Crisis and Risk Management
- PUR 6416: Public Relations and Fund Raising
- PUR 6446: Public Relations and Philanthropy
- PUR 6506: Public Relations Research
- PUR 6607: Public Relations Management
- PUR 6608: International Public Relations
- PUR 6934: Problems in Public Relations
- RTV 5702: Telecommunication Regulation
- RTV 6105: Writing for Electronic Media
- RTV 6309: Advanced TV Reporting
- RTV 6508: Audience Analysis
- RTV 6801: Telecommunication Management
- RTV 6807: Telecommunication Outlet Systems and Practices
- RTV 6973: Project in Lieu of Thesis
Fredric G. Levin College of Law

Dean: R. Jerry II

Complete faculty listings: Follow this link.

The University of Florida Levin College of Law has a longstanding tradition of producing national leaders, including current American Bar Association President Stephen Zack, and is one of the nation's best values in legal education.

For more information, please see our website: http://www.law.ufl.edu

Department/School

Comparative Law Department

Degrees Offered with a Major in Comparative Law

Master of Laws in Comparative Law

without a concentration

concentration in Tropical Conservation and Development

Courses

- LAW 7801: Introduction to the Legal System of the United States for LL.M in Comparative Law, Part II
- LAW 7805: Legal Writing and Research for LL.M in Comparative Law
- LAW 7906: Directed Research for LL.M in Comparative Law
- LAW 7932: Introduction to the Legal System of the United States for LLM in Comparative Law, Part I

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions
- LAW 7604: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
Environmental and Land Use Law

College

Fredric G. Levin College of Law

Department/School

Environmental and Land Use Law Department

Environmental and Land Use Law Program Information

The University of Florida Levin College of Law offers a Masters (LL.M.) in Environmental and Land Use Law. This one-year post-J.D. degree provides an opportunity for experienced attorneys as well as recent law school graduates to spend an academic year full-time on the UF campus developing in-depth expertise in environmental and land use law.

Students admitted to the program work with the LL.M. Program Director to design an individual course of study tailored to their particular interests. In addition to a broad range of academic courses, UF Law offers a wealth of environmental skills and field courses such as the Conservation Clinic, Environmental Dispute Resolution and Wetlands & Watersheds. LL.M. students may also apply for a seat in the spring break field course (previous offerings have included Sustainable Development in Belize, Central America, and Ocean and Coastal Law in Marineland, Florida); the South Florida Everglades field course offered in May (course availability varies) and the Summer Environmental Law Study Abroad Program in Costa Rica.

The program also capitalizes on the many outstanding programs at the University of Florida in disciplines related to environmental and land use law practice, including wildlife ecology, environmental engineering, urban and regional planning, and interdisciplinary ecology. The UF LL.M. program is unique in requiring that 6 of the 26 required credit hours must be from relevant graduate level courses that have substantial non-law content and are offered outside the law school or jointly by the law school and another department. In addition to completing required coursework, LL.M. candidates must complete a written project in connection with a seminar or the Conservation Clinic.

Six credit hours of coursework in graduate-level courses listed outside the law school or jointly listed by the law school and another graduate department and approved by the LL.M. Program Director are required. For elective courses, please visit http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law/degree-requirements.

For more information about the Environmental and Land Use Law Program, please see our website: http://www.law.ufl.edu/academics/degree-programs/ll-m-environmental-land-use-law, or contact:

University of Florida
Levin College of Law
P.O. Box 117625
Gainesville, FL 32611-7625
Phone: 352-273-0777
Email: elulp@law.ufl.edu

Degrees Offered with a Major in Environmental and Land Use Law

Master of Laws in Environmental and Land Use Law

Courses
International Taxation

College

Fredric G. Levin College of Law

Department/School

Taxation Department

Degrees Offered with a Major in International Taxation

Master of Laws in International Taxation

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions
- LAW 7604: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
- LAW 7614: U.S. International Tax I
- LAW 7615: U.S. International Tax II
- LAW 7617: Partnership Taxation
- LAW 7623: Taxation of Gratuitous Transfers
- LAW 7625: Income Taxation of Trusts and Estates
- LAW 7626: Estate Planning
- LAW 7632: Deferred Compensation
- LAW 7633: Tax Exempt Organizations
- LAW 7640: Civil Tax Procedure
- LAW 7641: Procedures in Tax Fraud Cases
- LAW 7650: State and Local Taxation
- LAW 7660: Tax Policy
- LAW 7680: Comparative Taxation
- LAW 7682: Income Tax Treaties
- LAW 7683: Transfer Pricing
- LAW 7905: Independent Study
- LAW 7910: Supervised Research
- LAW 7911: Federal Tax Research
- LAW 7931: Current Federal Tax Problems

Taxation

College

Fredric G. Levin College of Law

Department/School

Taxation Department

Degrees Offered with a Major in Taxation
Master of Laws in Taxation

Taxation Departmental Courses

- LAW 7602: Taxation of Property Transactions
- LAW 7604: Timing Issues in Taxation
- LAW 7611: Corporate Taxation I
- LAW 7613: Corporate Taxation II
- LAW 7614: U.S. International Tax I
- LAW 7615: U.S. International Tax II
- LAW 7617: Partnership Taxation
- LAW 7623: Taxation of Gratuitous Transfers
- LAW 7625: Income Taxation of Trusts and Estates
- LAW 7626: Estate Planning
- LAW 7632: Deferred Compensation
- LAW 7633: Tax-Exempt Organizations
- LAW 7640: Civil Tax Procedure
- LAW 7641: Procedures in Tax Fraud Cases
- LAW 7650: State and Local Taxation
- LAW 7660: Tax Policy
- LAW 7680: Comparative Taxation
- LAW 7682: Income Tax Treaties
- LAW 7683: Transfer Pricing
- LAW 7905: Independent Study
- LAW 7910: Supervised Research
- LAW 7911: Federal Tax Research
- LAW 7931: Current Federal Tax Problems

College of Liberal Arts and Sciences

Interim Dean: David Richardson

Complete faculty listings: Follow this link.

The College of Liberal Arts and Sciences constitutes the intellectual core of the university. Its principal mission is to lead the academic quest to understand our place in the universe, and to help shape our society and environment.

For more information, please see our website: http://www.clas.ufl.edu

Departments and Programs within the College of Liberal Arts and Sciences

College of Liberal Arts and Sciences Courses

Other

Animal Molecular and Cellular Biology

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine

Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program's website at http://www.animal.ufl.edu/amcb/.

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5905: Individual Study
- ALS 6046: Grant Writing
- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
- ANS 6668L: Molecular and Cellular Research Methods
- ANS 6702: Lactation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
- PCB 6816: Thermal Physiology
- ANS 6707: Growth Physiology in Farm Animals
- ANS 6711: Current Topics in Equine Nutrition and Exercise Physiology
- ANS 6715: Gastrointestinal and Feed Microbiology
- ANS 6716: Physiology in Farm Animals
- ANS 6718: Nutritional Physiology of Domestic Animals
- ANS 6723: Mineral Nutrition and Metabolism
- ANS 6745: Introduction to Statistical Genetics
- ANS 6750: Reproductive Physiology in Farm Animals
- ANS 6751: Physiology of Reproduction
- ANS 6751C
- ANS 6757: Molecular Endocrinology
- ANS 6905: Problems in Animal Science
- ANS 6910: Supervised Research
- ANS 6932: Special Topics in Animal Science
- ANS 6933: Graduate Seminar in Animal Science
- ANS 6936: Graduate Seminar in Animal Molecular and Cell Biology
- ANS 6939: Animal Molecular and Cellular Biology Colloquy
- ANS 6940: Supervised Teaching
- ANS 6971: Research for Master's Thesis
- ANS 7979: Advanced Research
- ANS 7980: Research for Doctoral Dissertation
- BCH 5045: Graduate Survey of Biochemistry
- BCH 6876: Recent Advances in Membrane Biology
- BME 5085: Patents, Product Development, and Technology Transfer
- BME 5401: Biomedical Engineering and Physiology I
- BCH 5413: Mammalian Molecular Biology and Genetics
- BCH 6740: Physical Biochemistry/Structural Biology
- BCH 6877: Recent Advances in Structural Biology
- BCH 6878: Recent Advances in Cytoskeletal Processes
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018L: Advanced In-Vitro Fertilization Laboratory Practicum
- GMS 6031: Molecular Immunology
- GMS 6051: Signal Transduction
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6140: Principles of Immunology
- GMS 6331: Stem Cell Biology
- GMS 8421: Cell Biology
- GMS 6647: Translational and Experimental Control of Cell Growth and Proliferation

University of Florida » 2014-2015 Graduate Catalog
2/2/2015
The department of Anthropology offers graduate work leading to the Master of Arts (thesis or nonthesis option) and Doctor of Philosophy degrees. Requirements for these degrees are given in the General Information section of this catalog. For more information, visit the departmental website: http://anthro.ufl.edu. Graduate training is offered in cultural anthropology, archeology, and biological anthropology.

Each graduate student should specify a major field of study among the four fields of anthropology. In addition, each must choose one of three tracks: the specialized track in which a student focuses on one field of anthropology, the multifield track in which a student combines two fields, or the interdisciplinary track in which a student adds study in a second discipline to anthropology. Knowledge of a foreign language or of statistics may be required by the student's supervisory committee.

The department generally requires applicants to have acceptable scores on the GRE (verbal and quantitative portions) and a 3.2 overall grade point average based on a 4.0 system. Previous work in anthropology is an asset but not a strict requirement for admission. Potential applicants are urged to visit the website to familiarize themselves with the specializations of our faculty and to indicate in their application those faculty with whom they might work. Barring special circumstances, the Department restricts admission to applicants interested in earning a Ph.D. Entering students who have earned a master's degree may apply for direct admission to the doctoral program. Students who enter without an M.A. will generally work for their M.A. on the way to the Ph.D. This requires either a formally-defended thesis or written comprehensive exams combined with a high-quality paper or research report. With their adviser's permission, they may opt to bypass the M.A.

Students enrolled in the M.A. program who wish to continue their studies for a Ph.D. must apply to the Department for certification.

New students are admitted into the graduate program only in the fall of each academic year. The deadline for receiving completed applications for admission into the graduate program is December 15, though the department encourages early applications.

Degrees Offered with a Major in Anthropology

Doctor of Philosophy

without a concentration

concentration in Historic Preservation

concentration in Tropical Conservation and Development
concentration in Women's/Gender Studies

Master of Arts

without a concentration

concentration in Historic Preservation

concentration in Tropical Conservation and Development

Master of Arts in Teaching

without a concentration

concentration in Tropical Conservation and Development

Courses

- ANG 5012: Fantastic Anthropology and Fringe Science
- ANG 5085: Collection and Analysis of Visual Data in Anthropology
- ANG 5126: Zoarcheology
- ANG 5158: Florida Archeology
- ANG 5162: Maya Archeoastronomy and Ethnoastronomy
- ANG 5164: The Inca and Their Ancestors
- ANG 5172: Historical Archeology
- ANG 5194: Principles of Archeology
- ANG 5255: Rural Peoples in the Modern World
- ANG 5265: Methods in Ethnoecology
- ANG 5266: Economic Anthropology
- ANG 5303: Women and Development
- ANG 5310: The North American Indian
- ANG 5323: Peoples of Mexico and Central America
- ANG 5327: Maya and Aztec Civilizations
- ANG 5330: The Tribal Peoples of Lowland South America
- ANG 5331: Peoples of the Andes
- ANG 5336: The Peoples of Brazil
- ANG 5341: Anthropology of the Caribbean
- ANG 5352: Peoples of Africa
- ANG 5354: Anthropology of Modern Africa
- ANG 5395: Visual Anthropology
- ANG 5420: Social Network Analysis in Cultural Anthropology
- ANG 5426: Kinship and Social Organization
- ANG 5464: Culture and Aging
- ANG 5485: Research Design in Anthropology
- ANG 5486: Computing for Anthropologists
- ANG 5488: Geospatial Analysis in Cultural Anthropology
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<tr>
<th>Course Code</th>
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<td>ANG 5525</td>
<td>Human Osteology and Osteometry</td>
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<td>ANG 5531</td>
<td>Culture and Nutrition</td>
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<td>ANG 5546</td>
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<td>Language and Culture</td>
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<td>Applied Anthropology</td>
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<td>ANG 5702</td>
<td>Anthropology and Development</td>
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<td>ANG 5711</td>
<td>Culture and International Business</td>
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<td>ANG 5743</td>
<td>Human Rights Missions in Forensic Anthropology</td>
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<td>ANG 5744</td>
<td>International Forensic Fieldwork in Human Rights</td>
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<td>ANG 5824L</td>
<td>Field Sessions in Archeology</td>
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<td>ANG 6034</td>
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<td>ANG 6091</td>
<td>Research Strategies in Anthropology</td>
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<td>ANG 6112</td>
<td>Critical Archaeology of Time</td>
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<td>ANG 6113</td>
<td>Ideology and Symbolic Approaches in Archaeology</td>
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<td>ANG 6120C</td>
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<td>ANG 6122C</td>
<td>Archaeological Ceramics</td>
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<td>ANG 6128</td>
<td>Lithic Technology</td>
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<td>ANG 6146</td>
<td>Archaeology of Maritime Adaptations</td>
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<td>ANG 6155</td>
<td>Southeastern U.S. Prehistory</td>
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<tr>
<td>ANG 6161</td>
<td>Problems in Caribbean Prehistory</td>
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<tr>
<td>ANG 6165</td>
<td>Problems in South American Archaeology</td>
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<td>ANG 6183</td>
<td>Laboratory Training in Archeology</td>
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<td>ANG 6185</td>
<td>Ethnoarchaeology</td>
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<td>ANG 6186</td>
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<td>ANG 6187</td>
<td>Experimental Archaeology</td>
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<td>ANG 6190</td>
<td>Seminar in Contemporary Methods</td>
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<td>ANG 6191</td>
<td>Archaeology of Death</td>
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<tr>
<td>ANG 6224</td>
<td>Painted Books of Ancient Mexico: Codices of Atecs, Mixtecs, and Mayas</td>
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<tr>
<td>ANG 6241</td>
<td>Special Topics in Ecology of Religion</td>
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<tr>
<td>ANG 6267</td>
<td>Anthropology, Geographical Information System, and Human Ecosystems</td>
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<tr>
<td>ANG 6273</td>
<td>Legal Anthropology</td>
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<tr>
<td>ANG 6274</td>
<td>Principles of Political Anthropology</td>
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<tr>
<td>ANG 6286</td>
<td>Seminar in Contemporary Theory</td>
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<td>ANG 6304</td>
<td>Seminar in Gender and International Development</td>
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<td>ANG 6314</td>
<td>Peoples of the Arctic</td>
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<td>ANG 6351</td>
<td>Peoples and Culture in Southern Africa</td>
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<td>ANG 6360</td>
<td>Ethnicity in China</td>
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<tr>
<td>ANG 6366</td>
<td>Family, Gender, and Population in China</td>
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<tr>
<td>ANG 6407</td>
<td>Sickness and Power</td>
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<td>ANG 6421</td>
<td>Landscape, Place, Dwelling</td>
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<tr>
<td>ANG 6452</td>
<td>Race and Racism in Anthropological Theory</td>
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<td>ANG 6453</td>
<td>Human Rights in Cross-Cultural Perspective</td>
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<td>ANG 6478</td>
<td>Evolution of Culture</td>
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<td>ANG 6481</td>
<td>Research Methods in Cognitive Anthropology</td>
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<td>ANG 6511</td>
<td>Seminar in Physical Anthropology</td>
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<td>ANG 6514</td>
<td>Human Origins</td>
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<td>ANG 6524</td>
<td>Skeletal Mechanics in Biological Anthropology</td>
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<td>ANG 6532</td>
<td>Molecular Genetics of Disease</td>
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<td>ANG 6547</td>
<td>Human Adaptation</td>
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<td>ANG 6552</td>
<td>Primate Behavior</td>
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<td>Primate Cognition</td>
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<td>ANG 6555</td>
<td>Issues in Evolutionary Anthropology</td>
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<td>ANG 6583</td>
<td>Primate Functional Morphology</td>
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<td>ANG 6591L</td>
<td>Advanced Molecular Anthropology Laboratory</td>
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<td>Seminar in Molecular Anthropology</td>
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<td>ANG 6593L</td>
<td>Biological Anthropology Laboratory</td>
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<td>ANG 6701</td>
<td>Seminar on Applied Anthropology</td>
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<td>ANG 6737</td>
<td>Medical Anthropology</td>
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<td>ANG 6740</td>
<td>Advanced Techniques in Forensic Anthropology</td>
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<td>ANG 6801</td>
<td>Ethnographic Field Methods</td>
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<tr>
<td>ANG 6905</td>
<td>Individual Work</td>
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<tr>
<td>ANG 6910</td>
<td>Supervised Research</td>
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<tr>
<td>ANG 6915</td>
<td>Research Projects in Social, Cultural, and Applied Anthropology</td>
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<tr>
<td>ANG 6917</td>
<td>Professions of Anthropology</td>
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<td>ANG 6930</td>
<td>Special Topics in Anthropology</td>
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<td>ANG 6940</td>
<td>Supervised Teaching</td>
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<tr>
<td>ANG 6945</td>
<td>Internship in Anthropology</td>
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<td>ANG 6971</td>
<td>Research for Master's Thesis</td>
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<td>ANG 7979</td>
<td>Advanced Research</td>
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<tr>
<td>ANG 7980</td>
<td>Research for Doctoral Dissertation</td>
</tr>
</tbody>
</table>

**Astronomy**

**College**

College of Liberal Arts and Sciences
Astronomy Program Information

The Astronomy Department offers graduate programs leading to the M.S., M.S.T. or Ph.D. degrees in astronomy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

**Planetary Systems:** Observational and theoretical studies concentrate in the areas of planet formation, the dynamical evolution of planetary systems and the detection and characterization of extrasolar planets. Members of the department are active in Kepler Mission and ground-based Dopple surveys to identify extrasolar planets. Researchers are also active in studying the origins and orbital evolution of interplanetary dust and small bodies in the solar system and around nearby stars.

**Stellar populations:** Observational studies concentrate on resolved stars in the Milky Way and nearby galaxies. Studies of particular classes of stars include various types of binary stars and blue stragglers. The goal of these studies is to apply our theoretical understanding of stellar structure and evolution to the properties of stars in a variety of environments.

**Origins of stars and planets:** Observational studies focus on the properties of giant molecular clouds, the collapse of molecular cloud cores, the formation of stars in clusters and in isolation, and the formation and evolution of circumstellar and protoplanetary disks. The department is active in several star formation surveys, involving many international ground- and space-based facilities. Theoretical studies emphasize the development of analytic models and numerical simulations, as well as their testing against observational constraints.

**Structure and evolution of galaxies:** Observational programs use multi-wavelength photometry of stars and star clusters in galaxies throughout the Local Group and in nearby groups, including the Milky Way, to study galaxy evolution. Other observations focus on the structure and dynamics of galaxies and their interstellar medium using neutral hydrogen (HI) and molecules such as carbon monoxide.

**Extragalactic astronomy and cosmology:** Observational programs investigate the nature of ultra-luminous galaxies, active galactic nuclei (AGNs), and the formation and chemical evolution of distant galaxies and clusters of galaxies. Theoretical investigations focus on the emission/absorption features in AGN spectra, the star-formation and chemical-evolution properties of galaxies, and applications of general relativity and particle physics to conditions in the very early universe.

**Instrumentation programs:** The UF Infrared Astrophysics Laboratory is a world leader in designing and constructing advanced near-infrared and mid-infrared instrumentation for major telescopes around the world, including the 8m Gemini North and South Telescopes and the 10m Gran Telescopio Canarias. Instrumentation is also developed in the area of high precision Doppler techniques for planet searches and the development of high contrast imaging techniques for direct imaging of extrasolar planets.

**Computing facilities:** The Astronomy Department maintains a network of high-performance computers running Linux and OS-X. The local network is maintained by a full-time systems manager. Astronomy students have access to supercomputing facilities maintained by the UF High Performance Computing Center, including thousands of CPU cores with high-performance networking.

Degrees Offered with a Major in Astronomy

**Doctor of Philosophy**

**Master of Science**

**Master of Science in Teaching**

Courses

- AST 5113: Solar System Astrophysics I
- AST 5114: Solar System Astrophysics II
- AST 6112: Solar System Astrophysics
- AST 6215: Stellar Structure and Function
- AST 6245: Stellar Atmospheres and Radiative Processes
- AST 6309: Galactic and Extragalactic Astronomy
- AST 6336: Interstellar Matter
- AST 6415: Observational Cosmology
Botany

The Department of Biology offers graduate work in Botany leading to the degrees of Master of Science, Master of Science in Teaching, and Doctor of Philosophy. Requirements for these degrees are given in the Graduate Degrees section of this catalog.

The Department offers studies in the areas of biochemistry, molecular biology, cell biology, physiology, ecology, systematics, and evolution. Specific areas of specialization include anatomy/morphology with emphasis on extant and fossil vascular plants; ecology and environmental studies including ecosystem ecology, conservation biology and genetics, fire ecology, exotic invasive species, and tropical botany and ecology; cell biology with emphasis on the cytoskeleton and cell morphogenesis; physiology, biochemistry, and molecular biology with emphasis on photosynthesis, growth and development of angiosperms, protein phosphorylation and signal transduction, global analysis of spatial patterns of gene expression, plant secondary metabolism and proteomics; systematics with emphasis on DNA- and morphology-based phylogenetic analyses, phylogeographic studies, molecular evolution, development, and monographic and floristic studies. To be considered for admission to graduate studies, students should have:

- The equivalent of an undergraduate degree in botany or biology with basic coursework in their area of interest
- Acceptable GRE scores (verbal, quantitative, and analytical writing)
- Letters of recommendation
- International students must submit an acceptable score on one of the following: TOEFL (Test of English as a Foreign Language: computer=213, paper=550, web=80), IELTS (International English Language Testing System: 6), MELAB (Michigan English Language Assessment Battery: 77), or successful completion of the UF English Language Institute program. The program of graduate study for each student will be determined by a supervisory committee, and deficiencies in background coursework will be made up early in the graduate program. No more than 9 credits of BOT 6905 may be used to satisfy the credit requirements for a master's degree.

Degrees Offered with a Major in Botany

Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences
Master of Science

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Botany Courses

- BOT 5225C: Plant Anatomy
- BOT 5305: Paleobotany
- BOT 5505C: Intermediate Plant Physiology
- BOT 5625: Plant Geography
- BOT 5655C: Physiological Plant Ecology
- BOT 5685C: Tropical Botany
- BOT 5695C: Ecosystems of Florida
- BOT 5725C: Taxonomy of Vascular Plants
- BOT 6508C: Proteomics Theory and Practice
- BOT 6516: Plant Metabolism
- BOT 6586: Plant Growth and Development
- BOT 6716C: Advanced Taxonomy
- BOT 6726C: Principles of Systematic Biology
- BOT 6905: Individual Studies in Botany
- BOT 6910: Supervised Research
- BOT 6927: Advancement in Botany
- BOT 6935: Special Topics
- BOT 6936: Graduate Student Seminar
- BOT 6940: Supervised Teaching
- BOT 6943: Internship in College Teaching
- BOT 6971: Research for Master's Thesis
- BOT 7979: Advanced Research
- BOT 7980: Research for Doctoral Dissertation
- PCB 5046C: Advanced Ecology
- PCB 5338: Principles of Ecosystem Ecology
- PCB 5356: Tropical Ecology
- PCB 6675C: Evolutionary Biogeography
- PFL 6686C: Fungal Biology

Chemistry
College

College of Liberal Arts and Sciences

Department/School

Chemistry Department

Chemistry Program

The department offers the Master of Science (thesis or nonthesis) and Doctor of Philosophy degrees with a major in chemistry and specialization in biochemistry, analytical, organic, inorganic, or physical chemistry. The nonthesis degree Master of Science in Teaching is also offered with a major in chemistry. New graduate students should have adequate undergraduate training in inorganic, analytical, organic, and physical chemistry. Normally this will include a minimum of one year of general chemistry, one semester of quantitative analysis, one year of organic chemistry, one year of physical chemistry, and one semester of advanced inorganic chemistry. Additional courses in instrumental analysis, biochemistry, and advanced physical and organic chemistry are desirable. Deficiencies in any of these areas may be corrected during the first year of graduate study. Such deficiencies are determined by a series of placement tests given prior to registration, and the results of these tests are used in planning the student's program. Doctoral candidates are required to complete at least 9 semester credits of courses specified by the division of the Chemistry Department in which they choose to specialize, as well as at least 9 semester credits of out-of-major-division courses. There are some minor restrictions on courses that may be used to meet this requirement. Additional courses may be required by the student’s supervisory committee or major professor.

Ph.D. candidates must serve not less than one year as teaching assistants. This requirement will be waived only when, in the opinion of the department, unusual circumstances justify such action. A chemical physics option is offered for students who will be doing research in areas of physical chemistry which require a strong background in physics. For this option, a student meets the departmental requirements for concentration in physical chemistry, except that only one out-of-major division course is required. In addition, a minimum of 14 credits in 4000 level or higher physics courses or a minimum of 7 such credits in physics and 7 in 4000 level or higher mathematics courses is required. Candidates for the master's degree are required to complete any two core courses. The Master of Science degree in chemistry has both thesis and nonthesis options. The nonthesis degree Master of Science in Teaching is offered with a major in chemistry and requires a written paper of substantial length (30 to 50 pages) on an approved topic pertaining to some phase of chemistry, under the course CHM 6905.

Degrees Offered with a Major in Chemistry

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

concentration in Imaging Science and Technology

Master of Science

Master of Science in Teaching

Courses
- CHM5224: Basic Principles for Organic Chemistry
- CHM5235: Organic Spectroscopy
- CHM5275: The Organic Chemistry of Polymers
- CHM5305: Chemistry of Biological Molecules
- CHM5413L: Advanced Physical Chemistry Laboratory
- CHM5511: Physical Chemistry of Polymers
- CHM6036: Chemical Biology
- CHM6037: Chemical Biology and Biochemistry Seminar
- CHM6153: Electrochemical Processes
- CHM6154: Chemical Separations
- CHM6155: Spectrochemical Methods
- CHM6158C: Electronics and Instrumentation
- CHM6159: Mass Spectrometric Methods
- CHM6165: Chemometrics
- CHM6180: Special Topics in Analytical Chemistry
- CHM6190: Analytical Chemistry Seminar
- CHM6225: Advanced Principles of Organic Chemistry
- CHM6226: Advanced Synthetic Organic Chemistry
- CHM6227: Topics in Synthetic Organic Chemistry
- CHM6251: Organometallic Compounds
- CHM6271: The Chemistry of High Polymers
- CHM6301: Enzyme Mechanisms
- CHM6302: Chemistry and Biology of Nucleic Acids
- CHM6303: Methods in Computational Biochemistry and Structural Biology
- CHM6306: Special Topics in Biological Chemistry/Mechanisms
- CHM6381: Special Topics in Organic Chemistry
- CHM6390: Organic Chemistry Seminar Presentation
- CHM6391: Organic Chemistry Seminar Discussion
- CHM6430: Chemical Thermodynamics
- CHM6461: Statistical Thermodynamics
- CHM6470: Chemical Bonding and Spectra I
- CHM6471: Chemical Bonding and Spectra II
- CHM6480: Elements of Quantum Chemistry
- CHM6490: Theory of Molecular Spectroscopy
- CHM6520: Chemical Physics
- CHM6580: Special Topics in Physical Chemistry
- CHM6586: Computational Chemistry
- CHM6600: Physical Chemistry Seminar
- CHM6620: Advanced Inorganic Chemistry I
- CHM6621: Advanced Inorganic Chemistry II
- CHM6626: Applications of Physical Methods in Inorganic Chemistry
- CHM6628: Chemistry of Solid Materials
- CHM6670: Inorganic Biochemistry
- CHM6680: Special Topics in Inorganic Chemistry
- CHM6690: Inorganic Chemistry Seminar
- CHM6720: Chemical Dynamics
- CHM6905: Individual Problems, Advanced
- CHM6910: Supervised Research
- CHM6934: Advanced Topics in Chemistry
- CHM6935: Chemistry Colloquium
- CHM6943: Internship in College Teaching
- CHM6971: Research for Master's Thesis
- CHM7485: Special Topics in Theory of Atomic and Molecular Structure
- CHM7979: Advanced Research
- CHM7980: Research for Doctoral Dissertation
- CHS 5110L: Radiochemistry Laboratory

Classical Studies

College

College of Liberal Arts and Sciences

Department/School

Classics Department

Classical Studies Program Information

(The following information refers only to our on-campus programs. Please visit the Distance Learning Homepage for further details on our Distance Learning programs, especially aimed at elementary, secondary, or community college teachers.)

Ph.D. in Classical Studies
The Ph.D. program in classical studies is a traditional course of study in Greek and Latin language and literature that prepares students for careers in research and teaching at colleges and universities. Students awarded a TA position receive a stipend plus a full tuition waiver. The University also offers competitive fellowships. The department routinely provides research fellowships for its Ph.D. candidates. Department awards are also available for study abroad opportunities. Students are expected to become Florida residents after one year.

M.A. in Classical Studies

The Department of Classics at the University of Florida offers an M.A. degree in Classical Studies. Students awarded a TA position receive a stipend plus a full tuition waiver. Students are expected to become Florida residents after one year.

The Master of Arts in Classical Studies is recommended for students who plan to continue their studies at the doctoral level.

For minimum degree requirements, see the Graduate Degrees section of the catalog. For additional requirements, please see the department website: http://classics.ufl.edu.

Admissions Requirements to the Classical Studies Programs:

Admission into the university and the program for Classics is ultimately determined and granted according to the rules established by the Graduate School of the University of Florida (see the Graduate Catalog).

Submission of Graduate Record Examination (GRE) scores, with a minimum score of 1000 (combined verbal and quantitative). Competitive applicants for funding awards from the department typically have a combined score of at least 1200.

Ph.D. program (Level II) requirements include:

1. M.A. in Classics or the equivalent.
2. A GPA of at least 3.25 in previous graduate work, and an undergraduate average of at least 3.0.
3. Demonstrated reading knowledge of German, French, Italian or Modern Greek (competency in the second language to be demonstrated before the completion of the second year at Level II).
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the applicant's record gives evidence of the capacity to undertake and complete guided independent reading and research at the doctoral level.

Master's program (Level I) requirements include:

1. Extensive study of Greek and Latin, with at least three years of coursework in one language and at least two years in the other language.
2. At least six hours in one or more of the following: ancient history, ancient art, archaeology, philosophy, literary criticism, linguistics.
3. A GPA of at least 3.0.
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the record shows promise on other grounds.

Degrees Offered with a Major in Classical Studies

Doctor of Philosophy

Master of Arts

Classics Departmental Courses

- CLA 6125: Augustan Age
- CLA 6155: Roman Dynasty: Nero and the Julio-Claudians
- CLA 6795: Greek and Roman Archaeology
- CLA 6805: The Classical Research Tradition
- CLA 6885: Roman Law and Society
- CLA 6895: Athenian Law and Society
- CLA 6905: Individual Work
- CLA 6930: Greece and the Near East
- CLT 6295: Greek Drama in Translation
- GRE 6425: Greek Prose Composition
- GRE 6755: Epigraphy
- GRW 6050: Individual Work in Modern Greek
- GRW 6105: The Greek Tradition
- GRW 6126: Greek Novel
- GRW 6136: Greek Tragedy
- GRW 6317: Ancient Greek Comedy
- GRW 6345: Greek Lyric Poetry
- GRW 6346: Pindar
- GRW 6347: Homer
- GRW 6386: Greek Historians
- GRW 6505: Individual Work
- GRW 6506: Plato
- GRW 6705: Attic Orators
- GRW 6905: Individual Work
- GRW 6930: Special Topics in Greek Literature
- GRW 6931: Comparative Study of Greek and Latin Literature
- GRW 6971: Research for Master's Thesis
Computer Science

College of Liberal Arts and Sciences

Department/School

Computer and Information Science and Engineering Department

Computer Science Program Information

The Department of Computer and Information Science and Engineering offers the Master of Science degree in Computer Science through the College of Liberal Arts and Sciences. Minimum requirements for this degree are given in the Graduate Degrees section of this catalog.

The department offers graduate study and research in Algorithms, Computer Vision, Databases, Graphics and Modeling, Machine Learning, Networks, and Systems, with active labs in Bioinformatics; Computational Science and Intelligence; Vision, Graphics and Medical Imaging; Database Systems Research and Development; Data Science Research; Mobile and Pervasive Computing; Human-Centered Computing; and Cybersecurity.

Specific degree requirements and options may be found here: http://cise.ufl.edu/academics/grad

Instructions for application for admission may be found here: http://cise.ufl.edu/admissions/grad

Degrees Offered with a Major in Computer Science

Master of Science

Computer and Information Science and Engineering Departmental Courses

- CAP 5100: Human-Computer Interaction
- CAP 5416: Computer Vision
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5635: Artificial Intelligence Concepts
- CAP 5705: Computer Graphics
- CAP 5805: Computer Simulation Concepts
- CAP 6137: Malware Reverse Engineering
- CAP 6402: Aesthetic Computing
- CAP 6516: Medical Image Analysis
- CAP 6610: Machine Learning
College of Engineering Courses

- EEE 5354L: Semiconductor Device Fabrication Laboratory
- EGN 5010L: NRF Training Lab
- EGN 5949: Practicum/Internship/Cooperative Work Experience
- EGN 6640: Entrepreneurship for Engineers
- EGN 6642: Engineering Innovation
- EGN 6039: Engineering Leadership

Counseling Psychology

College

College of Liberal Arts and Sciences

Department/School

Psychology Department

Degrees Offered with a Major in Counseling Psychology

Doctor of Philosophy

Psychology Departmental Courses

- CAP 6615: Neural Networks for Computing
- CAP 6617: Advanced Machine Learning
- CAP 6685: Expert Systems
- CAP 6701: Advanced Computer Graphics
- CDA 5155: Computer Architecture Principles
- CDA 5636: Embedded Systems
- CDA 6156: High Performance Computer Architecture
- CEN 5035: Software Engineering
- CEN 6070: Software Testing and Verification
- CEN 6075: Software Specification
- CIS 6905: Individual Study
- CIS 6910: Supervised Research
- CIS 6930: Special Topics in CIS
- CIS 6935: Graduate Seminar
- CIS 6940: Supervised Teaching
- CIS 6971: Research for Master's Thesis
- CIS 7979: Advanced Research
- CIS 7980: Research for Doctoral Dissertation
- CNT 5106C: Computer Networks
- CNT 5410: Computer and Network Security
- CNT 5517: Mobile Computing
- CNT 6107: Advanced Computer Networks
- CNT 6885: Distributed Multimedia Systems
- COP 5536: Advanced Data Structures
- COP 5555: Programming Language Principles
- COP 5615: Distributed Operating System Principles
- COP 5618: Concurrent Programming
- COP 5625: Programming Language Translators
- COP 5725: Database Management Systems
- COP 6726: Database System Implementation
- COP 6755: Distributed Database Systems
- COT 5405: Analysis of Algorithms
- COT 5442: Approximation Algorithms
- COT 5519: Sparse Matrix Algorithms
- COT 5520: Computational Geometry
- COT 5615: Mathematics for Intelligent Systems
- COT 6315: Formal Languages and Computation Theory
Creative Writing

College

College of Liberal Arts and Sciences

Department/School
Creative Writing Program Information

The Department of English offers the Master of Fine Arts degree in creative writing. Complete descriptions of the minimum requirements for the M.F.A. are provided in the Graduate Degrees section of this catalog. Full information concerning courses of study is available from the graduate coordinator.

Degrees

Master of Fine Arts

English Departmental Courses

- AML 6017: Studies in American Literature Before 1900
- AML 6027: Studies in 20th-Century American Literature
- CRW 6106: Fiction Writing
- CRW 6166: Studies in Literary Form
- CRW 6331: Verse Writing
- CRW 6906: Individual Work
- ENC 5236: Advanced Business Writing for Accounting
- ENC 6428: Digital English
- ENG 6016: Psychological Approaches to Literature
- ENG 6075: Literary Theory: Issues
- ENG 6076: Literary Theory: Theorists
- ENG 6077: Literary Theory: Forms
- ENG 6137: The Language of Film
- ENG 6138: Studies in the Movies
- ENG 6906: Individual Work
- ENG 6910: Supervised Research
- ENG 6932: Film and Video Production
- ENG 6971: Research for Master's Thesis
- ENG 7939: Seminar in Variable Topics
- ENG 7979: Advanced Research
- ENG 7980: Research for Doctoral Dissertation
- ENL 6206: Studies in Old English
- ENL 6216: Studies in Middle English
- ENL 6226: Studies in Renaissance Literature
- ENL 6236: Studies in Restoration and 18th-Century Literature
- ENL 6246: Studies in Romantic Literature
- ENL 6256: Studies in Victorian Literature
- ENL 6276: Studies in 20th-Century British Literature
- LAE 6940: Supervised Teaching
- LAE 6947: Writing Theories & Practices
- LIT 5335: Approaches to Children's and Adolescent Literature
- LIT 6037: Studies in Verse
- LIT 6047: Studies in Drama
- LIT 6309: Communications and Popular Culture
- LIT 6236: Postcolonial Studies
- LIT 6302: Studies in Comics and Animation
- LIT 6327: Studies in Folklore
- LIT 6357: African-Amer. or African Diaspora Lit./Cultures
- LIT 6358: Theoretical Approaches to Black Cultural Studies
- LIT 6855: Issues in Cultural Studies
- LIT 6856: Cultural Studies: Interventions
- LIT 6857: Cultural Studies: Movements
- LIT 6934: Variable Topics
- SPC 6239: Studies in Rhetorical Theory

Criminology, Law and Society

College

College of Liberal Arts and Sciences
Department/School

Sociology and Criminology & Law Department

Criminology, Law and Society Program Information

Requirements for the M.A. and Ph.D. degrees are given in the Graduate Degrees section of this catalog. The graduate program in criminology and law has two areas of special emphasis: crime and justice, and law and society. The degree programs are research-based and prepare students to conduct original exploration into relevant problems, issues, and policies.

M.A. degree program: Admission to the master’s degree program requires a bachelor’s degree from a criminology/criminal justice or relevant social science or humanities program (political science, sociology, anthropology, psychology, philosophy, history, women’s studies, etc.). Qualified students may enter the master’s program as undergraduates through the combined B.A./M.A. program. Both M.A. options (thesis and nonthesis) require satisfactory completion of at least 36 credit hours.

Ph.D. degree program: The Doctor of Philosophy program includes a minimum of 90 semester hours of credit beyond the B.A. Students with a criminology or closely related M.A. received in the last 7 years from an accredited U.S. university may request that up to 30 hours credit from their M.A. work be counted toward this total. Those with an M.A. from this department may apply 36 hours. The Department requires Ph.D. students to complete at least 66 hours of course work (excluding research credits), including the M.A. hours. Qualifying examinations take place at the end of a student’s course work.

Criminology, Law and Society/Law joint degree programs: The Department of Sociology and Criminology & Law (CLS) and the College of Law offer a joint degree program leading to an M.A. or a Ph.D. in Criminology, Law and Society and a J.D. in law. The joint degree programs enable students to earn both the degrees (the J.D. and the M.A. or the J.D. and the Ph.D.) in less time than would be required to earn both degrees consecutively. Students wishing to pursue the joint program must be admitted to both the Graduate School and the College of Law. These requirements include both the LSAT and GRE. Admission to one may precede the other. Students are encouraged to announce their intent to seek a joint degree as soon as possible. CLS allows 12 hours of appropriate law school courses to be credited toward the CLS degree. The 12 credits selected from the law curriculum must be approved by the graduate coordinator on the recommendation of the student’s supervisory committee. The College of Law will permit 12 hours of credit earned in graduate courses to be credited toward the J.D.

Degrees

Doctor of Philosophy

Master of Arts

Courses

- CCJ 5934: Contemporary Issues in Criminology and Law
- CCJ 6936: Proseminar in Crime, Law, and Justice
- CJL 6039: Law and Society
- CCJ 6063: Communities and Crime
- CCJ 6858: Drugs, Crime, and Policy
- CCJ 6285: Criminal Justice Process
- CCJ 6619: Crime and the Life Course
- CCJ 6643: White Collar Crime
- CCJ 6705: Research Methods in Crime, Law, and Justice
- CCJ 6708: Research Issues in Crime and Deviance
- CCJ 6712: Evaluation Research
- CCJ 6905: Independent Study
- CCJ 6910: Supervised Research
- CCJ 6920: Seminar in Criminological Theory
- CCJ 6971: Research for Master’s Thesis
- CCJ 7742: Research Methods in Crime, Law, and Justice II
- CCJ 7921: Professional Development in Criminology, Law, and Society
- CCJ 7979: Advanced Research
- CCJ 7980: Research for Doctoral Dissertation
- CCJ 6120: Corrections and Public Policy
- CJL 6089: Humanitarian Law
- CJL 6090: Law and Social Science
- CJL 6091: Anthropology of Law
- CJL 6095: Human Rights in Cultural Context

English
English Program Information

The Department of English offers the Master of Arts degree (thesis and nonthesis options) and the Doctor of Philosophy degree in English with the specializations listed below. Complete descriptions of the minimum requirements for the M.A., M.F.A., and Ph.D. degrees are provided in the Graduate Degrees section of this catalog. Specific areas of specialization for the Master of Arts and the Doctor of Philosophy include literature (Medieval, Renaissance, Restoration, and 18th-century and 19th-century British literature; American literature to 1900, contemporary British and American literature), American studies, critical theory, cultural studies, film and media studies, feminisms, genders and sexualities, postcolonial studies, composition and rhetoric; comics and visual rhetoric; and children's literature.

New graduate students should have completed an undergraduate English major of at least 24 semester hours, and doctoral students should have a Master of Arts degree in English. Full information concerning courses of study is available from the graduate coordinator.

Degrees

Doctor of Philosophy

Master of Arts

English Departmental Courses

- AML 6017: Studies in American Literature Before 1900
- AML 6027: Studies in 20th-Century American Literature
- CRW 6166: Studies in Literary Form
- CRW 6130: Fiction Writing
- CRW 6166: Studies in Literary Form
- CRW 6331: Verse Writing
- CRW 6906: Individual Work
- ENC 5236: Advanced Business Writing for Accounting
- ENC 6428: Digital English
- ENG 6016: Psychological Approaches to Literature
- ENG 6075: Literary Theory: Issues
- ENG 6076: Literary Theory: Theorists
- ENG 6077: Literary Theory: Forms
- ENG 6137: The Language of Film
- ENG 6138: Studies in the Movies
- ENG 6906: Individual Work
- ENG 6910: Supervised Research
- ENG 6932: Film and Video Production
- ENG 6971: Research for Master's Thesis
- ENG 7039: Seminar in Variable Topics
- ENG 7079: Advanced Research
- ENG 7980: Research for Doctoral Dissertation
- ENL 6206: Studies in Old English
- ENL 6216: Studies in Middle English
- ENL 6226: Studies in Renaissance Literature
- ENL 6236: Studies in Restoration and 18th-Century Literature
- ENL 6246: Studies in Romantic Literature
- ENL 6256: Studies in Victorian Literature
- ENL 6276: Studies in 20th-Century British Literature
- LAE 6940: Supervised Teaching
- LAE 6947: Writing Theories & Practices
- LIT 5335: Approaches to Children's and Adolescent Literature
- LIT 6037: Studies in Verse
- LIT 6047: Studies in Drama
French and Francophone Studies

Bachelor’s/master’s program: French and Francophone Studies offers a combined 4/1 degree program that enables outstanding undergraduates to obtain both the B.A. and M.A. degrees after successful completion of 152 credit hours. The program is designed for the students who wish to continue their education in French and Francophone Studies past the bachelor’s level but do not intend to pursue a doctorate or for students who wish to expand their training in a specific field before moving on to a doctoral program. Since students in the bachelor’s/master’s program have a graduate classification, students receiving undergraduate scholarships or Pell grants should check with the funding provider to make sure that they will not lose eligibility.

Degrees

Master of Arts in Teaching

Courses

- FLE 6385: Foreign Languages Teaching Methods
- FRE 6060: Beginning French for Graduate Students I
- FRE 6061: Beginning French for Graduate Students II
- FRE 6466: Advanced Translation and Stylistics
- FRE 6735: Special Studies in French Linguistics
- FRE 6736: The French language in the Americas
- FRE 6785: French Phonetics and Phonology
- FRE 6827: Sociolinguistics of French
- FRE 6845: History of the French Language
- FRE 6855: Structure of French
- FRE 6856: French in the 21st Century
- FRE 6940: Supervised Teaching
- FRE 6943: Romance Language Teaching Methods
- FRE 6945: Practicum in Advanced College Teaching
- FRE 6956: Overseas Studies in French
- FRW 6217: Seventeenth-Century French Prose
- FRW 6276: Readings in Eighteenth-Century Literature
- FRW 6288: Twentieth-Century French Novel
- FRW 6315: Seventeenth-Century French Drama
- FRW 6328: Twentieth-Century French Theater
Genetics and Genomics

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Medicine

Genetics and Genomics Program

Chair: C. Mulligan  
Graduate Coordinator: J. Bungert

Complete faculty listing: Follow this link  
or visit [mediasnews.health.ufl.edu/misc/mgm/UFGI/search/members-list4.php](mediasnews.health.ufl.edu/misc/mgm/UFGI/search/members-list4.php)

The University of Florida Genetics Institute is a multi-college, multi-faceted research center. Good geneticists are integrative geneticists, who incorporate many different subfields of genetics into their work. The core mission is to improve the quality of life of people throughout the world via integrative, genetics-based research. Accordingly, faculty interests and graduate research opportunities include a wide range of areas from advances in gene therapy to understanding the maintenance of genetic variation, from understanding plant immune responses to developing improved algorithms for identifying regulatory motifs in DNA sequences, and from the challenges of bioethics to strategies for controlling malaria.

The highlight of the first year core training is the research rotations program. Student laboratory rotations are a particularly exciting feature of the genetics and genomics doctoral program, and epitomize the philosophy that good geneticists are broadly trained and integrative. Many current Graduate Faculty members still vividly recall the transforming effects of their rotations during graduate school—they didn't always end up where they expected! Rotations can open students' eyes to areas of genetics that they had never considered and entice them into considering brand new career opportunities. Each student will sample the breadth and depth of genetics research at UF by carrying out three 8-week modules consisting of design, implementation, and analysis of genetics experiments. Each rotation is conducted in close association with a Graduate Faculty member. To ensure that students fully experience the impressive breadth of genetics research at UF, their rotations are hosted by Graduate Faculty in at least two different colleges. Students will also take PCB 5065, Advanced Genetics; GMS 6181, Special Topics in Microbiology (among the topics are genomics and bioinformatics, and ethics for genetics research); STA 6166, Statistical Methods I; and other electives as desired. In addition, throughout their tenure in the program, students participate in the Genetics Seminar, which is an opportunity to present their rotation plans and results of research to faculty and other students.

Prospective students should have strong backgrounds in biology and other hard sciences. Exceptional students with other backgrounds will also be considered. The research statement required as part of the application has a particularly important part in the admissions decision. Each applicant must describe his/her research interests, so that Graduate Faculty can evaluate knowledge of the discipline, fit to the program, and ability to articulate and motivate an interesting research problem. The required letters of recommendation are also extremely important in helping identify applicants with exceptional aptitude for genetics, and with research experience and promise.

For more information, write to the Genetics and Genomics Graduate Program, Attn: Graduate Secretary, Genetics Institute, University of Florida, PO Box 100196, Gainesville, FL 32610-0196.

Expanded information can be found at [http://www.ufgi.ufl.edu](http://www.ufgi.ufl.edu).

Degrees Offered with a Major in Genetics and Genomics

Doctor of Philosophy

Doctor of Philosophy - Clinical and Translational Science

Courses

- AGR 6322: Advanced Plant Breeding
- ANG 6532: Molecular Genetics of Disease
- ANG 7979: Advanced Research
- ANG 7980: Research for Doctoral Dissertation
- BCH 6415: Advanced Molecular and Cell Biology
- BCH 7410: Advanced Gene Regulation
Geography

College

College of Liberal Arts and Sciences

Department/School

Geography Department

Geography Program Information

The Department of Geography offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees Section of this catalog.

Degrees

Doctor of Philosophy

without a concentration

concentration in Geographic Information Systems
concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Arts

without a concentration

concentration in Applications of Geographic Technologies

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Arts in Teaching

without a concentration

concentration in Geographic Information Systems

concentration in Tropical Conservation and Development

concentration in Wetland Sciences
Master of Science

without a concentration

concentration in Applications of Geographic Technologies

concentration in Geographic Information Systems

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- GEA6419: Seminar: South America
- GEA6466: Seminar on Geography of Amazonia
- GEA6468: Resource Utilization and Conservation in Latin America
- GEO 5305: Environmental Biogeography
- GEO 5346: Natural Hazards
- GEO 5556: Geography of Innovation and Technological Change
- GEO 5605: Advanced Urban Geography
- GEO 5809: Geography of World Agriculture
- GEO 5905: Individual Study: Directed Reading
- GEO 5920: Geography Colloquium
- GEO 5945C: Field Course in Geography
- GEO 6118: Contemporary Geographic Thought and Research
- GEO 6119: Proposal Writing in Geography
- GEO 6160: Introduction to Quantitative Methods for Geographers
- GEO 6161: Intermediate Quantitative Methods for Geographers
- GEO 6166: Advanced Quantitative Methods for Spatial Analysis
- GEO 6255: Climatology
- GEO 6262: Fluvial Morphology
- GEO 6348: Floods Seminar
- GEO 6375: Land Change Science Seminar
- GEO 6429: Seminar: Cultural Geography
- GEO 6435: Seminar in Population
- GEO 6451: Medical Geography
- GEO 6495: Environment and Behavior
- GEO 6905: Individual Work
- GEO 6921: How to Survive and Thrive in Academia
- GEO 6931: Seminar in Cultural and Political Ecology
- GEO 6938: Selected Topics in Geography
- GEO 6971: Research for Master's Thesis
- GEO 7979: Advanced Research
- GEO 7980: Research for Doctoral Dissertation
- GEY 6341: Shelter and Care Options for U.S. Elderly
- GIS 5008C: Maps and Graphs
- GIS 5009C: Advanced Cartography
- GIS 5028C: Advanced Aerial Photo Interpretation
Geology

College

College of Liberal Arts and Sciences

Department/School

Geological Sciences Department

Geology Program

The Department of Geological Sciences offers programs leading to the Master of Science (thesis), the Master of Science in Teaching (nonthesis), and the Doctor of Philosophy degrees in geology. Requirements for these degrees are described in the General Information section of this catalog.

For admission to graduate status in the Department of Geological Sciences, a student must have a baccalaureate degree with a major in geology or a related field or its equivalent. Deficiencies in undergraduate preparation can be corrected by completing the undergraduate courses without credit while enrolled as a graduate student.

Applicants should take the GRE general test. The scores of this examination must be reported to the Department of Geological Sciences. Three letters of recommendation are also required for admission to the doctoral program and for financial aid applications at any level.

A minimum of 33 semester hours of graduate level courses are required for the Master of Science in geology. At least 24 hours must be in organized graduate-level geology courses (excluding research, teaching, special projects, etc.). Six hours of thesis research credit are required. All master's degrees are terminal; a separate and new application for admission to the doctoral program is required.

For the Master of Science in Teaching degree, at least 36 hours are required. Six of these hours must be in GLY 6943 and at least 24 must be in organized graduate-level geology courses. The remaining 6 hours must be in approved electives. A minor in education is required. Candidates also must pass the final oral examination.

Of the 90 semester hours required for the Ph.D., 45 must be in formal, organized graduate-level class work (excluding individual work, supervised research and teaching, advanced research, dissertation, special projects, etc.). Remaining credits will be in GLY 7979 and GLY 7980, additional geology courses, or courses in a related field.

The Department offers a combined bachelor's/master's degree program. Contact the graduate coordinator for information.

Degrees

Doctor of Philosophy

without a concentration

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development
concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Hydrologic Sciences

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Courses

- BOT 5305: Paleobotany
- ESC 5211: Current Topics in Earth Science for Teachers
  - ESC 5211L
  - GLY 5020
  - GLY 5020L
  - GLY 5075
- GLY 5156: Geologic Evolution of North America
- GLY 5246: Geochemistry
- GLY 5245: Hydrogeochemistry
- GLY 5247: Surface and Ground Water Interactions
- GLY 5248: Physical Geochemistry
- GLY 5255: Organic Geochemistry and Geobiology
- GLY 5328: Advanced Igneous Petrology
- GLY 5455: Introduction to Geophysics and Tectonics
  - GLY 5456
- GLY 5466: Seismology and Earth Structure
- GLY 5468: Terrestrial Gravity and Magnetism
- GLY 5476: Environmental Geophysics
- GLY 5556C: Sedimentology
- GLY 5576: Continental Margin Stratigraphy
German

Chair: M. Watt
Graduate Coordinator: W. Hasty
Complete faculty listings: Follow this link.

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

Degrees

Doctor of Philosophy

without a concentration

concentration in Women's/Gender Studies

Master of Arts

German Literature and Cinema
German Language

- GER 6060: Beginning German for Graduate Students I
- GER 6061: Beginning German for Graduate Students II
- GER 6505: German Culture
- GER 6940: Supervised Teaching

History

College

College of Liberal Arts and Sciences

Department/School

History Department

History Program

The Department of History offers the following graduate degrees: Master of Arts degree with fields of specialization in African, Asian, European, Latin American, and United States history and the Doctor of Philosophy degree with fields of specialization in African, European, Latin American, and United States history, or with a dual major which allows students to create their own major fields.

Master of Arts: This degree serves to prepare students for admission to a Ph.D. program, for a teaching career in high school or community colleges, or for a career in government or business.

Fields of specialization:
- African (East Africa, Southern Africa, West Africa)
- European (medieval, early modern, or modern)
- Latin American (colonial Latin America, post-Colonial Latin America, Brazil, and the Caribbean or Spanish America)
- United States history (early America, 19th century, 20th century)

Thesis option requirements:
- A minimum of 30 credit hours
- At least 12 graduate-level regular course credit hours in your major field. In European, you must take at least two seminars in your area of specialization. In U.S. history, you must take the 19th-century America readings seminar, either the 20th-century or early America readings seminar, and at least one research seminar. In Latin American and African history, you must take the relevant readings seminars in your area of specialization, one other readings seminar, and at least one research seminar.
- At least 6 graduate-level regular course credit hours outside the major field (but in the Department of History). We recommend that you invest these regular course hours in readings seminars.
- Take 3 hours of historiography (HIS 6061) by the fourth semester of graduate study.
- Take 3 regular course credit hours from outside the Department. These should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.
- Complete a master's thesis. The semester you graduate, you must be registered for a minimum of 3 thesis research hours (HIS 6971) in the fall or spring term or 2 in a summer term. Your thesis should demonstrate your ability to handle the primary-source material of your field, and a working knowledge of the secondary literature; and should demonstrate your ability to present research results in a coherent, well-written study. The student must complete the thesis and make it available to readers 2 weeks before the oral examination, complete the application
for the degree at the Office of the University Registrar before the deadline, and take the examination.

- Each student must pass a final comprehensive oral examination at the end of the program.

Non-thesis option requirements:

- A minimum of 30 credit hours.
- At least 12 graduate-level regular course credit hours inside your major field. In European, you must take at least one seminar in your area of specialization. In U.S. history, you must take the 19th-century American readings seminar, either the 20th-century or the early America readings seminar, and at least one research seminar. In Latin American or African history, you must take the relevant readings seminars in your area of specialization, one other readings seminar, and at least one research seminar.
- At least 6 graduate-level regular course credit hours outside your major field (but in the Department of History). We recommend that you invest these regular course hours in readings seminars.
- Take 3 hours of historiography (HIS 6001) by your fourth semester of graduate study.
- Take 3 regular course credit hours from outside the Department; these should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.
- Complete a research seminar and/or a nonthesis project in history. Your primary goal in either is to complete an article-length essay (approximately 35 to 40 pages) of publishable or near-publishable quality. The essay should be based largely on primary sources.
- You must pass a final comprehensive oral and written examination conducted by your supervisory committee.

Supervisory committee for the M.A.: The committee normally consists of the chair and two other members of the graduate faculty. Additional members may be added if desirable. The committee assists in planning and supervising the student’s program and conducts the final examination. The chair is also the thesis director if that option is chosen.

Duration: The M.A. program can be completed in 3 semesters of full-time registration but may take longer. The Department believes that normally no more than 4 semesters of full-time registration should be spent on the degree. These semesters need not be consecutive. The Board of Education has established 60 credit hours as a maximum for the master's degree. Up to 6 credits of graduate-level courses taken at another school with a grade of B or better may be transferred into the master's program if approved by the Graduate School.

Bachelor’s/master’s program: The Department offers a combined 4/1 degree program that enables outstanding undergraduates to obtain both the B.A. and M.A. degrees in history after successful completion of 150 credit hours. The program is designed for the students who wish to continue their education in history past the bachelor's level but do not intend to pursue a doctorate in history or for students who wish to expand their training in a specific field before moving on to a doctoral program. The department offers a 4/1 degree program in the standard M.A. fields of study and offers two specialized tracks: oral history and academic publishing. Please see the Department website for more information. Students in this program are not eligible for departmentally controlled financial aid.

Doctor of Philosophy requirements:

- Professional competence in your major field, or major fields for students pursuing a dual degree.
- Knowledge of a minor, which may be drawn from the approved major fields of specialization for the doctorate (African, European, Latin American, or U.S. history), from approved minor fields (Atlantic history, gender, legal history), or may be self designed as a thematic research or teaching field. It must include at least 3 hours outside the historical area that defines your major field. Note: Students pursuing a dual major do not take a department minor field.
- At least 12 graduate-level regular course credit hours from outside the Department; these should be graduate-level hours, but undergraduate 3000 or 4000 level hours may be taken subject to approval by your adviser.
- Pass a set of written and oral qualifying examinations testing competence in major and additional fields and your knowledge of the nature of history and the historian’s task.
- A dissertation for which credit is given in HIS 7980.

History/Law joint degree program: The Department of History and the College of Law offer a program in legal history leading to either the M.A. or a Ph.D. degree in history and the J.D. in law. Because the faculties of history and law stress interdisciplinary training, students admitted to the joint degree program will be allowed to count a significant number of hours toward both degrees. Applicants must be accepted by both the Graduate School and the College of Law. Normally, students will complete the course and examination requirements of both degrees in 4 years. Students may begin their first year of work in either history or law, but they must complete the first year of law school within 1 year and they must do so within the first 2 years after admission to the joint degree program. For further information write to the Legal History Coordinator, Department of History, University of Florida, Box 117320, Gainesville, FL 32611-7320.

Degrees

Doctor of Philosophy

without a concentration

concentration in Historic Preservation

concentration in Women's/Gender Studies

Master of Arts
without a concentration

concentration in Historic Preservation

concentration in Jewish Studies

Courses

- AFH 5297: History of African Agriculture
- AFH 5348: History of West Africa
- AFH 5458: Southern Africa
- AFH 5934: Topics in African History
- AFH 6259: Seminar in Modern Africa
- AFH 6805: Theories and Methods of African History
- AFH 6934: Africa
- AFH 6936: Readings in African History
- AMH 5405: The South to 1860
- AMH 5905: Special Studies
- AMH 5930: Topics in United States History
- AMH 6198: Early American Society
- AMH 6199: Nineteenth Century America
- AMH 6290: Modern America
- AMH 6356: Research in U.S. History
- AMH 6406: Readings in Southern History, 1607-1865
- AMH 6466: Seminar in U.S. Urban History
- AMH 6506: Seminar in American Labor History
- AMH 6516: Seminar in American Foreign Relations and Expansion
- AMH 6557: Seminar in Constitutional or Legal History of the United States
- ASH 5388: Topics in East Asian History
- EUH 5546: Topics in British History
- EUH 5934: Topics in European History
- EUH 6126: Readings in Medieval History
- EUH 6174: Conversion in the Middle Ages
- EUH 6175: Ethnicity in the Middle Ages
- EUH 6176: Villages and Peasants in the Middle Ages
- EUH 6177: Economy and Society in Late Antiquity and the Early Middle Ages
- EUH 6213: Europe, 1500-1763
- EUH 6289: Readings, Modern Europe
- EUH 6469: Modern German History
- EUH 6935: Readings, Early Modern Europe
- EUH 6937: Readings in Mediterranean History
- HIS 5450: Slavery in the New World: Comparative Perspectives
- HIS 5484: Science and the Enlightenment
- HIS 5485: Special Studies in the History of Science
- HIS 6060: Historical Method
- HIS 6061: Introduction to Historiography
- HIS 6416: Problems in Comparative Legal History
- HIS 6445: Postcolonial Theories
- HIS 6469: Topics in Historiography of History of Science
- HIS 6478: Topics in the Scientific Revolution
- HIS 6480: Pre-Newtonian Sciences
- HIS 6488: Readings in the History of Science
- HIS 6905: Individual Study
- HIS 6910: Supervised Research
- HIS 6940: Supervised Teaching
- HIS 6943: Internship in College Teaching
- HIS 6967: Nonthesis Project in History
- HIS 6971: Research for Master's Thesis
- HIS 7979: Advanced Research
- HIS 7980: Research for Doctoral Dissertation
- LAH 5438: Modern Mexico
- LAH 5475: Caribbean, Nineteenth and Twentieth Centuries
- LAH 5476: Caribbean History to 1800: Slavery, Colonization, and International Conflict
- LAH 5527: Andean Nations
- LAH 5607: History of Amazonia
- LAH 5637: Brazil Since 1750
- LAH 5933: Topics in Caribbean History
Latin

College

College of Liberal Arts and Sciences

Department/School

Classics Department

Latin Program Information

(The following information refers only to our on-campus programs. Please visit the Distance Learning Homepage for further details on our Distance Learning MA and ML Programs, especially aimed at elementary, secondary, or community college teachers.)

The Department of Classics at the University of Florida offers an M.A. degree in Latin, an M.A.T. degree in Lation, as well as a Master of Latin degree. Students awarded a TA position receive a stipend plus a full tuition waiver. Students are expected to become Florida residents after one year.

The Master of Arts in Latin is a thesis degree designed specifically for students who are aiming toward a career in secondary teaching, but who still desire the writing experience and credential that a thesis provides.

The Master of Arts in the Teaching of Latin (M.A.T.) is recommended for students who wish to pursue a career in teaching and who want to include educational courses in their program. This is a non-thesis degree.

The Master of Latin (M.L.) degree is designed primarily for currently employed, and/or certified teaching professionals who wish to widen their knowledge of Latin, broaden their education in the field of Classics, and enhance their professional qualifications. This is a non-thesis degree.

For minimum degree requirements, see the Graduate Degrees section of the catalog. For additional requirements, please see the department website: http://classics.ufl.edu.

Admission Requirements to the Latin Programs:

Admission into the university and the program for Classics is ultimately determined and granted according to the rules established by the Graduate School of the University of Florida (see the Graduate Catalog).

Submission of Graduate Record Examination (GRE) scores, with a minimum score of 1000 (combined verbal and quantitative). Competitive applicants for funding awards from the department typically have a combined score of at least 1200.

Master's level (Level I) requirements include:

1. Extensive study of Greek and Latin, with at least three years of coursework in one language and at least two years in the other language.
2. At least six hours in one or more of the following: ancient history, ancient art, archaeology, philosophy, literary criticism, linguistics.
3. A GPA of at least 3.0.
4. Deficiencies that can be corrected within one year will not necessarily prevent admission, if the record shows promise on other grounds.

Degrees

Master of Arts

Master of Arts in Teaching

Master of Latin
Classics Departmental Courses

- CLA 6125: Augustan Age
- CLA 6515: Roman Dynasty: Nero and the Julio-Claudians
- CLA 6795: Greek and Roman Archeology
- CLA 6805: The Classical Research Tradition
- CLA 6885: Roman Law and Society
- CLA 6895: Athenian Law and Society
- CLA 6905: Individual Work
- CLA 6930: Greece and the Near East
- CLT 6295: Greek Drama in Translation
- GRE 6425: Greek Prose Composition
- GRE 6755: Epigraphy
- GRK 6905: Individual Work in Modern Greek
- GRW 6105: The Greek Tradition
- GRW 6216: Greek Novel
- GRW 6315: Greek Tragedy
- GRW 6317: Ancient Greek Comedy
- GRW 6345: Greek Lyric Poetry
- GRW 6346: Pindar
- GRW 6347: Homer
- GRW 6386: Greek Historians
- GRW 6505: Plato
- GRW 6705: Attic Orators
- GRW 6905: Individual Work
- GRW 6930: Special Topics in Greek Literature
- GRW 6931: Comparative Study of Greek and Latin Literature
- GRW 6971: Research for Master's Thesis
- GRW 7979: Advanced Research
- GRW 7980: Research for Doctoral Dissertation
- LAT 6425: Latin Prose Composition
- LNW 5325: Roman Elegiac Poetry
- LNW 5655: Roman Poets: Horace
- LNW 5665: Roman Poets: Vergil
- LNW 5675: Roman Poets: Ovid
- LNW 5931: Comparative Study of Latin and Greek Literature
- LNW 6105: The Roman Tradition
- LNW 6225: The Ancient Roman Novel
- LNW 6335: Roman Oratory and Rhetoric
- LNW 6365: Studies in Roman Satire
- LNW 6385: Roman Historians
- LNW 6495: Late Latin Literature
- LNW 6905: Individual Work
- LNW 6933: Special Topics in Latin Literature
- LNW 6935: Proseminar in Classics
- LNW 6940: Supervised Teaching
- LNW 6971: Research for Master's Thesis
- LNW 7979: Advanced Research
- LNW 7980: Research for Doctoral Dissertation

Latin American Studies

College

College of Liberal Arts and Sciences

Department/School

Latin American Studies Department

Latin American Studies Program

The Center for Latin American Studies offers the following graduate programs:

- An interdisciplinary Master of Arts degree
- Graduate certificate and advanced graduate certificate in Latin American studies in conjunction with disciplinary degrees in the Colleges of Agricultural and Life Sciences; Design, Construction, and Planning; Business Administration; Education; Fine Arts; Journalism and Communications; Law; and Liberal Arts and Sciences.

The graduate program in Latin American studies relies on over 250 courses with Latin American content taught in more than 35 academic units of the above colleges. The degree and certificate
programs in Latin American studies are described on their website [www.latam.ufl.edu/academics/graduate-programs](http://www.latam.ufl.edu/academics/graduate-programs). Complete course listings are available at the Center for Latin American Studies (319 Grinter Hall) and on the website.

Degrees

**Master of Arts**

without a concentration

concentration in Tropical Conservation and Development

Latin American Studies Courses

- FOT 6940: Translation Studies Practicum
- LAS 6008: Ecological Principles
- LAS 6220: Issues and Perspectives in Latin American Studies
- LAS 6290: Tropical Conservation and Development
- LAS 6291: Conservation and Development Skills
- LAS 6292: Tropical Conservation and Development Research Methods
- LAS 6293: Design and Methods of Research in Latin American Studies
- LAS 6295: Latin American Business Environment
- LAS 6296: Latin American Business Topics
- LAS 6905: Individual Work
- LAS 6938: Seminar in Modern Latin American Studies
- LAS 6940: Tropical Conservation and Development Practicum
- LAS 6943: Development Theory and Practice in Latin America
- LAS 6971: Research for Master's Thesis

**Linguistics**

College

[College of Liberal Arts and Sciences](http://www.las.ufl.edu)

Department/School

[Linguistics Department](http://lin.ufl.edu)

Linguistics Program Information

The Linguistics Department offers graduate programs leading to the M.A. and Ph.D. degrees with specializations in

- The core areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics)
- Language documentation
- Sociolinguistics and language change
- Discourse analysis
- TESL
- Second language acquisition
- Psycholinguistics
- Neurolinguistics

For detailed information on the program, including financial aid, please visit the website [http://lin.ufl.edu](http://lin.ufl.edu).

The Certificate in Second Language Acquisition and Teaching is offered to University of Florida graduate degree-seeking students in linguistics and related disciplines.

As part of its service to the University community, Linguistics also offers English as a Second Language training for international applicants and admitted students. These programs, the
English Language Institute (ELI), Academic Written English (AWE), and Academic Spoken English (ASE), are described in the Student Services section of this catalog. This information, along with links to the application form, are available at http://lin.ufl.edu.

Applicants who lack a background in linguistics should develop basic competency in the core areas before commencing graduate work. These deficiencies can be met by taking LIN 3010, LIN 3201, and LIN 3460 or the equivalent.

Degrees

Doctor of Philosophy

Master of Arts

Linguistics Departmental Courses

- EAP 5835: Academic Spoken English I
- EAP 5836: Academic Spoken English II
- EAP 5837: Academic Spoken English Tutorial
- EAP 5845: Academic Writing
- EAP 5846: Research and Technical Writing
- EAP 5937: Special Topics in Academic Spoken English
- LIN 5657: Gender and Language
- LIN 5741: Applied English Grammar
- LIN 6084: Introduction to Graduate Research
- LIN 6165: Field Methods
- LIN 6208: Phonetics for Linguists
- LIN 6226: Advanced Phonetics
- LIN 6323: Phonology
- LIN 6341: Issues in Phonology
- LIN 6402: Morphology
- LIN 6410: Issues in Morphology
- LIN 6501: Syntax
- LIN 6520: Issues in Syntax
- LIN 6571: Structure of Specific Language
- LIN 6601: Sociolinguistics
- LIN 6622: Bilingualism
- LIN 6707: Psycholinguistics
- LIN 6708C: Methods in Psycholinguistics
- LIN 6720: Second Language Acquisition
- LIN 6773: Topics in Computational Linguistics
- LIN 6796: Cognitive Neuroscience of Language
- LIN 6804: Semantics I
- LIN 6826: Introduction to Formal Pragmatics
- LIN 6856: Semantics II
- LIN 6905: Individual Study
- LIN 6910: Supervised Research
- LIN 6932: Special Topics
- LIN 6940: Supervised Teaching
- LIN 6971: Research for Master's Thesis
- LIN 7118: History of Linguistics
- LIN 7641: Seminar in Language Variation
- LIN 7725: Topics in Second Language Acquisition
- LIN 7885: Discourse Analysis and Pragmatics
- LIN 7979: Advanced Research
- LIN 7980: Research for Doctoral Dissertation
- TSL 6171: TESL I: Materials and Techniques
- TSL 6172: TESL II: Materials for Special Purposes

Mathematics

College
Department/School

Mathematics Department

Degrees

Doctor of Philosophy

without a concentration

concentration in Imaging Science and Technology

concentration in Quantitative Finance

Master of Arts in Teaching

Master of Science

Master of Science in Teaching

Courses

- MAA 5104: Advanced Calculus for Engineers and Physical Scientists I
- MAA 5105: Advanced Calculus for Engineers and Physical Scientists II
- MAA 5228: Modern Analysis I
- MAA 5229: Modern Analysis II
- MAA 5404: Introduction to Complex Variables for Engineers and Physical Scientists
- MAA 6236: Mathematical Analysis for Statisticians
- MAA 6406: Complex Analysis I
- MAA 6407: Complex Analysis II
- MAA 6616: Analysis I
- MAA 6617: Analysis II
- MAA 7526: Advanced Topics in Functional Analysis I
- MAA 7527: Advanced Topics in Functional Analysis II
- MAD 6206: Combinatorial Theory I
- MAD 6207: Combinatorial Theory II
- MAD 6406: Numerical Linear Algebra
- MAD 6407: Numerical Analysis
- MAD 7396: Topics in Combinatorial Theory I
- MAD 7397: Topics in Combinatorial Theory II
- MAE 6940: Supervised Teaching
- MAE 6943: Internship in College Teaching
- MAP 5304: Intermediate Differential Equations for Engineers and Physical Scientists
- MAP 5345: Introduction to Partial Differential Equations
- MAP 5489: Modeling in Mathematical Biology
- MAP 6208: Numerical Optimization
- MAP 6327: Applied Differential Equations I
- MAP 6356: Partial Differential Equations I
- MAP 6357: Partial Differential Equations II
- MAP 6375: Numerical Partial Differential Equations
- MAP 6376: Finite Element Method
- MAP 6467: Stochastic Differential Equations and Filtering Theory I
- MAP 6468: Stochastic Differential Equations and Filtering Theory II
- MAP 6472: Probability and Potential Theory I
- MAP 6473: Probability and Potential Theory II
- MAP 6487: Biomathematics Seminar I
• MAP 6488: Biomathematics Seminar II
• MAP 6505: Mathematical Methods of Physics and Engineering II
• MAP 6506: Mathematical Methods of Physics and Engineering II
• MAP 6941: Internship in Applied Mathematics
• MAP 7436: Seminar in Applied Mathematics I
• MAP 7437: Seminar in Applied Mathematics II
• MAS 5311: Introductory Algebra I
• MAS 5312: Introductory Algebra II
• MAS 6331: Algebra I
• MAS 6332: Algebra II
• MAS 7215: Theory of Numbers I
• MAS 7216: Theory of Numbers II
• MAS 7396: Advanced Topics in Algebra I
• MAS 7397: Topics in Algebra II
• MAT 6905: Individual Work
• MAT 6910: Supervised Research
• MAT 6932: Special Topics in Mathematics
• MAT 6971: Research for Master's Thesis
• MAT 7979: Advanced Research
• MAT 7980: Research for Doctoral Dissertation
• MHF 5107: Introduction to Set Theory
• MHF 5207: Foundations of Mathematics
• MHF 6306: Mathematical Logic I
• MHF 6307: Mathematical Logic II
• MTG 5316: Introduction to Topology I
• MTG 5317: Introduction to Topology II
• MTG 5411: Introduction to Fractal Geometry
• MTG 5412: Introduction to Dynamical Systems and Chaos
• MTG 6256: Differential Geometry I
• MTG 6257: Differential Geometry II
• MTG 6346: Topology I
• MTG 6347: Topology II
• MTG 6401: Ergodic Theory and Dynamical Systems I
• MTG 6402: Ergodic Theory and Dynamical Systems II
• MTG 7396: Advanced Topics in Topology I
• MTG 7397: Advanced Topics in Topology II

Philosophy

College

College of Liberal Arts and Sciences

Department/School

Philosophy Department

Degrees

Doctor of Philosophy

Master of Arts

Master of Arts in Teaching

Courses
Physics

College

College of Liberal Arts and Sciences

Department/School

Physics Department

Physics Program Information

The Department of Physics is dedicated to advancing the frontiers of knowledge in both pure and applied physics, thus providing an exciting intellectual climate for our graduate students. Our research activities include astrophysics (particle astrophysics, cosmology and gravitation), condensed matter and materials physics (experimental, theoretical and computational), low temperature physics, elementary particle physics (experimental and theoretical) and biological physics. With such diversity in research offerings you will have an opportunity to pursue research in most areas of contemporary physics. In spite of the size of our Department, we are committed to designing a program of graduate study that is tailored to your experience and interests. Our Graduate Coordinator sees that each of our graduate students receives personal attention and advice as they progress toward their advanced degree.

Graduate Program Overview

Preliminary Examination:
- Covers undergraduate subject matter
- Given twice a year; two years to complete

Graduate Core Courses
- Two semesters of quantum mechanics
- Two semesters of electromagnetism
- One semester of classical mechanics
- One semester of statistical mechanics
- Waivers given for equivalent
- Work at other institutions
- Completed in first or second years

Distribution Requirement
Advanced course work in three subfields
Usually completed by the end of the second year

Highlights
- Involvement in research in first summer (or sooner)!
- Diversity of research interdisciplinary options!
- Individualized program designed to meet the unique background of each student!

For more information, please see our website: http://www.physics.ufl.edu

Degrees

Doctor of Philosophy
without a concentration

concentration in Imaging Science and Technology

Master of Science

Master of Science in Teaching

Courses

- AST 6416: Physical Cosmology
- PHY 5277: Physics of Accident Reconstruction and Biomechanics
- PHY 5905: Individual Work
- PHY 6246: Classical Mechanics
- PHY 6346: Electromagnetic Theory I
- PHY 6347: Electromagnetic Theory II
- PHY 6536: Statistical Mechanics I
- PHY 6555C: Cryogenics
- PHY 6645: Quantum Mechanics I
- PHY 6646: Quantum Mechanics II
- PHY 6648: Quantum Field Theory I
- PHY 6905: Individual Work
- PHY 6910: Supervised Research
- PHY 6943: Internship in College Teaching
- PHY 6971: Research for Master's Thesis
- PHY 7097: Advanced Topics in Theoretical Physics
- PHY 7669: Quantum Field Theory II
- PHY 7939: Special Topics
- PHY 7999: Advanced Research
- PHY 7999: Research for Doctoral Dissertation
- PHZ 5155C: Physical Modeling and Simulation
- PHZ 5245: Introduction to Magnetic Resonance
- PHZ 5354: Introduction to Particle Physics
- PHZ 5405: Introduction to Solid-State Physics
- PHZ 6156: Computer Methods in Physics
- PHZ 6166: Qualitative Methods of Theoretical Physics
- PHZ 6355: Elementary Particle Physics I
- PHZ 6356: Standard Model of Elementary Particles I
- PHZ 6391: Seminar in Astrophysics
Plant Molecular and Cellular Biology

College

College of Liberal Arts and Sciences

Department/School

Plant Molecular and Cellular Biology Department

Program Information

Director: Gloria A. Moore
Graduate Coordinator: Matias Kirst

Plant Molecular and Cellular Biology (PCMB) is an interdisciplinary and interdepartmental graduate degree program that emphasizes understanding the molecular and cellular mechanisms that mediate plant development, adaptation, and evolution. Students can pursue an M.S. or a Ph.D. degree through the PCMB program. All students complete core courses in Advanced Genetics, Plant Molecular Biology and Genomics, Plant Cellular and Developmental Biology, and Plant Biochemistry. In addition to the core classes, students can select from a variety of courses in biochemistry, molecular biology, physiology, breeding, genetics, evolution, microbiology, and plant pathology.

New students are exposed to a variety of faculty and experimental systems while they rotate through several laboratories during their first two semesters before selecting an adviser and dissertation research area. Both M.S. and Ph.D. students take four required courses: PCB 5065 Advanced Genetics, PCB 5530 Plant Molecular Biology and Genomics, PCB 6528 Plant Cell and Developmental Biology and BOT 6935 Plant Biochemistry, as well as journal colloquium classes (PCB 7922 Journal Colloquium). Additional elective courses are taken after approval by the student's supervisory committee. For additional information see http://pmcb.ifas.ufl.edu.

Successful candidates should have a strong interest in plant molecular and cellular mechanisms controlling development, metabolism, adaptation, and evolution. Applicants typically have a B.S. or M.S. in the agricultural, forestry, biological or chemical sciences with advanced undergraduate coursework in genetics, molecular and cellular biology, and biochemistry. However, outstanding students from a broad range of science disciplines are actively considered.

Degrees

Doctor of Philosophy

without a concentration

concentration in Toxicology

Master of Science
Plant Molecular and Cellular Biology Courses

- BOT 6936: Special Topics
- PCB 5065: Advanced Genetics
- PCB 5530: Plant Molecular Biology and Genomics
- PCB 6528: Plant Cell and Developmental Biology
- PCB 6910: Supervised Research
- PCB 6937: Special Topics in Plant Molecular and Cellular Biology
- PCB 6971: Research for Master's Thesis
- PCB 7922: Journal Colloquy in Plant Molecular and Cellular Biology
- PCB 7979: Advanced Research
- PCB 7980: Research for Doctoral Dissertation

Political Science

College

College of Liberal Arts and Sciences

Department/School

Political Science Department

Political Science Program Information

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science--international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information about international relations, please contact the Political Science Department or visit their departmental page in this catalog.

Admission to graduate study in the Department of Political Science normally requires the completion of an undergraduate major in political science or its equivalent. Students without this preparation may be required to make up deficiencies early in their graduate work. The core sequence begins in the fall term, providing basic knowledge that students need in later semesters. In evaluating candidates for admission, the Department considers:

- Prior academic achievement
- GRE scores
- Letters of recommendation from three faculty members or others familiar with the academic potential or work habits of the applicant
- A statement of purpose that conveys intellectual ambitions, indicates how the program of study satisfies the student's interests and goals, and tells how the student would contribute to the program.

Fields of specialization offered by the Department include American government and politics, comparative politics, international relations, public policy, political theory, political behavior, and political methodology.

Master of Arts: The M.A. curricula are designed to serve students who want to pursue goals of an advanced general education, to gain skills and knowledge suitable for various types of public or private employment, or to prepare for further work at the doctoral level. M.A. students are required to complete POS 6736: The Conduct of Inquiry, and either POS 6737: Political Data Analysis or STA 6126: Statistical Methods in Social Research I. Students may complete their M.A. degrees with or without a thesis. Students pursuing the thesis option must complete 30 hours of graduate course work. The thesis is expected to be of length and quality comparable to papers presented at professional academic conferences or published in academic journals. Students pursuing the nonthesis option must complete 36 semester hours of graduate course work and defend two qualifying papers. For both M.A. options, course work in political science, exclusive of core courses, must include a minimum of two graduate-level courses in one field of political science.

The M.A. degree may be taken in conjunction with the following certificate programs:

- Political campaigning
- Public affairs

Students in these certificate programs pursue the nonthesis option.

Public affairs: This program trains students for leadership positions in state, local, and national governments as well as for careers in nonprofit organizations by providing students with knowledge and skills in the areas of organization behavior, public budgeting and finance, public management, policy analysis, program evaluation, and computer applications. The curriculum consists of seminars in political science, public administration, public policy, process, state and local politics, and research methods. Supervised internships in selected agencies in Florida are arranged by the Department of Political Science as an integral part of the training program. This specialization requires 39 hours of course work plus satisfactory completion of a 3-hour internship at the discretion of the Department. Students must also defend a final management-policy paper that incorporates analytical and substantive expertise. Graduates of the program serve in a variety of professional positions, including city managers, heads of municipal departments, directors of nonprofit organizations, analysts for the state legislature, and budget analysts for the federal government. In addition to the M.A. degree in political science, students receive the Certificate in Public Affairs.

Political campaigning: The program is designed to provide students with the basic political skills, insights, and experience that are critical for success in the rapidly changing profession of politics and political consulting. The program combines an awareness of the academic literature on mass and elite behavior with exposure to the increasingly sophisticated techniques used by campaigns. Students take a total of 39 hours from four major areas:

- Courses required of all M.A. students
- Courses oriented to practical aspects of political campaigning and governmental affairs (lobbying), including a 3-credit campaign-related internship
- Courses placing campaigns and elections in the broader context of American politics
- Related courses offered by the College of Journalism and Communications

Entry-level jobs have included such positions as legislative aide, campaign (or deputy campaign) manager, polling analyst, state party political coordinator, general campaign consultant, and media relations. With additional experience, some former students have gone on to become state legislator (and later, member of the U.S. House of Representatives), deputy chief of staff to the governor of Florida, partner in a major Washington area polling firm, assistant to the Minister of Justice and Attorney General of Canada, and head lobbyist for a nationwide restaurant chain.
Degrees Offered with a Major in Political Science

Doctor of Philosophy

without a concentration

concentration in Educational Policy

concentration in Tropical Conservation and Development

Master of Arts

without a concentration
concentration in International Development Policy and Administration

concentration in Public Affairs

concentration in Political Campaigning

concentration in Tropical Conservation and Development

Political Science Departmental Courses

- CPO 5935: Advanced Topics in Comparative Politics
- CPO 6046: Politics in Advanced Industrial Societies
- CPO 6059: Democracy and Its Competitors
- CPO 6077: Social Movements in Comparative Perspective
- CPO 6091: Introduction to Comparative Political Analysis
- CPO 6206: Seminar in African Politics
- CPO 6307: Latin American Politics I
- CPO 6732: Democratization and Regime Transition
- CPO 6736: Post-Communist politics
- CPO 6756: Comparative Elections and Party Systems
- CPO 6757: The European Union In Comparative Perspective
- CPO 6786: Peasant Politics and Society
- CPO 6795: Environmental Politics
- CPO 6796: Water Politics
- INR 5935: Advanced Topics in International Relations
- INR 6036: Globalization, Regionalism, and Governance
- INR 6039: International Political Economy
- INR 6208: Advanced International Relations Theory
- INR 6213: Seminar: Politics of the European Union
- INR 6249: Inter-American Relations
- INR 6305: Politics of American Foreign Policy Making
- INR 6337: Survey of International Security
- INR 6352: International Environmental Relations
- INR 6507: International Organization
- INR 6607: International Relations Theory
- INR 6936: Seminar in Transnational and Global Studies
- INR 6938: Seminar in Culture and World Politics
- PAD 5935: Advanced Topics in Public Administration
- PAD 6106: Public Administration Theory
- PAD 6227: Public Budgeting and Finance
- PAD 6434: Leadership and Ethics in Public Agencies
- POS 6458: Politics of Campaign Finance
- PAD 6946: Internship in Government
- POS 6535: Advanced Topics in Political Science
- POS 6645: Seminar in American Politics
- POS 6648: American Political Development
- POS 6657: State Government and Politics
- POS 6614: Urban Politics
- POS 6615: Community Analysis
- POS 6696: Patrons, Clients, Corruption, and Accountability
- POS 6627: Political Behavior
- POS 6628: Empirical Political Research
- POS 6629: Political Participation
- POS 6674: Political Campaigning
- POS 6678: Advanced Campaign Strategy
- POS 6679: The Politics of Direct Democracy
- POS 6692: Religion and Politics
- POS 6627: Legislative Process
- POS 6653: Political Parties and Interest Groups
- POS 6676: Bureaucratic Politics in the U.S.
- POS 6707: Qualitative Research Methods for Political Science
- POS 6712: Empirical Theories of Politics
- POS 6716: Scope and Epistemologies of Political Science
- POS 6736: The Conduct of Inquiry
- POS 6737: Political Data Analysis
- POS 6747: Topics in Political Research Methodology
- POS 6757: Survey Research
- POS 6909: Individual Work
- POS 6910: Supervised Research
- POS 6933: Special Topics
- POS 6940: Supervised Teaching
- POS 6971: Research for Master's Thesis
- POS 7979: Advanced Research
Political Science - International Relations

College

College of Liberal Arts and Sciences

Department/School

Political Science Department

Political Science—International Relations Program Information

The Department of Political Science currently offers two graduate degrees: Master of Arts (thesis or nonthesis option) and Doctor of Philosophy. The political science—international relations program currently offers the Master of Arts (thesis or nonthesis option). Requirements for these degrees are given in the Graduate Degrees Section of this catalog. For further information, please contact the Political Science Department directly or visit their departmental catalog page.

Admission to graduate study in the Department of Political Science normally requires the completion of an undergraduate major in political science or its equivalent. Students without this preparation may be required to make up deficiencies early in their graduate work. The core sequence begins in the fall term, providing basic knowledge that students need in later semesters. In evaluating candidates for admission, the Department considers

- Prior academic achievement
- GRE scores
- Letters of recommendation from three faculty members or others familiar with the academic potential or work habits of the applicant
- A statement of purpose that conveys intellectual ambitions, indicates how the program of study satisfies the student’s interests and goals, and tells how the student would contribute to the program.

Political science—international relations: The M.A. degree in political science—international relations is designed to provide professional education to those whose primary interest is a career in foreign relations. In this program, students must complete course work in the core of international relations theory and in two or more of the four major subfields of international relations, international political economy, international security, foreign policy, and international organization. The M.A. is a 36-hour degree, requiring successful completion of a 6-credit political science core sequence, 15 credits of departmental or extra-department electives, and a 10-credit international relations major. Students may pursue either a thesis option or take a comprehensive examination at the end of the program.

Law/Public Affairs joint degree program: This program culminates in the Master of Arts in political science and Juris Doctor degrees. A joint degree program culminating in the Master of Arts in political science international relations and Juris Doctor degrees is also available. The joint program enables students to earn both the J.D. and the M.A. in less time than would be required to earn both degrees consecutively. Full-time students who make satisfactory progress can usually earn both degrees in 4 years. Candidates for the joint degree program must meet the entrance requirements for, and be admitted to, both the College of Law and the Department of Political Science. These requirements include both the LSAT and the GRE. Students are encouraged to announce their intent of seeking a joint degree as soon as possible. The Department of Political Science will allow 12 hours of appropriate upper division courses to be credited toward the M.A. degree. The 12 credits selected from the law curriculum must be approved by the Political Science graduate coordinator on the recommendation of the student’s supervisory committee. The College of Law will permit 12 hours of credit earned in political science graduate courses to be credited toward the J.D. degree. Students in the joint degree program are permitted, but not required, to pursue a companion certificate program in public affairs, political campaigning, or international development policy and administration.

Combined bachelor’s/master’s degree program: This combined program is designed for superior students who have the ability to pursue an accelerated program leading to the Bachelor of Arts and the Master of Arts degree in political science or political science international relations.

Up to 12 semester hours of approved graduate-level political science courses may be used as credit for both the undergraduate and graduate degree. Applicants to the program must present

- Acceptable scores on the verbal, quantitative, and analytical writing portions of the GRE
- Completion of at least 24 semester hours at the University of Florida (including at least 12 semester hours of political science) with a GPA of 3.7 or higher
- Letters of recommendation from two faculty members in the Department of Political Science

The combined program is not recommended for students considering a Ph.D. program in political science at UF but is appropriate for those considering one of the M.A. degree plus certificate programs described above. Further information concerning this program is available from the departmental undergraduate and graduate coordinators.

Degrees
Master of Arts

Master of Arts in Teaching

Political Science Departmental Courses

- CPO 5935: Advanced Topics in Comparative Politics
- CPO 6046: Politics in Advanced Industrial Societies
- CPO 6059: Democracy and Its Competitors
- CPO 6077: Social Movements in Comparative Perspective
- CPO 6091: Introduction to Comparative Political Analysis
- CPO 6206: Seminar in African Politics
- CPO 6307: Latin American Politics I
- CPO 6732: Democratization and Regime Transition
- CPO 6736: Post-Communist politics
- CPO 6756: Comparative Elections and Party Systems
- CPO 6757: The European Union In Comparative Perspective
- CPO 6786: Peasant Politics and Society
- CPO 6795: Environmental Politics
- CPO 6796: Water Politics
- INR 5935: Advanced Topics in International Relations
- INR 6036: Globalization, Regionalism, and Governance
- INR 6039: International Political Economy
- INR 6206: Advanced International Relations Theory
- INR 6213: Seminar: Politics of the European Union
- INR 6249: Inter-American Relations
- INR 6305: Politics of American Foreign Policy Making
- INR 6337: Survey of International Security
- INR 6352: International Environmental Relations
- INR 6507: International Organization
- INR 6607: International Relations Theory
- INR 6936: Seminar in Transnational and Global Studies
- INR 6938: Seminar in Culture and World Politics
- PAD 5935: Advanced Topics in Public Administration
- PAD 6108: Public Administration Theory
- PAD 6227: Public Budgeting and Finance
- PAD 6434: Leadership and Ethics in Public Agencies
- POS 6458: Politics of Campaign Finance
- POS 6496: Internship in Government
- POS 6535: Advanced Topics in Political Science
- POS 6605: Seminar in American Politics
- POS 6608: American Political Development
- POS 6627: State Government and Politics
- POS 6646: Urban Politics
- POS 6657: Community Analysis
- POS 6696: Patrons, Clients, Corruption, and Accountability
- POS 6607: Political Behavior
- POS 6628: Empirical Political Research
- POS 6672: Political Participation
- POS 6674: Political Campaigning
- POS 6678: Advanced Campaign Strategy
- POS 6679: The Politics of Direct Democracy
- POS 6692: Religion and Politics
- POS 6642: Legislative Process
- POS 6645: Political Parties and Interest Groups
- POS 6676: Bureaucratic Politics in the U.S.
- POS 6707: Qualitative Research Methods for Political Science
- POS 6712: Empirical Theories of Politics
- POS 6716: Scope and Epistemologies of Political Science
- POS 6736: The Conduct of Inquiry
- POS 6737: Political Data Analysis
- POS 6747: Topics in Political Research Methodology
- POS 6757: Survey Research
- POS 6909: Individual Work
- POS 6910: Supervised Research
- POS 6933: Special Topics
- POS 6940: Supervised Teaching
- POS 6971: Research for Master's Thesis
- POS 7979: Advanced Research
- POS 7980: Research for Doctoral Dissertation
- POT 5935: Advanced Topics in Political Theory
- POT 6016: Ancient Political Thought
- POT 6056: Modern Political Thought
The Department of Psychology offers the Master of Science and the Doctor of Philosophy degrees. Complete descriptions of the minimum requirements for these degrees are provided in the Graduate Degrees section of this catalog. Students are not accepted for a terminal master's degree.

Doctoral areas of specialization include the research areas of developmental, behavior analysis, behavioral and cognitive neuroscience, social psychology, and counseling psychology. The training program in counseling psychology is accredited by the American Psychological Association. A predoctoral internship of one year is required for the counseling psychology program.

Undergraduate preparation should include at least one course in experimental methods and one course in statistics. Other courses in psychology should include at least three or four of the following: cognition, developmental, learning, personality, physiological, sensory, and social. Applicants should have competitive GRE scores and GPA (3.5 or higher).

Co-major: The Department offers a co-major program in conjunction with the College of Education leading to the Doctor of Philosophy degree in psychology and research and evaluation methodology.

Degrees

Doctor of Philosophy

without a concentration

concentration in Women's/Gender Studies

Master of Arts

Master of Science
without a concentration

Psychology Departmental Courses

- CBH 6056: Comparative Psychology
- CLP 6169: Seminar: Psychology and Deviant Behavior
- CLP 7525: Best Methods for Studying Psychological Change
- DEP 6057: Advanced Developmental Psychology I
- DEP 6058: Advanced Developmental Psychology II
- DEP 6059: Seminar: Special Topics in Developmental Psychology
- DEP 6099: Survey of Developmental Psychology
- DEP 6216: Psychological Disturbances of Children
- DEP 6406: Advanced Adulthood and Aging
- DEP 6409: Seminar: Adult Development and Aging
- DEP 6799: Current Research Methods in Developmental Psychology
- DEP 6936: Current Research in Developmental Psychology
- DEP 7608: Theories of Developmental Psychology
- EAB 5436: Behavioral Pharmacology
- EAB 6099: Survey of Behavior Analysis
- EAB 6118: Theoretical Foundations of Behavior Analysis
- EAB 6707: Applied Behavior I
- EAB 6712: Experimental Psychopathology
- EAB 6716: Behavior Analysis in Developmental Disabilities
- EAB 6719: Seminar: Strategies and Tactics of Human Behavioral Research
- EAB 6750: Quantitative Methods
- EAB 6790: Ethics and Professional Issues
- EAB 6937C: Seminar: Special Topics in Experimental Analysis of Behavior
- EAB 6939: Seminar: Special Topics in Applied Behavior Analysis
- EAB 7089: Advanced Seminar: Experimental Analysis of Behavior
- EAB 7090: Verbal Behavior
- EXP 6099: Survey of Cognition and Sensory Processes
- EXP 6609: Seminar: Cognition
- EXP 6939: Seminar: Current Issues in Cognition and Sensory Processes
- GEY 7408: Psychotherapy with Older Adults
- MHS 6430: Introduction to Family Counseling
- MHS 6440: Marriage Counseling
- MHS 7431: Advanced Family Counseling
- PCO 6057: Psychology of Counseling I
- PCO 6058: Psychology of Counseling II
- PCO 6059: Psychology of Counseling III
- PCO 6278: Diversity and Multiculturalism in Counseling Psychology
- PCO 6316C: Psychological Assessment I
- PCO 6317C: Psychological Assessment II
- PCO 6931: History and Contemporary Issues in Counseling Psychology
- PCO 6939: Seminar: Current Topics in Counseling Psychology
- PCO 7217: Professional Ethics and Skills in Counseling Psychology
- PCO 7247: Group Counseling/Psychology
- PCO 7537: Vocational Psychology
- PCO 7944: Practicum in Counseling Psychology
- PCO 7945: Advanced Practicum in Counseling Psychology
- PCO 7949: Internship in Counseling Psychology
- PPE 6059: Seminar in Personality
- PSB 5445: Drug Use and Abuse
- PSB 5935: Seminar in Physiological Psychology
- PSB 6058: Neuroethology
- PSB 6087: Advanced Physiological Psychology
- PSB 6088L: Behavioral Neurobiology
- PSB 6099: Survey of Physiological and Comparative Psychology
- PSB 7248: Neurobehavioral Relations
- PSB 7249: Seminar in Neural Mechanisms and Behavior
- PSY 6608: History of Psychology
- PSY 6905: Individual Work
- PSY 6910: Supervised Research
- PSY 6930: Topics in Psychology
- PSY 6939: Seminar: The Teaching of Psychology
- PSY 6940: Supervised Teaching
- PSY 6971: Research for Master's Thesis
- PSY 7979: Advanced Research
- PSY 7980: Research for Doctoral Dissertation
- SOP 6099: Survey of Social Psychology
- SOP 6219C: Advanced Research Techniques in Social-Personality Psychology
- SOP 6409: Seminar: Current Topics in Social-Personality Psychology
- SOP 6419: Seminar: Attitudes and Social Cognition
- SOP 6509: Seminar: Interpersonal Relations and Group Processes
- SOP 6929: Colloquium on Research in Social-Personality Psychology

Religion
College

College of Liberal Arts and Sciences

Department/School

Religion Department

Religion Program

The Department of Religion offers the Master of Arts and Doctor of Philosophy degrees in three specialty fields:

- Religion in the Americas
- Religions of Asia
- Religion and nature.

Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog.

The first two specialty fields provide advanced education in the academic study of religion focusing on the religions and religious experiences of indigenous peoples. The third specialty field addresses the religious and ethical dimensions of human attitudes and practices regarding the natural world. Specific and current requirements are given at http://www.religion.ufl.edu under “Graduate Program.” In special instances, and with the agreement of the supervisory committee and two sponsoring faculty members, master’s degree students may choose an area outside the three specialty fields.

In addition to materials requested by the Graduate School for admission, applicants must send directly to the Religion Department the following evidence of aptitude and interest

- Three references from persons competent to evaluate the applicant's potential for graduate work
- An essay of 3 to 5 double-spaced, typewritten pages identifying the applicant's goals and particular interests pertinent to the three available specialty fields (this essay is extremely important and applicants should attend to it carefully)
- A writing sample.

Beyond these requirements, applicants need to show clear evidence of solid preparation before admission. This usually includes formal study of the primary language in the specialty field. Acceptable scores on the GRE General Test are required. In addition to evidence of preparation and academic promise, the Department gives careful consideration to the fit between an applicant’s central scholarly interests and the resources the Department and University have to offer.

Master of Arts: The M.A. degree provides a broad background in the study of religious traditions, theoretical orientations in the discipline, and an initial concentration in one of the three specialty fields. Course work culminates in a thesis and oral examination on the thesis and course work.

Total credits: Thirty credit hours are required. These include Method and Theory I and II, the core course(s) of the major field (or equivalent for those not in one of the three specialty fields), and 6 hours of thesis research credits. The additional hours shall consist of further courses in the specialty field, other graduate seminars, and up to 6 hours of research language study.

Language study: All M.A. students are required to demonstrate competency in a scholarly language other than English before beginning the thesis. Most languages are acceptable, though students should consult the individual field requirements. The chosen language must be approved by the student’s mentor and the graduate coordinator.

Thesis: Each student, guided by a supervisory committee, will prepare a Master of Arts thesis, acceptable to the Department of Religion and the Graduate School, and undergo an oral examination.

Promotion to doctoral status: The Department anticipates admitting only the best qualified M.A. students to the doctoral program. Resident graduate students who wish to apply for doctoral status (i.e., permission to fulfill requirements leading to doctoral qualifying examinations) must apply during the semester before they wish that status to be changed. A review and decision will be made by the field faculty and the graduate committee.

Doctor of Philosophy: The Ph.D. program trains future scholars to conduct original research and teach in colleges, universities, and other educational, governmental, and nongovernmental institutions. A student usually enters with a religion master’s degree either from this or another institution. Those admitted with master's degrees in disciplines other than religion may petition to bypass the religion master’s degree with additional language course work. All students are admitted into one of the three specialty fields and must fulfill the requirements of that field, as outlined. In addition, all students are encouraged to take courses in other departments to support work in their specialty field.

Course requirements: The University of Florida requires 90 hours of course work for the Ph.D. These may include up to 30 hours from a completed M.A. degree. The number of hours credited toward the Ph.D. is at the discretion of department faculty. A minimum of 45 hours is devoted to course work at the doctoral level. The specific distribution of course work depends on the specialization but will include intensive work in the major area of specialization, 6 hours of method and theory (if not taken at the M.A. level) and 12 hours devoted to dissertation writing and research.

Language requirements: All doctoral students must demonstrate proficiency in at least one and in many cases two languages other than English. The chosen language(s) as well as how and when the student’s competence will be judged must be approved by the student's supervisory committee chair. Frequently language competence is documented by 1) taking an appropriate course or courses in the language with a grade of “B” or better, or 2) passing a translation exam (usually administered by a department member or a language department at the University). Basic course work for scholarly languages will not count toward the required 90 credit hours. However, students studying a scholarly language connected to their research needs (above and beyond basic competence) can receive 6 (or more) credit hours for such advanced courses toward the required 90 total credit hours, with approval of the student's supervisory committee chair.

Qualifying examinations: Qualifying examinations form a bridge between course work and dissertation research. Normally students will take qualifying examinations during their third year in residence. The precise areas of questioning and the reading list are decided by the supervisory committee in consultation with the student, well in advance of the examinations, but no later than the beginning of the term in which the student intends to take the qualifying examinations.
Dissertation proposal: Each doctoral candidate submits a formal dissertation proposal to the candidate’s supervisory committee chair at least 3 weeks before the end of the semester after the qualifying examination.

Admission to candidacy: On successfully completing the qualifying examination and the dissertation proposal, and all other course and language requirements, and with the approval of the supervisory committee, students make formal application to the Department and Graduate School for admission to Ph.D. candidacy.

Dissertation and its defense: The final years of the program are devoted to dissertation research and writing. The student is expected to present the completed dissertation and defend it at a public oral defense conducted by the supervisory committee.

Mentoring: Each student is assigned a faculty mentor on admission to the program, based on expressions of faculty interest and the student's intended area of concentration. The mentor and graduate coordinator answer questions and provide support for the student in choosing courses and planning a program. By the end of the second semester, all master's degree students must designate their supervisory committee chair and one additional department committee member. By the end of the second semester, all doctoral students must designate their committee chair. By no later than the end of the fourth semester of study, all doctoral students must designate a four-member supervisory committee including the chair and one member from outside the department. For details about the programs listed above, visit http://www.religion.ufl.edu.

Degrees Offered with a Major in Religion

Doctor of Philosophy

without a concentration

collection in Tropical Conservation and Development

collection in Women's/Gender Studies

Master of Arts

without a concentration

concentration in Jewish Studies

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies

Courses

- REL 5***
- RLG5143: Religion and Social Change
Romance Languages (Language, Literature and Culture)

College

College of Liberal Arts and Sciences

Department/School

Department of Languages, Literatures and Cultures

Degrees Offered with a Major in Romance Languages

Doctor of Philosophy

concentration in French and Francophone Studies
Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW 6930: Special Study in Romance Languages and Literatures
- SPN 6166: Teaching Spanish for the Professions
- SPN 6940: Supervised Teaching
- SPW 6545: Spanish Romanticism
- SPN 6705: Foundations of Hispanic Linguistics
- SPN 6845: History of the Spanish Language
- SPS 6905: Individual Study
- SPS 6910: Supervised Research
- SPS 6940: Supervised Teaching
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation
- SPW 6535: Spanish Romanticism

Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6715: Formal Instruction and Acquisition of Spanish
- SPN 6735: Special Study in Spanish Linguistics
- SPN 6785: Advanced Spanish Phonetics
- SPN 6827: Sociolinguistics of the Spanish-Speaking World
- SPN 6835: Spanish and Spanish-American Dialectology
- SPN 6845: History of the Spanish Language
- SPN 6848: Medieval Spanish Linguistics
- SPN 6855: Structure of Spanish
- SPN 6856: Spanish in Contact: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FOL 6943: Romance Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6236: Spanish-American Narrative from the origins to Criollismo
- SPW 6269: Spanish Novel of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6286: Contemporary Spanish-American Narrative II
- SPW 6306: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPN 6425: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6729: The Generation of 1898
- SPW 6806: Introduction to Graduate Study and Research
- SPW 6902: Special Study in Spanish or Spanish-American Literature
- SPW 6905: Individual Work
- SPW 6910: Supervised Research
- SPW 6934: Seminar in Spanish American Literature and Culture
- SPW 6938: Seminar in Spanish Literature and Culture
- SPW 6971: Research for Master's Thesis
- SPW 7979: Advanced Research
- SPW 7980: Research for Doctoral Dissertation

Portuguese

- POW 6276: Twentieth-Century Brazilian Novel
- POW 6385: Brazilian Lyric
- POW 6386: Brazilian Drama
- POW 6905: Individual Work
- POW 6930: Rotating Topics in Brazilian or Portuguese Literature

Romance Languages (Spanish and Portuguese Studies)

College

College of Liberal Arts and Sciences
Department/School

Spanish and Portuguese Studies Department

Degrees Offered with a Major in Romance Languages

Doctor of Philosophy

concentration in Spanish

Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW 6930: Special Study in Romance Languages and Literatures
- SPN 6166: Teaching Spanish for the Professions
- SPN 6940: Supervised Teaching
- SPW 6545: Spanish Romanticism
- SPN 6705: Foundations of Hispanic Linguistics
- SPN 6845: History of the Spanish Language
- SPS 6905: Individual Study
- SPS 6910: Supervised Research
- SPS 6940: Supervised Teaching
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation
- SPW 6535: Spanish Romanticism

Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6715: Formal Instruction and Acquisition of Spanish
- SPN 6735: Special Study in Spanish Linguistics
- SPN 6785: Advanced Spanish Phonetics
- SPN 6827: Sociolinguistics of the Spanish-Speaking World
- SPN 6835: Spanish and Spanish-American Dialectology
- SPN 6845: History of the Spanish Language
- SPN 6848: Medieval Spanish Linguistics
- SPN 6855: Structure of Spanish
- SPN 6856: Spanish in Contact: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FOL 6943: Romance Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6236: Spanish-American Narrative from the origins to Criollismo
- SPW 6269: Spanish Novel of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6294: Contemporary Spanish-American Narrative II
- SPW 6306: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6355: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPW 6425: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6729: The Generation of 1898
- SPW 6806: Introduction to Graduate Study and Research
- SPW 6902: Special Study in Spanish or Spanish-American Literature
- SPW 6905: Individual Work
- SPW 6910: Supervised Research
- SPW 6934: Seminar in Spanish American Literature and Culture
- SPW 6938: Seminar in Spanish Literature and Culture
- SPW 6971: Research for Master's Thesis
Sociologists conduct research to understand the social forces that shape all of our lives, often in hopes of improving everyday life and the life chances of each person. Graduate studies in sociology provide the people skills and technical skills to organize information, communicate analytical research to academic and lay audiences, and prepare well-reasoned and carefully-written reports and documents that contribute to societal well-being. Our award-winning and internationally-known faculty successfully mentor graduate students to complete their studies and become established in their professional academic and nonacademic careers.

We offer particular expertise in these areas: environment and resources, families, aging, gender, health, sexualities, life course, and race-ethnicity in US and global perspectives. There is also considerable expertise in: demography, social inequality, Latin American studies, Latino sociology, social psychology, deviance, and political sociology. We take great pride in the fact that our faculty are involved in interdisciplinary research projects that span nearly all of the University's colleges and academic programs, including: the School of Natural Resources and the Environment, the Water Institute, the Emerging Pathogens Institute, the Center for Latin American Studies, the Center for European Studies, the Center for Women's Studies and Gender Research, the Health Science Center, and the Jewish Studies Center. Wherever you go on campus, you will most likely find at least one Sociologist from our department making major contributions.

Minimum requirements for the M.A. and Ph.D. degrees are given in the Graduate Degrees section of this catalog. Admission to either Sociology graduate program requires a bachelor's degree in Sociology or related social science as approved by the Department. Current UF students may also enter the M.A. program through the combined B.A./M.A. program. The Sociology graduate programs look for mature students with outstanding potential and research interests that complement those of our faculty.

Prospective students should examine the research interests of the Sociology Graduate Faculty to obtain a more detailed sense of faculty expertise and research areas, see the department website: http://soccrim.clas.ufl.edu/graduate/. Applications for admission and fellowship support are due December 1 of each year. Students planning to apply for admission should take the Graduate Record Examination at the earliest possible date.

Degrees Offered with a Major in Sociology

Doctor of Philosophy

without a concentration

concentration in Tropical Conservation and Development

concentration in Women's/Gender Studies
Master of Arts

without a concentration

concentration in Tropical Conservation and Development

Courses

- SYA 6018: Classical Social Theories
- SYA 6126: Contemporary Sociological Theory
- SYA 6305: Methods in Social Research I
- SYA 6306: Methods in Social Research II
- SYA 6315: Qualitative Research Methods
- SYA 6327: Research Problems in Deviance
- SYA 6407: Quantitative Research Methods
- SYA 6905: Individual Work
- SYA 6910: Supervised Research
- SYA 6942: Applied Social Research Project
- SYA 6971: Research for Master's Thesis
- SYA 7903: Special Study in Sociology
- SYA 7979: Advanced Research
- SYA 7980: Research for Doctoral Dissertation
- SYD 6436: Metropolitan Growth and Development
- SYD 6517: Seminar in Environment and Society
- SYD 6518: Core Issues in Environmental and Resource Sociology
- SYD 6706: Racial and Ethnic Relations
- SYD 6707: Black and White Americans: Sociological Perspectives
- SYD 6807: Sociology of Gender
- SYD 6826: Men and Masculinities
- SYD 7808: Reproduction and Gender
- SYO 6107: American Families
- SYO 6126: Family Theories
- SYO 6175: Topics in Family Research
- SYO 6407: Health Disparities
- SYO 6427: Health and Aging
- SYO 6535: Social Inequality
- SYO 6806: Gender and Society
- SYP 6115: Seminar in Symbolic Interaction
- SYP 6517: Theories of Crime and Deviance
- SYP 6545: Sociology of Law
- SYP 6735: Sociology of Aging and the Life Course
- SYP 6736: Sociology of the Aged
- SYP 6745: Aging and End-of-Life Issues

Spanish

College

College of Liberal Arts and Sciences

Department/School

Spanish and Portuguese Studies Department

Degrees
Master of Arts

Master of Arts in Teaching

Spanish and Portuguese Studies Departmental Courses

- FOL 6326: Technology in Foreign Language Education
- FOW 6930: Special Study in Romance Languages and Literatures
- SPN 6166: Teaching Spanish for the Professions
- SPN 6940: Supervised Teaching
- SPW 6545: Spanish Romanticism
- SPN 6705: Foundations of Hispanic Linguistics
- SPN 6845: History of the Spanish Language
- SPS 6905: Individual Study
- SPS 6910: Supervised Research
- SPS 6940: Supervised Teaching
- SPS 7979: Advanced Research
- SPS 7980: Research for Doctoral Dissertation
- SPW 6835: Spanish Romanticism

Spanish

- SPN 6315: Advanced Composition and Syntax
- SPN 6715: Formal Instruction and Acquisition of Spanish
- SPN 6735: Special Study in Spanish Linguistics
- SPN 6785: Advanced Spanish Phonetics
- SPN 6827: Sociolinguistics of the Spanish-Speaking World
- SPN 6835: Spanish and Spanish-American Dialectology
- SPN 6845: History of the Spanish Language
- SPN 6848: Medieval Spanish Linguistics
- SPN 6855: Structure of Spanish
- SPN 6856: Spanish in Contact: Issues in Bilingualism
- SPN 6900: Directed Readings in Spanish
- FOL 6943: Romance Language Teaching Methods
- SPN 6945: Practicum in Advanced College Teaching
- SPW 6209: Colonial Spanish-American Literature
- SPW 6216: Spanish Prose Fiction of the Golden Age
- SPW 6236: Spanish-American Narrative from the Origins to Criollismo
- SPW 6269: Spanish Novel of the Nineteenth Century
- SPW 6278: Postwar Spanish Fiction
- SPW 6285: Contemporary Spanish-American Narrative I
- SPW 6286: Contemporary Spanish-American Narrative II
- SPW 6306: Spanish-American Theater
- SPW 6315: Spanish Drama of the Golden Age
- SPW 6337: Golden Age Poetry
- SPW 6345: Twentieth-Century Spanish Poetry
- SPW 6356: Spanish-American Poetry from Romanticism to Vanguardismo
- SPW 6357: Contemporary Spanish-American Poetry
- SPW 6366: Spanish-American Essay
- SPN 6425: Writing for the Profession
- SPW 6606: Cervantes
- SPW 6679: The Generation of 1898
- SPW 6806: Introduction to Graduate Study and Research
- SPW 6902: Special Study in Spanish or Spanish-American Literature
- SPW 6905: Individual Work
- SPW 6910: Supervised Research
- SPW 6934: Seminar in Spanish American Literature and Culture
- SPW 6938: Seminar in Spanish Literature and Culture
- SPW 6971: Research for Master's Thesis
- SPW 7979: Advanced Research
- SPW 7980: Research for Doctoral Dissertation

Portuguese

- POW 6276: Twentieth-Century Brazilian Novel
- POW 6385: Brazilian Lyric
POW 6386: Brazilian Drama
POW 6905: Individual Work
POW 6930: Rotating Topics in Brazilian or Portuguese Literature

Statistics

College

College of Liberal Arts and Sciences

Department/School

Statistics Department

Degrees Offered with a Major in Statistics

Doctor of Philosophy

without a concentration

concentration in Quantitative Finance

Master of Science in Statistics

Master of Statistics

Statistics Departmental Courses

- STA 5106: Computer Programs in Statistical Analysis
- STA 5223: Applied Sample Survey Methods
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 5503: Categorical Data Methods
- STA 5507: Applied Nonparametric Methods
- STA 5701: Applied Multivariate Methods
- STA 5715: Applied Survival Analysis
- STA 5823: Stochastic Process Methods
- STA 5856: Applied Time Series Methods
- STA 6092: Applied Statistical Practice
- STA 6126: Statistical Methods in Social Research I
- STA 6127: Statistical Methods in Social Research II
- STA 6166: Statistical Methods in Research I
- STA 6167: Statistical Methods in Research II
- STA 6177: Applied Survival Analysis
- STA 6178: Genetic Data Analysis
- STA 6207: Regression Analysis
- STA 6208: Basic Design and Analysis of Experiments
- STA 6209: Design and Analysis of Experiments
- STA 6226: Sampling Theory and Application
- STA 6246: Theory of Linear Models
Sustainable Development Practice

College

College of Liberal Arts and Sciences

Department/School

Latin American Studies Department

Sustainable Development Practice Program

Director: G. Galloway  
Program Coordinator: C. Tarter

The Master of Sustainable Development Practice (MDP) Program offers the following academic programs:

- An interdisciplinary Master’s degree in Sustainable Development Practice
- A graduate certificate in Sustainable Development Practice

The MDP Program is jointly administered by the Center for Latin American Studies and the Center for African Studies. The Master’s degree is described in the Other Master’s Degrees section of the Graduate Catalog. The certificate program is described in the Interdisciplinary Graduate Certificates section of the Graduate Catalog. More information about the MDP Program can also be found at the website http://www.africa.ufl.edu/mdp/index.html.

Degrees

Master of Sustainable Development Practice

Sustainable Development Courses

- AFS 6905: Individual Work in African Studies
• EVR 5705: Natural Resources and Innovation Systems
• LAS 6291: Conservation and Development Skills
• LAS 6938: Seminar in Modern Latin American Studies
• LAS 6943: Development Theory and Practice in Latin America
• PHC 6445: Global Public Health and Development II
• PHC 6764: Global Public Health and Development I

African Studies Courses

• AFS 5061: Africana Bibliography
• AFS 6060: Research Problems in African Studies
• AFS 6305: Development Theory and Practice Intro
• AFS 6307: Foundations of Economics for Sustainable Development
• AFS 6357: Anthropology of Humanitarian Intervention
• AFS 6905: Individual Work in African Studies

Latin American Studies Courses

• FOT 6940: Translation Studies Practicum
• LAS 6008: Ecological Principles
• LAS 6220: Issues and Perspectives in Latin American Studies
• LAS 6290: Tropical Conservation and Development
• LAS 6291: Conservation and Development Skills
• LAS 6292: Tropical Conservation and Development Research Methods
• LAS 6293: Design and Methods of Research in Latin American Studies
• LAS 6295: Latin American Business Environment
• LAS 6296: Latin American Business Topics
• LAS 6905: Individual Work
• LAS 6938: Seminar in Modern Latin American Studies
• LAS 6940: Tropical Conservation and Development Practicum
• LAS 6943: Development Theory and Practice in Latin America
• LAS 6971: Research for Master's Thesis

Additional Course Offerings

College of Agricultural and Life Sciences Courses

• ALS 5106: Food and the Environment
• ALS 5364C: Molecular Techniques Laboratory
• ALS 5905: Individual Study
• ALS 5932: Special Topics
• ALS 6046: Grant Writing
• ALS 6921: Colloquium on Plant Pests of Regulatory Significance
• ALS 6925: Integrated Plant Medicine
• ALS 6930: Graduate Seminar
• ALS 6931: Plant Medicine Program Seminar
• ALS 6942: Principles of Plant Pest Risk Assessment and Management
• ALS 6943: Internship in Plant Pest Risk Assessment and Management
• BCH 5045: Graduate Survey of Biochemistry

College of Public Health and Health Professions Courses

• HSC 5938: Special Topics
• HSC 6905: Independent Study
• HSC 6939: Special Topics
• HSC 6940: Supervised Teaching
• PHC 6000: Epidemiology Methods I
• PHC 6001: Principles of Epidemiology in Public Health
• PHC 6002: Epidemiology of Infectious Diseases
• PHC 6003: Epidemiology of Chronic Diseases and Disability
• PHC 6009: Biology and Epidemiology of HIV/AIDS
• PHC 6011: Epidemiology Methods II
• PHC 6016: Social Epidemiology in Public Health
• PHC 6036: Environmental Infectious Diseases: A Molecular Approach
• PHC 6050: Statistical Methods for Health Sciences Research I
• PHC 6102: Introduction to Public Health Administrative Systems
• PHC 6103: Systems Thinking for Public Health
• PHC 6104: Evidence-Based Management of Public Health Programs
• PHC 6146: Public Health Program Planning and Evaluation
• PHC 6153: Public Policy and Aging
• PHC 6183: Disaster Preparedness and Emergency Response
• PHC 6194: Spatial Epidemiology
• PHC 6195: Health information for Diverse Populations: Theory & Methods
• PHC 6220: Overview of Long-Term Care
• PHC 6301: Aquatic Systems and Environmental Health
• PHC 6309: Environmental Justice Issues in Public Health
• PHC 6312: Water Quality and Human Health
• PHC 6313: Environmental Health Concepts in Public Health
• PHC 6316: Health, Risk, and Crisis Communication
• PHC 6317: Risk Communication for Public Health Practice
• PHC 6346: Occupational and Environmental Health Among Agriculture Workers
• PHC 6370: Public Health Biology
• PHC 6403: Adolescence, Risk Taking and Health
• PHC 6404: Gender, Sexuality, and Health
• PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
• PHC 6413: Critical Incidents and Violence in Communities
• PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
• PHC 6419: Biomedical and Psychological Aspects of Very Late Life
• PHC 6421: Public Health Law and Ethics
• PHC 6441: Health Disparities in the United States
• PHC 6445: Global Public Health and Development II
• PHC 6447: Ecology of HIV/AIDS in the Rural South
• PHC 6452: Environmental Management of Vector-Borne Diseases
• PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
• PHC 6519: Zoonotic Diseases in Humans and Animals
• PHC 6520: Foodborne Diseases
• PHC 6530: Public Health Issues of Mothers and Children
• PHC 6543: Community Practice of Behavioral Health Risk Prevention
• PHC 6544: Health Behavior Interventions in Practice
• PHC 6561: Public Health Laboratory Techniques
• PHC 6585: Health Promotion and Disease Prevention
• PHC 6586: Interventions for Public Health
• PHC 6607: Critical Issues in Public Health
• PHC 6700: Social and Behavioral Research Methods
• PHC 6702: Exposure Measurement and Assessment
• PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
• PHC 6762: International Public Health
• PHC 6905: Independent Study
• PHC 6917: Supervised Research Project
• PHC 6601: Seminar in Contemporary Public Health Issues
• PHC 6931: Seminars in Public Health
• PHC 6937: Special Topics in Public Health
• PHC 6945: Public Health Practicum
• PHC 6946: Public Health Internship
• PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
• PHC 7038: Psychiatric Epidemiology
• PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
• PHC 7727: Grant Writing for Population Health Research
• PHC 7752: Seminar in Instrument Development for Public Health
• PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
• PHC 7907: Social and Behavioral Science Journal Club
• PHC 7979: Advanced Research
• PHC 7980: Research for Doctoral Dissertation
• RHT 5156: Exercise Physiology
• RHT 6125C: Concepts in Clinical Biomechanics
• RHT 6127C: Control of Gait and Posture
• RHT 6167C: Applied Neurophysiology for Physical Therapy
• RHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
• RHT 6316: Neurological Aspects of Orthopedic Rehabilitation
• RHT 6813L: Research Instrumentation in Physical Therapy
• RHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
• RSD 6110: Rehabilitation Science Theory and Application I
• RSD 6112: Rehabilitation Science Theory and Application II
• RSD 6114: Rehabilitation in the United Kingdom
• RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
• RSD 6700: Rasch Measurement: Introduction and Application
• RSD 6705: Research Methods in Rehabilitation
• RSD 6706: Scientific Writing for the Rehabilitation Professional
• RSD 6900: College Classroom: Teaching Process and Practice
• RSD 6905: Individual Work
• RSD 6910: Supervised Research
• RSD 6930: Special Topics in Rehabilitation Science
• RSD 6940: Supervised Teaching
• RSD 7979: Advanced Research
• RSD 7980: Research for Doctoral Dissertation
• RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
• RCS 6066: Rehabilitation Issues in Human Growth and Development
• RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
• RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
• RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
• RCS 6412: Rehabilitation Counseling Theory and Practice
• RCS 6470: Human Sexuality and Disability
• RCS 6601: Forensic Rehabilitation Consultation I
• RCS 6602: Forensic Rehabilitation Consultation II
• RCS 6625: Community Counseling and Case Management
• RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
Women's Studies

College

College of Liberal Arts and Sciences

Department/School

Women's Studies Department

Women's Studies Program Information

The Women's Studies program is administered by the Center for Women's Studies and Gender Research. This interdisciplinary forum for graduate studies offers both a Thesis and a Non-Thesis M.A., as well as a two certificates. The Center also offers a regular colloquium series, frequently sponsors speakers, and distributes a newsletter each fall and spring.

Master of Arts (thesis and non-thesis): The Center offers the Master of Arts (M.A.) thesis degree option, which requires the completion and defense of a thesis (30 credit hours), and the Master of Arts non-thesis degree option, which requires completion and defense of a project or paper (30 credit hours). All Master's students take a core curriculum of 9 graduate credits (3 courses). For the thesis M.A., the remaining 21 hours consist of 15 credits of approved electives and 6 thesis credits. For the non-thesis M.A., 21 credits of approved electives are required.

Required courses for all MA students (9 credits):

- WST 5933: Proseminar in Women's Studies
- WST 6508: Advanced Feminist Theory
- WST 6935: Special Topics in Women's Studies

Thesis

15 approved credits at 5000-level or higher
6 credits of WST 6971: Research for Master's Thesis
(3 of which must be taken in the final graduating term)

Total for MA thesis: 30 credits

Non-thesis

21 approved credits at 5000-level or higher;

at least 6 of these credits must be classes in WST.

Total for MA non-thesis: 30 credits

BA/MA Program: UF offers a number of Bachelor's/Master's programs for superior students. The university created combined degree programs to provide academically talented students an opportunity to complete both a bachelor's and a master's degree in a shorter period of time. The program allows you to double-count graduate courses toward both degrees, thus reducing the time it would normally take to graduate by a semester or more. The combined-degree program reduces the cost of both degrees and enhances your marketability for career advancement.

Concurrent degree - MA in Women's Studies and an MA in Mass Communications (MAMC) with specialization in Journalism: When appropriate, the Center for Women's Studies and Gender Research will work with individual students to develop a collaborative degree program with the College of Journalism and Communication. At the University of Florida, students may apply to complete Master's degrees in two different programs or two Master's degrees in the same program concurrently. Those interested should discuss the proposed study with the office of Graduate Student Records (392-4643, 106 Grinter) before applying. Written approval is needed from each academic unit and the Graduate School Dean. The student must be officially admitted to both programs through regular procedures. No more than 9 credits from the first program may be applied toward the second.

MA/J.D. Joint Degree: The faculties of the Levin College of Law and Women's Studies in the College of Liberal Arts and Sciences have approved a joint degree program culminating in both a J.D. degree, awarded by the College of Law, and an M.A. degree (thesis or non-thesis), awarded by the College of Liberal Arts and Sciences. Under this joint degree program, a student can obtain both degrees in approximately one year less than it would take to obtain both degrees if pursued consecutively. A student must satisfy the curriculum requirements for each degree before either degree is awarded. At least 12 credits must be taken in each program. The graduate program in Women's Studies will accept 12 credits of appropriate professional courses toward the M.A. degree. The 12 credits selected from the professional curriculum must be approved by the Graduate Coordinator upon the recommendation of the student's graduate supervisory committee. Reciprocally, the law school will accept 12 credits of appropriate Women's Studies courses toward the satisfaction of the J.D. degree. Admission to the second program is required no later than the end of the third consecutive semester after beginning one degree of the joint degree program. A summer term is counted as a single semester.

Certificates (M.A. or Ph.D. level): Two graduate certificates in Women's Studies for master's and doctoral students are offered in conjunction with degree programs in other academic units. The Graduate Certificate in Women's Studies and the Graduate Certificate in Gender and Development require specific sets of course work, designed to give students a thorough grounding in the discipline. The Graduate Certificate in Women's Studies offers students a general overview of the field. The Graduate Certificate in Gender and Development allows students to focus on issues related to gender, economic development, and globalization.

Graduate courses in women's studies are also available from the following academic units or programs:

- Agricultural and Life Sciences
- Anthropology
- Counselor Education
- English
For more information, please see our website: [http://web.wst.ufl.edu](http://web.wst.ufl.edu).

**Degrees Offered with a Major in Women's Studies**

**Master of Arts**

**Courses**

- WST 5933: Proseminar in Women's Studies
- WST 6348: Ecofeminism
- WST 6508: Advanced Feminist Theory
- WST 6905: Independent Study
- WST 6935: Special Topics in Women's Studies
- WST 6936: Feminist Challenges to Disciplinary Paradigms
- WST 6946: Internship in Applied Women's Studies and Gender Research
- WST 6957: International Studies in Women's Studies and Gender Research
- WST 6971: Research for Master's Thesis

**Zoology**

**College**

[College of Liberal Arts and Sciences](#)

**Department/School**

[Biology Department](#)

**Zoology Program Info**

*Chair: Craig W. Osenberg*  
*Graduate Coordinator: W. Bradley Barbazuk*

The Department of Biology offers graduate programs in Zoology leading to the Master of Science in Teaching, Master of Science, and Doctor of Philosophy degrees. The requirements for these degrees can be found in the Graduate Degrees section of this catalog.

Our program emphasizes Integrative Biology, with integration accomplished through a focus on the theoretical foundations provided by evolutionary biology and ecology. Our faculty has expertise in ecology, evolution, behavior, comparative and environmental physiology, genetics, development, and phylogenetics. We work in a variety of terrestrial and aquatic environments and geographic regions (tropics through subpolar), and on a range of organisms (including plants). Our faculty value integrative research (e.g., by crossing levels of organization from gene expressions to species interactions), linking theory with data (through use of statistical and mathematical tools), and using natural history to guide the development and testing of rigorous conceptual frameworks. Many of our faculty also are interested in applying and testing basic science in applied contexts (e.g., conservation biology and ecotoxicology).

Our approach is highlighted through our first-year, required, graduate course, Integrative Principles. Each student's supervisory committee will recommend additional courses according to the academic background and research plans of the student.

**Degrees Offered with a Major in Zoology**
Doctor of Philosophy

without a concentration

concentration in Animal Molecular and Cellular Biology

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Master of Science in Teaching

without a concentration

concentration in Tropical Conservation and Development

concentration in Wetland Sciences

Zoology Courses

- BOT 6726C: Principles of Systematic Biology
The College of Medicine offers training opportunities leading to either the Doctor of Philosophy or Master of Science degree in medical sciences. Minimum requirements for these degrees are given in the Graduate Degrees section of this catalog. For more information, please see our website http://med.ufl.edu.

The interdisciplinary program (IDP) in biomedical sciences is the major focus leading to the Doctor of Philosophy degree. Other graduate courses and programs are listed under departmental headings. For further information, visit http://idp.med.ufl.edu.

Departments and Programs within the College of Medicine

College of Medicine Courses

Other

Biochemistry and Molecular Biology

College

Biochemistry and Molecular Biology Department

Degrees Offered with a Major in Biochemistry and Molecular Biology

Master of Science

Courses

- BCH 5413: Mammalian Molecular Biology and Genetics
- BCH 6040: Research Discussion in Biochemistry and Molecular Biology
- BCH 6107: Biophysical Techniques in Proteomics and Protein Science
- BCH 6206: Advanced Metabolism
- BCH 6207: Advanced Metabolism: Role of Membranes in Signal Transduction and Metabolic Control
- BCH 6208: Advanced Metabolism: Regulation of Key Reactions in Carbohydrate and Lipid Metabolism
- BCH 6209: Advanced Metabolism: Regulation of Key Reactions in Amino Acid and Nucleotide Metabolism
- BCH 6415: Advanced Molecular and Cell Biology
- BCH 6740: Physical Biochemistry/Structural Biology
- BCH 6741C: Magnetic Resonance Imaging and Spectroscopy in Living Systems
- BCH 6744: Molecular Structure Determination by X-Ray Crystallography
- BCH 6744L: Molecular Structure Determination by X-Ray Crystallography Laboratory
- BCH 6745: Molecular Structure and Dynamics of NMR Spectroscopy
- BCH 6745L: Molecular Structure and Dynamics by NMR Spectroscopy Laboratory
- BCH 6746: Structural Biology/Macromolecular Structure Determination
- BCH 6747: Structural Biology/Advanced Physical Biochemistry: Spectroscopy and Hydrodynamics
- BCH 6749C: Numerical Methods in Structural Biology
- BCH 6876: Recent Advances in Membrane Biology
- BCH 6877: Recent Advances in Structural Biology
- BCH 6878: Recent Advances in Cytokeletal Processes
- BCH 6905: Independent Studies in Biochemistry and Molecular Biology
- BCH 6910: Supervised Research
- BCH 6936: Biochemistry Seminar
- BCH 6971: Research for Master's Thesis
- BCH 7410: Advanced Gene Regulation
- BCH 7412: Epigenetics of Human Disease and Development
- BCH 7414: Advanced Chromatin Structure
- BCH 7515: Structural Biology/Advanced Physical Biochemistry: Kinetics and Thermodynamics
- BCH 7979: Advanced Research
- BCH 7990: BioChem Doctoral Research

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
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- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6070: Sensory and Motor Systems
- GMS 6072: Neuroendocrinology and Neuroimmunology
- GMS 6073: Developmental Neurobiology
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
Biostatistics (Medicine)

College

College of Public Health and Health Professions
College of Medicine

Department

Biostatistics Department

Degrees

Doctor of Philosophy

Master of Science

Biostatistics Departmental Courses

- GMS 6818: Design and Conduct Clinical Trials I
- GMS 6819: Design and Conduct Clinical Trials II
- GMS 6827: Advanced Clinical Trial Methods
- GMS 6841: Design and Analysis of Translational Research in Biomedical Sciences
- GMS 6861: Applied Biostatistics I
- GMS 6862: Applied Biostatistics II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6020: Clinical Trial Methods
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6050C: Biostatistical Methods I
- PHC 6051: Biostatistical Methods II
- PHC 6052: Introduction to Biostatistical Methods
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6055: Biostatistical Computing Using R
- PHC 6063: Biostatistical Consulting
- PHC 6080: SAS for Public Health - Data
- PHC 6081: SAS for Public Health - Analysis
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6937: Special Topics in Public Health
College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
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- GEY 5936: Topics in Gerontology
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- GMS 6181: Special Topics in Microbiology
- GMS 6190: Seminar
- GMS 6191: HIV Journal Club
- GMS 6193: Research Conference in Oral Biology
- GMS 6195: Epigenetics Journal Club
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
- GMS 6221: Ethics in Genetics
- GMS 6223: Drosophila Neurogenetics: from Development to Function
- GMS 6231: Genomics and Bioinformatics
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
- GMS 6234: Introduction to phyodynamics: A practical approach to molecular phylogenetics of pathogens
- GMS 6290: Genetics/Genomics Program Graduate Seminar
- GMS 6312: Clinical Chemistry and Toxicology
- GMS 6313: Clinical Chemistry and Toxicology: A Rotation
- GMS 6331: Stem Cell Biology
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
- GMS 6337: B Cell Development in Health and Disease
- GMS 6381: Special Topics in Pathology
- GMS 6382: Special Topics in Immunology
- GMS 6400C: Principles of Physiology
- GMS 6405: Fundamentals of Endocrine Physiology
- GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
- GMS 6408: Fundamentals of Renal Physiology
- GMS 6410: Physiology of the Circulation of Blood
- GMS 6411: Fundamentals of Cardiovascular Physiology
- GMS 6412: Human Physiology for Biomedical Engineering
- GMS 6413: Advances in Hypertension Research
- GMS 6414: Advanced Renal Physiology
- GMS 6415: Fundamentals of Gastrointestinal Physiology
- GMS 6416: Human Endocrinology and Anatomy of Reproduction
- GMS 6471: Fundamentals of Physiology and Functional Genomics I
- GMS 6472: Fundamentals of Physiology and Functional Genomics II
- GMS 6473: Fundamentals of Physiology and Functional Genomics III
- GMS 6483: Theories of Aging
- GMS 6485: Population Based Research on Aging
- GMS 6486: Fundamentals of Biological Aging
- GMS 6490C: Research Methods in Physiology
- GMS 6491: Journal Club in Physiology
- GMS 6495: Seminar in Physiology
- GMS 6496: Recent Advances in Physiology
- GMS 6497: Seminar on Vision
- GMS 6506: Biologic Drug Development
- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6609: Advanced Gross Anatomy
- GMS 6621: Vision
- GMS 6622: Mitochondrial Biology in Aging and Disease
- GMS 6635: Organization of Cells and Tissues
- GMS 6642: Morphogenesis: Organ Systems I
- GMS 6643: Morphogenesis: Organ Systems II
- GMS 6644: Apoptosis
- GMS 6690: Molecular Cell Biology Journal Club
- GMS 6715: Lifestyle Interventions in Aging I: Behavioral Aspects & Clinical Outcomes
- GMS 6717: Lifestyle Interventions in Aging II: Physiologic Aspects
- GMS 6771: Clinical Neuroscience of Aging
- GMS 6876: Law & Ethics of Aging
- GMS 6845: Clinical & Translational Research Practicum
- GMS 6852: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
- GMS 6895: CTS Journal Club
- GMS 6903: Manuscript and Abstract Writing for Clinician/Scientists
- GMS 6970: Individual Study
- GMS 6383: Current Topics in Immunotherapy
- GMS 6683: Fundamentals of Vascular Physiology and Pathology
- GMS 5604: Medical Human Embryology
- GMS 5605: Medical Anatomy
- GMS 5608L: Medical Anatomy Lab
- GMS 5613: Medical Human Anatomy by Diagnostic Imaging
- GMS 5630: Medical Histology
- GMS 6081: Biological Imaging Techniques
- GMS 6394: Seminar in Mammalian Genetics
- GMS 6403: Advanced Endocrinology
- GMS 6484: Geriatric and Age Related Diseases
- GMS 6500: Introduction to Pharmacology
- GMS 6607C: Musculoskeletal Systems
- GMS 6719: Fundamentals of Computational Neuroscience
- GMS 6790: Addiction: Neuroscience and Trends
Epidemiology Program Information

The Ph.D. in Epidemiology program is in the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The program requires a minimum of 90 semester credits beyond the bachelor's degree. All students must complete a minimum of 9 credits in Epidemiology foundation course work, at least 36 credits of epidemiology core courses, 6 credits of statistics electives, 18 credits of epidemiology electives, 15 credits of general electives, and 12 credits of dissertation research. Students must also complete at least two mentored teaching experiences. All entering students who do not hold MPH or equivalent degrees are also required by the College of Public Health and Health Professions to complete an Introduction to Public Health course.

Students in the Ph.D. program in Epidemiology are admitted to work with a research mentor on that mentor's project, and that research mentor funds the student. Other funding sources are available such as the Graduate School and the Department.

The core course work is designed to incorporate competencies recommended in the report of the 2002 workshop on doctoral education in epidemiology from the American College of Epidemiology and the Association of Schools and Programs of Public Health, and criteria for applied epidemiology competencies. The overall outcomes expected of all graduates are as follows:

1. Apply epidemiological methods to address critical and/or emerging public health issues through the use of:
   - Appropriate epidemiological research designs
   - Advanced statistical analysis methods for health studies
   - Data structures and measurement methods for health research
   - Biological, behavioral and social theory applied to the understanding and prevention of contemporary threats to health and well-being
   - Depth of knowledge in an area of specialization

2. Assimilate the history, philosophy, and ethical principles of epidemiology into current research

3. Develop grant proposals and manage research projects

4. Write scientific papers for publication in peer-reviewed journals, and communicate research results to scientists, policy makers, and the public

5. Compete successfully for research and teaching positions in academic institutions, federal or state agencies, or private institutions.

Details of the Ph.D. in Epidemiology program and application information are available at our website: [http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2](http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2).

The Master of Science in Epidemiology degree is offered by the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The 36 credit program prepares students for careers in the public health arena that are focused on the surveillance and prevention of illnesses among diverse populations around the world. Students are trained in the foundational aspects of epidemiology including person, place and time, risk and protective factors, and the social determinants of health. Areas of focus include: chronic disease, infectious disease, geriatric, environmental, psychiatric, social, cancer and maternal and child health epidemiology.

Graduates of the M.S. in Epidemiology program are trained to:

- Apply surveillance, assessment, evaluation, and other foundational epidemiological research designs to areas of interest,
- Choose appropriate measurement and analytic methods to study health and disease in a population,
- Utilize biological, behavioral and social theory to understand how to prevent and intervene to promote the public health.

The program consists of required coursework and the successful completion of a thesis. The thesis is required to demonstrate skill in independent inquiry and investigation, under the tutelage of a mentor. Students may complete the course in three semesters with 36 credits.

More program information, including specific course requirements and elective options, is described at the program website: [http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2](http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2).

Degrees Offered with a Major in Epidemiology
Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Master of Science

Epidemiology (PHHP/COM) Departmental Courses

- GMS 6820: Advanced Epidemiology Methods
- PHC 6008: Cardiovascular Epidemiology
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
- PHC 6034: Epidemic Investigation
- PHC 6070: Epidemiology of Aging
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6711: Measurement in Epidemiology and Outcomes Research
- PHC 6937: Special Topics in Public Health
- PHC 6938: Oral and Craniofacial Epidemiology
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7007: Cancer Epidemiology
- PHC 7038: Psychiatric Epidemiology
- PHC 7065: Critical Skills in Epidemiological Data Management
- PHC 7427: Ethics in Population Science
- PHC 7727: Grant Writing for Population Health Research
- PHC 7901: Epidemiology/Literature Review and Critique (Journal Club)
- PHC 7902: Epidemiology Supervised Research Writing Circle
- PHC 7910: International Field Epidemiology
- PHC 7916: National Field Epidemiology
- PHC 7934: Seminar I: Epidemiology Past, Present, and Future
- PHC 7978: Advanced Research
- PHC 7980: Research for Doctoral Dissertation

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
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- GMS 6032: Mechanisms of Host Defense
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<tr>
<td>GMS 6033</td>
<td>Immunity in Health and Disease</td>
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<td>Molecular Virology III: DNA Viruses</td>
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<td>GMS 6079</td>
<td>Computers in Biology</td>
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<td>GMS 6080</td>
<td>Basic Magnetic Resonance Imaging</td>
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<td>GMS 6090</td>
<td>Research in Medical Sciences</td>
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<td>GMS 6096</td>
<td>Introduction to NIH Grant Writing for Biomedical Sciences</td>
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<td>GMS 6099</td>
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<td>GMS 6121</td>
<td>Infectious Diseases</td>
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<td>GMS 6233</td>
<td>Quantitative Models of Protein Evolution and Phylogenetics</td>
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<tr>
<td>GMS 6234</td>
<td>Introduction to phylogenomics: An applied approach to molecular phylogenetics of pathogens</td>
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<td>GMS 6290</td>
<td>Genomics/Genetics Program Graduate Seminar</td>
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<td>GMS 6312</td>
<td>Clinical Chemistry and Toxicology</td>
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<td>GMS 6335</td>
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<td>Theories of Aging</td>
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<tr>
<td>GMS 6491</td>
<td>Journal Club in Physiology</td>
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<tr>
<td>GMS 6495</td>
<td>Seminar in Physiology</td>
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<tr>
<td>GMS 6496</td>
<td>Recent Advances in Physiology</td>
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<tr>
<td>GMS 6497</td>
<td>Seminar on Vision</td>
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<tr>
<td>GMS 6506</td>
<td>Biologic Drug Development</td>
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<tr>
<td>GMS 6563</td>
<td>Molecular Pharmacology</td>
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<tr>
<td>GMS 6590</td>
<td>Seminar in Pharmacology</td>
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<tr>
<td>GMS 6592</td>
<td>Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes</td>
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</tbody>
</table>
Genetics and Genomics

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Medicine

Degrees Offered with a Major in Genetics and Genomics

Doctor of Philosophy

Doctor of Philosophy - Clinical and Translational Science

Courses

- AGR 6322: Advanced Plant Breeding
- ANG 6532: Molecular Genetics of Disease
- ANG 7979: Advanced Research
- ANG 7980: Research for Doctoral Dissertation
- BCH 6415: Advanced Molecular and Cell Biology
- BCH 7410: Advanced Gene Regulation
- CAP 5510: Bioinformatics
- CAP 5515: Computational Molecular Biology
- CAP 5805: Computer Simulation Concepts
- CIS 6900: Special Topics in CIS
- COT 5405: Analysis of Algorithms
- FOR 6310: Forest Genetics and Tree Improvement
- FOR 6934: Topics in Forest Resources and Conservation
- FOR 7979: Advanced Research
• FOR 7980: Research for Doctoral Dissertation
• GMS 6011: Mouse Genetics
• GMS 6012: Human Genetics
• GMS 6013: Developmental Genetics
• GMS 6014: Applications of Bioinformatics to Genetics
• GMS 6015: Human Genetics II
• GMS 6059: Gene Therapy from Bench to Bedside
• GMS 6920: Genetics Journal Colloquy
• GMS 7979: Advanced Research
• GMS 7980: Research for Doctoral Dissertation
• HOS 6201: Breeding Perennial Cultivars
• PCB 5065: Advanced Genetics
• PCB 5235L: Experiments in Immunology
• PCB 5615: Molecular Evolution and Systematics
• PCB 6528: Plant Cell and Developmental Biology
• PCB 7979: Advanced Research
• PCB 7980: Research for Doctoral Dissertation
• STA 5325: Fundamentals of Probability
• STA 5328: Fundamentals of Statistical Theory
• STA 6166: Statistical Methods in Research I
• STA 6167: Statistical Methods in Research II
• STA 6178: Genetic Data Analysis
• STA 6208: Basic Design and Analysis of Experiments
• STA 6329: Matrix Algebra and Statistical Computing
• STA 6334: Special Topics in Statistics
• STA 7979: Advanced Research
• STA 7980: Research for Doctoral Dissertation
• ZOO 6927: Special Topics in Zoology
• ZOO 7979: Advanced Research
• ZOO 7980: Research for Doctoral Dissertation

College of Medicine Courses

• ENU 6652: Clinical Rotation in Diagnostic Radiology
• ENU 6657: Diagnostic Radiological Physics
• GEY 5935: Topics in Gerontology
• GEY 6220: Overview of Geriatric Care Management
• GEY 6646: Issues and Concepts in Gerontology
• GEY 6905: Independent Study in Gerontology
• GEY 6936: Professional Development in Gerontology/Geriatrics
• GMS 5905: Special Topics in Biomedical Sciences
• GMS 6001: Fundamentals of Biomedical Sciences I
• GMS 6003: Fundamentals of Graduate Research and Professional Development
• GMS 6004: IDP Practical Laboratory
• GMS 6005: Fundamentals of Developmental Biology
• GMS 6006: Fundamentals of Immunology and Microbiology
• GMS 6007: Fundamentals of Neuroscience
• GMS 6008: Fundamentals of Physiology and Functional Genomics
• GMS 6009: Principles of Drug Action
• GMS 6010: Yeast Genetics
• GMS 6011: Mouse Genetics
• GMS 6012: Human Genetics
• GMS 6013: Developmental Genetics
• GMS 6014: Applications of Bioinformatics to Genetics
• GMS 6015: Human Genetics II
• GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
• GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
• GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
• GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
• GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
• GMS 6029: Brain Journal Club
• GMS 6031: Molecular Immunology
• GMS 6032: Mechanisms of Host Defense
• GMS 6033: Immunity in Health and Disease
• GMS 6034: Advanced Virology I: Genetics and RNA
• GMS 6035: Advanced Virology II: RNA Viruses
• GMS 6036: Molecular Virology III: DNA Viruses
• GMS 6038: Bacterial Genetics and Physiology
• GMS 6039: Bacterial Pathogenesis
• GMS 6040: Host-Pathogen Interactions
• GMS 6051: Signal Transduction
• GMS 6052: Ion Channels of Excitable Membranes
• GMS 6053: Cancer Biology and Therapeutics
• GMS 6059: Gene Therapy from Bench to Bedside
• GMS 6061: Nuclear Structure and Dynamics
• GMS 6062: Protein Trafficking
• GMS 6063: Mechanisms of Aging
• GMS 6064: Tumor Biology
• GMS 6065: Fundamentals of Cancer Biology
• GMS 6070: Sensory and Motor Systems
• GMS 6072: Neuroendocrinology and Neuroimmunology
• GMS 6073: Developmental Neurobiology
Medical Sciences

College

Interdisciplinary Program in Biomedical Sciences

Dear M. L. Good,

Associate Dean for Graduate Education: P. A. Gulig
Complete faculty listing Follow this link.

The College of Medicine offers training opportunities leading to either the Doctor of Philosophy or Master of Science degree in medical sciences. Minimum requirements for these degrees are given in the General Information section of this catalog. The interdisciplinary program (IDP) in biomedical sciences is the major focus leading to the Doctor of Philosophy degree. Other graduate courses and programs are listed under departmental headings.

Interdisciplinary Program (IDP) in Biomedical Sciences

The goal of the IDP is to prepare students for a diversity of careers in research and teaching in academic and commercial settings, after completion of the Ph.D. in Medical Sciences. The program provides a modern, comprehensive graduate education in biomedical sciences while providing both maximum program flexibility and appropriate specialization for advanced training. The IDP represents a cooperative effort of six interdisciplinary advanced concentrations with participation of over 250 faculty members.

During the first semester of study, students undertake a common, comprehensive interdisciplinary core curriculum of classroom study and a responsible conduct of research course. During the second semester, students begin to focus their coursework in one or two concentrations. Throughout the first two semesters, students participate in at least three laboratory rotations in any of the laboratories of the IDP faculty members. The advanced concentration and the supervisory committee chair are chosen no later than the end of the spring semester to maximize flexibility and facilitate an informed decision. Students entering the advanced concentrations take more specialized courses that strengthen their knowledge of these disciplines. The advanced concentration curricula are flexible enough to allow students to integrate course work offered in other advanced concentrations. In addition, journal clubs and seminars associated with their research interests allow students to further augment their scientific development.

Prospective students should have strong backgrounds in biology including genetics, chemistry (organic, quantitative, and biochemistry), physics, and calculus. Demonstrated high motivation and a serious intention to pursue research-related careers are also important considerations. This is best accomplished by performing independent study in a research laboratory for at least a semester, with a year or more being preferred. For more information, write IDP, P.O. Box 100229, College of Medicine, Gainesville, FL 32610-0229. For expanded information about the IDP, visit http://idp.med.ufl.edu.

Advanced Concentration in Biochemistry and Molecular Biology

Directors: Robert McKenna and Kevin Brown

The Graduate Faculty of the biochemistry and molecular biology advanced concentration share an interest in the relationships between the structure of a biological macromolecule and the function of that molecule in the cell. The structure (encoded ultimately by the genome) sets the phenotype of the organism. The unifying theme among the Graduate Faculty is their approach to research. Each uses the techniques of biochemistry and molecular biology/genetics to characterize the function of a macromolecule and show how function (and the process it is part of) is determined by the structure of that molecule and its interactions with other macromolecules. Specific research directions range from physical determination of the molecular structure of proteins to regulation of cellular processes to the genetic mapping of disease loci.

For information about other programs and courses in this field, see the Department of Biochemistry and Molecular Biology listing.

Advanced Concentration in Biochemistry and Molecular Biology Courses
Advanced Concentration in Cancer Biology

Directors: Dietmar Siemann and Maria Zajac-Kaye

The Cancer Biology Concentration (CBC) provides training opportunities in cancer research ranging from basic to translational. The program spans many disciplines, including molecular and cell biology, genetics and epigenetics, biochemistry, microbiology, pharmacology, anatomy, pathology, epidemiology, bioinformatics, immunology and many others involved in the understanding of the development, progression, dissemination, and treatment of cancer.

Students in the will have opportunities to work with outstanding cancer investigators in state of the art facilities. Through combinations of courses, seminars, small group discussions, and an interdisciplinary approach to research, the program allows students to gain a unique understanding of cancer and to build a firm foundation upon which they can build careers in academia, government, and biotech and pharmaceutical industry.

For more information please see our website: http://idp.med.ufl.edu/about/cancer-biology-concentration

Advanced Concentration in Cancer Biology Courses

- BCH 5413: Mammalian Molecular Biology and Genetics
- BCH 7410: Advanced Gene Regulation
- BCH 7412: Epigenetics of Human Disease and Development
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6006: Principles of Drug Action
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6090: Research in Medical Sciences
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6338: Recent Advances in Cancer Metastasis
- GMS 6421: Cell Biology
- GMS 6644: Apoptosis
- GMS 6647: Transcriptional and Translational Control of Cell Growth and Proliferation
- GMS 6683: Fundamentals of Vascular Physiology and Pathology
- GMS 6691: Special Topics in Cell Biology and Anatomy
- GMS 6812: Cancer Health Outcomes Assessment
- GMS 6818: Design and Conduct Clinical Trials I
- PHC 6937: Special Topics in Public Health

Advanced Concentration in Genetics

Director: M. R. Wallace

The concentration in genetics offers graduate training in all facets of modern molecular genetics including bacterial, viral, lower eukaryotic, mouse, developmental, and human genetics. The courses listed are taught in a 5-week modular format.

Advanced Concentration in Genetics Courses
Advanced Concentration in Health Outcomes and Policy

The University of Florida's Master of Science in Medical Sciences, with a concentration in Health Outcomes and Policy, is a specialized degree designed to put its graduates at the forefront of innovative research to develop, implement, and evaluate clinical and community-based programs that promote health and health outcomes. Throughout the curriculum, special emphasis is placed on health disparities and vulnerable populations. In addition to traditional graduate students, our program is available to medical students, post-doctoral researchers, fellows, residents, Ph.D. students, and junior faculty.

We also offer a 16-credit graduate certificate designed to complement other concurrent courses of study and to provide continuing education opportunities for faculty. The certificate can be completed in one year on a part-time basis.

Advanced Concentration in Health Outcomes and Policy Courses

- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6802: Examining Health Outcomes for Chronic Diseases in Clinical and Community-based Research
- GMS 6803: Data Management for Clinical Research
- GMS 6804: Medical Informatics
- GMS 6811: Grant Writing Skills for Clinical Research
- GMS 6812: Cancer Health Outcomes Assessment
- GMS 6816: Pediatric Child Health Outcomes Assessment for Clinical and Community-Based Research
- GMS 6821: Measuring and Analyzing Health Outcomes I
- GMS 6822: Measuring and Analyzing Health Outcomes II
- GMS 6826: Advanced Design and Methodology for Case-Control Studies in Clinical Research
- GMS 6829: Longitudinal Research Design
- GMS 6830: Health Outcomes Research and Policy Development
- GMS 6832: Economic Methods for Evaluating Value in Health
- GMS 6833: Health Care Policy and Vulnerable Populations
- GMS 6834: Health Policy and Formulation of Payment Mechanisms for Health Care
- GMS 6835: Health Policy Issues in Children's Health
- GMS 6842: Translational Research Methods
- GMS 6844: Experimental and Quasi-Experimental Research Designs for Community Settings
- GMS 6846: Meta-Analysis in Clinical, Health Services Research and Public Health
- GMS 6851: Health Outcomes Research
- GMS 6852: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
- GMS 6853: Applied Topics in Dissemination and Implementation Science
- GMS 6854: Applied Topics in Clinical Effectiveness Research
- GMS 6881: Special Studies in Epidemiology and Health Policy Research
- GMS 6882: Directed Readings in Epidemiology and Health Policy
- GMS 6883: Practicum Experience in Epidemiology and Health Policy
- GMS 6884: Research in Epidemiology and Health Policy
- GMS 6885: Research Designs in Health Outcomes and Policy
- GMS 6893: Clinical and Translational Science Seminar Series
- GMS 6896: Health Outcomes and Policy Seminar

Advanced Concentration in Immunology and Microbiology

Directors: R. C. Condit and C. E. Mathews

The concentration in immunology and microbiology offers graduate training in cellular and molecular immunology (including immunopathology, immunogenetics, and autoimmunity) and in microbiology (including virology, bacteriology, microbial genetics, and microbial pathogenesis). The courses listed are taught in a 5-week modular format.

Advanced Concentration in Immunology and Microbiology Courses
Advanced Concentration in Molecular Cell Biology

Director: Alexander Ishov
Co-Director: Maria Zajac-Kaye

The advanced concentration in molecular cell biology (MCB) prepares investigators for careers in biomedical research in academic or industrial settings. This multidisciplinary specialization has more than 50 participating faculty members and offers an extraordinary range of opportunities for advanced study of life at the molecular and cellular levels. The Graduate Faculty share common interests in the molecular interactions that account for functionally integrated subcellular, cellular, and tissue organization found in living organisms. The model systems in use range from yeast and cellular line molds through Drosophila to birds and mammals. These systems are manipulated and analyzed using a wide range of powerful molecular, genetic, protein chemical, immunological, pharmacological, nuclear magnetic resonance (NMR), and microscopic imaging strategies. Students who select MCB take advanced course work and initiate independent research during the second year. This approach provides broad-based vision early in the program and the appropriate degree of specialization later on.

Advanced Concentration in Molecular Cell Biology Courses

- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6013: Developmental Genetics
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Mechanisms of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6331: Stem Cell Biology
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
- GMS 6381: Special Topics in Pathology
- GMS 6417: Integrative Aging Physiology
- GMS 6421: Cell Biology
- GMS 6622: Mitochondrial Biology in Aging and Disease
- GMS 6635: Organization of Cells and Tissues
- GMS 6644: Apoptosis
- GMS 6647: Transcriptional and Translational Control of Cell Growth and Proliferation
- GMS 6690: Molecular Cell Biology Journal Club
- GMS 6691: Special Topics in Cell Biology and Anatomy
- GMS 6692: Research Conference in Anatomy and Cell Biology

Advanced Concentration in Neuroscience

Directors: W. J. Streit and J. L. Bizon

The Graduate Faculty associated with the neuroscience advanced concentration have expertise in neuroanatomy, molecular and cellular neurobiology, neurodevelopment and aging, neurotransmitter chemistry and pharmacology, neuroendocrinology and neuroimmunology, cellular and molecular neuro-oncology, cellular and membrane neurophysiology, somatosensory and motor systems, transplantation neurobiology, injury and repair of the CNS, and neurobehavioral sciences. Study in marine vertebrate and invertebrate neurobiology is available through Graduate Faculty at the Whitney Laboratory.

Advanced Concentration in Neuroscience Courses
Advanced Concentration in Oral Biology

Chair: R. A. Burne
Graduate Coordinator: J. Brady

The Department of Oral Biology, a unit of the College of Dentistry, offers graduate study leading to the degree of Doctor of Philosophy as part of the College of Medicine's Interdisciplinary Program (IDP) in Biomedical Sciences. The work is designed to provide the degree candidate with a strong background in basic biological principles relevant to the various subspecialties of oral biology, as well as specialized training in various aspects of the diseases and disorders of the oral cavity.

Areas of emphasis include application of microbiological, immunological, cellular, and molecular biological concepts and technologies to answer questions about host-pathogen interactions in oral disease; vaccine development; oral microbial physiology; oral bacterial biofilm biology; saliva and salivary gland biology; microbial antibiotic resistance; and autoimmune diseases. More information is available at [http://dental.ufl.edu/departments/oral-biology/](http://dental.ufl.edu/departments/oral-biology/).

Prerequisites for admission in addition to those of the Graduate School include a broad base of courses in mathematics, physics, organic and analytic chemistry, advanced biology, biochemistry, molecular biology, and statistical methods. Specific requirements can be obtained from the Graduate Coordinator or the IDP office.

Oral Biology Departmental Courses

- GMS 6160: Introduction to Oral Biology I
- GMS 6161: Introduction to Oral Biology II
- GMS 6173: Stomatognathic System: Form and Function
- GMS 6176: Biology of Tooth Supporting Structures I
- GMS 6177: Biology of Tooth Supporting Structures II
- DEN 6680: Principles and Craniofacial Biology and Emerging Therapies
- DEN 6681: Craniofacial Pathobiology
- GMS 7179: Journal Colloquy

Advanced Concentration in Physiology and Pharmacology

Directors: J. K. Harrison and H. Kasahara

The Graduate Faculty associated with this advanced concentration have expertise in a variety of disciplines, including molecular and cellular biology, pharmacology, physiology, neuroscience, and biochemistry. These faculty bring together unique strengths to provide the students with diverse training. Students may train in laboratories involved in cardiovascular, neuro, endocrine, and developmental physiology; pharmacology; and toxicology. Students conduct research at the molecular, cellular, and integrative levels. Many of the faculty are involved in multidisciplinary, collaborative research efforts that aim to understand basic physiological mechanisms and pathophysiological processes (e.g., cardiovascular, neurodegenerative, and neoplastic diseases).

Advanced Concentration in Physiology and Pharmacology Courses

- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6400C: Principles of Physiology
- GMS 6405: Fundamentals of Endocrine Physiology
- GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
- GMS 6408: Fundamentals of Renal Physiology
- GMS 8410: Physiology of the Circulation of Blood
- GMS 8411: Fundamentals of Cardiovascular Physiology
- GMS 6415: Fundamentals of Gastrointestinal Physiology
- GMS 6491: Journal Club in Physiology
- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

Core Courses--IDP

- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6090: Research in Medical Sciences
- GMS 6901: Seminar in Biology of Disease
- GMS 7003: Responsible Conduct of Biomedical Research
- GMS 7593: Topics in Pharmacology and Toxicology

General and Advanced Courses

- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6090: Research in Medical Sciences
- GMS 6622: Mitochondrial Biology in Aging and Disease
- GMS 6672: Science and Ethics of In Vitro Fertilization
- GMS 6905: Independent Studies in Medical Sciences
- GMS 6910: Supervised Research
- GMS 6931: Ethical and Policy Issues in Clinical Research
- GMS 6940: Supervised Teaching
- GMS 6971: Research for Master's Thesis
- GMS 7001: Fundamentals of Biomedical Science Education
- GMS 7002: Practicum in Biomedical Science Education
- GMS 7003: Responsible Conduct of Biomedical Research
- GMS 7979: Advanced Research
- GMS 7990: Research for Doctoral Dissertation

Other Interdisciplinary Doctoral Concentrations Offered

The interdisciplinary emphasis on vision sciences is also discussed in the Interdisciplinary Graduate Studies section. The program director is Dr. W. Clay Simith, P.O. Box 100284 College of Medicine, Gainesville, FL 32610 or (352) 392-0476.

Interdisciplinary study in toxicology is coordinated by the Center for Environmental and Human Toxicology and is concerned with the effects of chemicals on human and animal health. Additional information is given in the Interdisciplinary Graduate Studies section of this catalog or may be obtained from the codirector, Dr. Colin Sumners, P.O. Box 100215, College of Medicine, Gainesville, FL 32610 or (352) 392-0740.

Degrees Offered with a Major in Medical Sciences

Doctor of Philosophy

without a concentration

concentration in Biochemistry and Molecular Biology
optional second concentration in Clinical and Translational Science
optional second concentration in Health Outcomes and Policy

concentration in Cancer Biology

concentration in Clinical and Translational Science
optional second concentration in Health Outcomes and Policy

concentration in Genetics
optional second concentration in Clinical and Translational Science
optional second concentration in Health Outcomes and Policy

concentration in Health Outcomes and Policy
optional second concentration in Clinical and Translational Science

concentration in Imaging Science and Technology

concentration in Immunology and Microbiology
optional second concentration in Clinical and Translational Science
optional second concentration in Health Outcomes and Policy

concentration in Molecular Cell Biology
optional second concentration in Clinical and Translational Science
optional second concentration in Health Outcomes and Policy

concentration in Neuroscience
optional second concentration in Clinical and Translational Science
optional second concentration in Health Outcomes and Policy

concentration in Physiology and Pharmacology
optional second concentration in Clinical and Translational Science
optional second concentration in Health Outcomes and Policy

concentration in Toxicology

Master of Science

without a concentration

concentration in Clinical and Translational Science
concentration in Health Outcomes and Policy

concentration in Translational Biotechnology

College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Independent Study in Gerontology
- GEY 6936: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018L: Advanced in-Vitro Fertilization Laboratory Practicum
- GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
- GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
- GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
- GMS 6029: Brain Journal Club
- GMS 6031: Molecular Immunology
- GMS 6032: Mechanisms of Host Defense
- GMS 6033: Immunity in Health and Disease
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Mechanisms of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6070: Sensory and Motor Systems
- GMS 6072: Neuroendocrinology and Neuroimmunology
- GMS 6073: Developmental Neurobiology
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
- GMS 6078: Synaptic Function and Plasticity
- GMS 6079: Computers in Biology
- GMS 6080: Basic Magnetic Resonance Imaging
- GMS 6090: Research in Medical Sciences
- GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
- GMS 6099: Foundations in Aging and Geriatric Research
- GMS 6121: Infectious Diseases
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA Microarray Data Analysis
- GMS 6160: Introduction to Oral Biology I
- GMS 6161: Introduction to Oral Biology II
- GMS 6169: Antiinfectious Strategies
- GMS 6173: Stomatognathic System: Form and Function
• GMS 6181: Special Topics in Microbiology
• GMS 6190: Seminar
• GMS 6191: HIV Journal Club
• GMS 6193: Research Conference in Oral Biology
• GMS 6195: Epigenetics Journal Club
• GMS 6196: Virology Journal Club
• GMS 6198: Bacterial Pathogenesis Journal Club
• GMS 6221: Ethics in Genetics
• GMS 6223: Drosophila Neurogenetics: from Development to Function
• GMS 6231: Genomics and Bioinformatics
• GMS 6232: Advanced Applications of Bioinformatics in Genetics
• GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
• GMS 6234: Introduction to phydynamics: A practical approach to molecular phylogenetics of pathogens
• GMS 6290: Genetics/Genomics Program Graduate Seminar
• GMS 6312: Clinical Chemistry and Toxicology
• GMS 6313: Clinical Chemistry and Toxicology: A Rotation
• GMS 6331: Stem Cell Biology
• GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
• GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
• GMS 6337: B Cell Development in Health and Disease
• GMS 6338: Special Topics in Pathology
• GMS 6339: Special Topics in Immunology
• GMS 6400C: Principles of Physiology
• GMS 6405: Fundamentals of Endocrine Physiology
• GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
• GMS 6408: Fundamentals of Renal Physiology
• GMS 6410: Physiology of the Circulation of Blood
• GMS 6411: Fundamentals of Cardiovascular Physiology
• GMS 6412: Human Physiology for Biomedical Engineering
• GMS 6413: Advances in Hypertension Research
• GMS 6414: Advanced Renal Physiology
• GMS 6415: Fundamentals of Gastrointestinal Physiology
• GMS 6416: Human Endocrinology and Anatomy of Reproduction
• GMS 6471: Fundamentals of Physiology and Functional Genomics I
• GMS 6472: Fundamentals of Physiology and Functional Genomics II
• GMS 6473: Fundamentals of Physiology and Functional Genomics III
• GMS 6483: Theories of Aging
• GMS 6485: Population Based Research on Aging
• GMS 6486: Fundamentals of Biological Aging
• GMS 6490C: Research Methods in Physiology
• GMS 6491: Journal Club in Physiology
• GMS 6495: Seminar in Physiology
• GMS 6496: Recent Advances in Physiology
• GMS 6497: Seminar on Vision
• GMS 6506: Biologic Drug Development
• GMS 6563: Molecular Pharmacology
• GMS 6590: Seminar in Pharmacology
• GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
• GMS 6609: Advanced Gross Anatomy
• GMS 6621: Vision
• GMS 6622: Mitochondrial Biology in Aging and Disease
• GMS 6635: Organization of Cells and Tissues
• GMS 6642: Morphogenesis: Organ Systems I
• GMS 6643: Morphogenesis: Organ Systems II
• GMS 6644: Apoptosis
• GMS 6690: Molecular Cell Biology Journal Club
• GMS 6715: Lifestyle Interventions in Aging I: Behavioral Aspects & Clinical Outcomes
• GMS 6717: Lifestyle Interventions in Aging II: Physiologic Aspects
• GMS 6771: Clinical Neuroscience of Aging
• GMS 6876: Law & Ethics of Aging
• GMS 6845: Clinical & Translational Research Practicum
• GMS 6852: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
• GMS 6895: CTS Journal Club
• GMS 6903: Manuscript and Abstract Writing for Clinician/Scientists
• GMS 6970: Individual Study
• GMS 6972: Current Topics in Immunotherapy
• GMS 6983: Fundamentals of Vascular Physiology and Pathology
• GMS 6984: Medical Human Embryology
• GMS 6985: Medical Anatomy
• GMS 6986L: Medical Anatomy Lab
• GMS 6913: Medical Human Anatomy by Diagnostic Imaging
• GMS 6930: Medical Histology
• GMS 6931: Biological Imaging Techniques
• GMS 6934: Seminar in Mammalian Genetics
• GMS 6943: Advanced Endocrinology
• GMS 6944: Geriatric and Age Related Diseases
• GMS 6950: Introduction to Pharmacology
• GMS 6807C: Musculoskeletal Systems
• GMS 6719: Fundamentals of Computational Neuroscience
• GMS 6790: Addiction: Neuroscience and Trends
• GMS 6800: Fundamentals of Epidemiology
• GMS 6801: Epidemiology, Prevention, and Control of Infectious Diseases
• GMS 6810: Intermediate Epidemiology/Methods
• GMS 6813: Clinical Trials
• GMS 6814: Molecular and Genetic Epidemiology
Molecular Genetics and Microbiology

College

College of Medicine

Department/School

Molecular Genetics and Microbiology Department

Courses

- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA Microarray Data Analysis
- GMS 6169: Antimicrobial Strategies
- GMS 6181: Special Topics in Microbiology
- GMS 6190: Seminar
- GMS 6195: Epigenetics Journal Club
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
- GMS 6221: Ethics in Genetics
- GMS 6231: Genomics and Bioinformatics
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6251: Molecular Therapy I – Vectors and Molecular Mechanisms
- GMS 6252: Molecular Therapy II – Disease Targets and Applications
- GMS 6253: Molecular Therapy III – Immunology of Gene Transfer
- GMS 6290: Genetics/Genomics Program Graduate Seminar
- GMS 6338: Recent Advances in Cancer Metastasis
- GMS 6506: Biologic Drug Development
- GMS 6920: Genetics Journal Colloquy
- GMS 6921: Immunology/Microbiology Journal Colloquy
- GMS 6943: Master's Translational Biotechnology Internship
- GMS 7093: Introduction to Clinical and Translational Research
- GMS 7191: Research Conference
- GMS 7192: Journal Colloquy
- GMS 7194: Biotechnology Seminar
- PCB 5235L: Experiments in Immunology

Degrees

Doctor of Philosophy - Mammalian Genetics
College of Medicine Courses

- ENU 6652: Clinical Rotation in Diagnostic Radiology
- ENU 6657: Diagnostic Radiological Physics
- GEY 5935: Topics in Gerontology
- GEY 6220: Overview of Geriatric Care Management
- GEY 6646: Issues and Concepts in Gerontology
- GEY 6905: Professional Development in Gerontology/Geriatrics
- GMS 5905: Special Topics in Biomedical Sciences
- GMS 6001: Fundamentals of Biomedical Sciences I
- GMS 6003: Fundamentals of Graduate Research and Professional Development
- GMS 6004: IDP Practical Laboratory
- GMS 6005: Fundamentals of Developmental Biology
- GMS 6006: Fundamentals of Immunology and Microbiology
- GMS 6007: Fundamentals of Neuroscience
- GMS 6008: Fundamentals of Physiology and Functional Genomics
- GMS 6009: Principles of Drug Action
- GMS 6010: Yeast Genetics
- GMS 6011: Mouse Genetics
- GMS 6012: Human Genetics
- GMS 6013: Developmental Genetics
- GMS 6014: Applications of Bioinformatics to Genetics
- GMS 6015: Human Genetics II
- GMS 6017C: In-Vitro Fertilization Laboratory Practicum A
- GMS 6018L: Advanced In-Vitro Fertilization Laboratory Practicum
- GMS 6021: Principles of Neuroscience I: Organization and Development of the Nervous System
- GMS 6022: Principles of Neuroscience II: Cellular and Molecular Neuroscience
- GMS 6024: Principles of Neuroscience IV: Neural Integration & Control
- GMS 6026: Brain Journal Club
- GMS 6031: Molecular Immunology
- GMS 6032: Mechanisms of Host Defense
- GMS 6033: Immunity in Health and Disease
- GMS 6034: Advanced Virology I: Genetics and RNA
- GMS 6035: Advanced Virology II: RNA Viruses
- GMS 6036: Molecular Virology III: DNA Viruses
- GMS 6038: Bacterial Genetics and Physiology
- GMS 6039: Bacterial Pathogenesis
- GMS 6040: Host-Pathogen Interactions
- GMS 6051: Signal Transduction
- GMS 6052: Ion Channels of Excitable Membranes
- GMS 6053: Cancer Biology and Therapeutics
- GMS 6059: Gene Therapy from Bench to Bedside
- GMS 6061: Nuclear Structure and Dynamics
- GMS 6062: Protein Trafficking
- GMS 6063: Mechanisms of Aging
- GMS 6064: Tumor Biology
- GMS 6065: Fundamentals of Cancer Biology
- GMS 6070: Sensory and Motor Systems
- GMS 6072: Neuroendocrinology and Neuroimmunology
- GMS 6073: Developmental Neurobiology
- GMS 6074: Comparative and Evolutionary Neurobiology
- GMS 6077: Neural Degeneration and Regeneration
- GMS 6078: Synaptic Function and Plasticity
- GMS 6079: Computers in Biology
- GMS 6080: Basic Magnetic Resonance Imaging
- GMS 6090: Research in Medical Sciences
- GMS 6096: Introduction to NIH Grant Writing for Biomedical Sciences
- GMS 6099: Foundations in Aging and Geriatric Research
- GMS 6121: Infectious Diseases
- GMS 6140: Principles of Immunology
- GMS 6145: Immunology of Gene Transfer
- GMS 6151: Genetic Analysis Using Model Systems
- GMS 6153: Advanced Bacterial Genetics
- GMS 6155: DNA Microarray Data Analysis
- GMS 6160: Introduction to Oral Biology I
- GMS 6161: Introduction to Oral Biology II
- GMS 6169: Antimicrobial Strategies
- GMS 6173: Stomatognathic System: Form and Function
- GMS 6181: Special Topics in Microbiology
- GMS 6190: Seminar
- GMS 6191: HIV Journal Club
- GMS 6193: Research Conference in Oral Biology
- GMS 6195: Epigenetics Journal Club
- GMS 6196: Virology Journal Club
- GMS 6198: Bacterial Pathogenesis Journal Club
- GMS 6221: Ethics in Genetics
- GMS 6223: Drosophila Neurogenetics: from Development to Function
- GMS 6231: Genomics and Bioinformatics
- GMS 6232: Advanced Applications of Bioinformatics in Genetics
- GMS 6233: Quantitative Models of Protein Evolution and Phylogenetics
- GMS 6234: Introduction to phyloinformatics: A practical approach to molecular phylogenetics of pathogens
- GMS 6290: Genetics/Genomics Program Graduate Seminar
- GMS 6312: Clinical Chemistry and Toxicology
- GMS 6313: Clinical Chemistry and Toxicology: A Rotation
- GMS 6331: Stem Cell Biology
- GMS 6335: Advanced Stem Cell Biology: Tissue Engineering
- GMS 6336: Advanced Stem Cell Biology: Regenerative Medicine
- GMS 6337: B Cell Development in Health and Disease
- GMS 6338: Special Topics in Pathology
- GMS 6339: Special Topics in Immunology
- GMS 6400C: Principles of Physiology
- GMS 6405: Fundamentals of Endocrine Physiology
- GMS 6406: Fundamentals of Pulmonary/Respiratory Physiology
- GMS 6408: Fundamentals of Renal Physiology
- GMS 6410: Physiology of the Circulation of Blood
- GMS 6411: Fundamentals of Cardiovascular Physiology
- GMS 6412: Human Physiology for Biomedical Engineering
- GMS 6413: Advances in Hypertension Research
- GMS 6414: Advanced Renal Physiology
- GMS 6415: Fundamentals of Gastrointestinal Physiology
- GMS 6416: Human Endocrinology and Anatomy of Reproduction
- GMS 6471: Fundamentals of Physiology and Functional Genomics I
- GMS 6472: Fundamentals of Physiology and Functional Genomics II
- GMS 6473: Fundamentals of Physiology and Functional Genomics III
- GMS 6483: Theories of Aging
- GMS 6485: Population Based Research on Aging
- GMS 6486: Fundamentals of Biological Aging
- GMS 6490C: Research Methods in Physiology
- GMS 6491: Journal Club in Physiology
- GMS 6495: Seminar in Physiology
- GMS 6496: Recent Advances in Physiology
- GMS 6497: Seminar on Vision
- GMS 6506: Biologic Drug Development
- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6609: Advanced Gross Anatomy
- GMS 6621: Vision
- GMS 6622: Mitochondrial Biology in Aging and Disease
- GMS 6635: Organization of Cells and Tissues
- GMS 6642: Morphogenesis: Organ Systems I
- GMS 6643: Morphogenesis: Organ Systems II
- GMS 6644: Apoptosis
- GMS 6690: Molecular Cell Biology Journal Club
- GMS 6715: Lifestyle Interventions in Aging I: Behavioral Aspects & Clinical Outcomes
- GMS 6717: Lifestyle Interventions in Aging II: Physiologic Aspects
- GMS 6771: Clinical Neuroscience of Aging
- GMS 6876: Law & Ethics of Aging
- GMS 6845: Clinical & Translational Research Practicum
- GMS 6852: Community Engaged Research for Clinical Effectiveness and Implementation Science Studies
- GMS 6895: CTS Journal Club
- GMS 6903: Manuscript and Abstract Writing for Clinician/Scientists
- GMS 6970: Individual Study
- GMS 6383: Current Topics in Immunotherapy
- GMS 6683: Fundamentals of Vascular Physiology and Pathology
- GMS 5604: Medical Human Embryology
- GMS 5605: Medical Anatomy
- GMS 5606L: Medical Anatomy Lab
- GMS 5613: Medical Human Anatomy by Diagnostic Imaging
- GMS 5630: Medical Histology
- GMS 6581: Biological Imaging Techniques
- GMS 6394: Seminar in Mammalian Genetics
- GMS 6403: Advanced Endocrinology
- GMS 6484: Geriatric and Age Related Diseases
- GMS 6500: Introduction to Pharmacology
- GMS 6607C: Musculoskeletal Systems
- GMS 6719: Fundamentals of Computational Neuroscience
- GMS 6780: Addiction: Neuroscience and Trends
- GMS 6800: Fundamentals of Epidemiology
- GMS 6801: Epidemiology, Prevention, and Control of Infectious Diseases
- GMS 6810: Intermediate Epidemiology Methods
- GMS 6813: Clinical Trials
- GMS 6814: Molecular and Genetic Epidemiology
- GMS 6823: Methods for Evaluating Health Care Outcomes and Costs: Module 1
- GMS 6824: Methods for Evaluating Health Care Outcomes and Costs: Module 2
- GMS 6825: Methods for Evaluating Health Care Outcomes and Costs: Module 3
- GMS 6863: Analysis and Study Design for High Dimension, Low Sample Size Data
- GMS 7887: Health Outcomes & Policy PhD Research Seminar

College of Nursing

Dean: A.M. McDaniel

Complete faculty listings: Follow this link.
The nationally ranked College of Nursing offers the graduate degrees of Master of Science in Nursing, Doctor of Nursing Practice, and Doctor of Philosophy in nursing sciences. Requirements for these degrees are given in the **Graduate Degrees** section of this catalog. Students may request special review by the College of Nursing Admissions Committee if they believe they are strong candidates for graduate study but do not fully meet all criteria.

The College offers the master's degree and post-master's certification for nurse midwifery and the following nurse practitioner roles: adult acute care, adult, family, pediatric, and neonatal. Additional offerings include:

- Psychiatric/mental clinical nurse specialists/nurse practitioners
- Clinical Nurse Leader

For additional information about the Nursing programs, visit [http://www.nursing.ufl.edu](http://www.nursing.ufl.edu) or call (352) 273-6331.

**College of Nursing Courses**

**Other**

**Nursing**

**College**

**Master of Science in Nursing (MSN)**

The master's degree prepares nurses for advanced practice, clinical nurse specialist, or to be a clinical nurse leader. The graduate nursing core includes nursing theory, research, statistics, health policy, ethics, finance, and health promotion. The advanced practice core includes specific theory and clinical courses with relevant clinical experiences.

The College offers the master's degree and post-master's certification for nurse midwifery and the following nurse practitioner roles: adult acute care, adult, family, pediatric, and neonatal.

Additional offerings include:

- Psychiatric/mental clinical nurse specialists/nurse practitioners
- Clinical Nurse Leader
- Graduates are eligible for Florida licensure and national certification.

To be considered for the M.S.N. program, students must meet the following minimum requirements:

- Bachelor of Science in Nursing degree with an upper-division grade point average of 3.0 or higher from a CCNE or NLN AC accredited program
- A score of 500 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination (GRE) General Test. In the new version of the GRE a minimum score of 153 in the verbal section and 144 in the quantitative section. Analytical writing section is optional.
- Eligibility for licensure to practice as a registered nurse in the state of Florida

For application materials: [http://www.nursing.ufl.edu/prospective/prospective_msn_application_process.shtml](http://www.nursing.ufl.edu/prospective/prospective_msn_application_process.shtml)

**Degrees**

**Master of Science in Nursing**

without a concentration

**College of Nursing Courses**

- NGR 5934: Cultural Influences on Health Care
- NGR 6002C: Advanced Health Assessment
- NGR 6006: Principles of Clinical Outcomes Management
- NGR 6054C: Advanced Neonatal Health Assessment and Diagnostic Reasoning
- NGR 6052C: Adult Nursing: Diagnostics and Procedures
- NGR 6101: Theory and Research for Nursing
- NGR 6140: Physiology and Pathophysiology for Advanced Practice Nursing
- NGR 6172: Pharmacotherapeutics for Advanced Practice Nursing
- NGR 6892: Health Care Policy and Organizational Delivery
- NGR 6230C: Acute Care Nurse Practitioner: Diagnostics and Procedures for the Critically Ill
NURG 6240: Primary Care for Adults
NURG 6241: Adult Nursing: Common Health Problems
NURG 6241L: Adult Nurse Practitioner: Common Health Problems Laboratory
NURG 6243: Acute Care Nurse Practitioner: Critically Ill Adult
NURG 6243L: Acute Care Nurse Practitioner: Critically Ill Adult Laboratory
NURG 6244: Adult Nursing: Chronic Health Problems
NURG 6244L: Adult Nurse Practitioner: Chronic Health Problems Laboratory
NURG 6247: Complex High Prevalence Illnesses Of Adults
NURG 6247L: Complex High Prevalence Illnesses Of Adults Laboratory
NURG 6248: Adult Acute Care Nurse Practitioner 3
NURG 6248L: Adult Acute Care Nurse Practitioner 3 Laboratory
NURG 6255: Advanced Nursing Care of Older Adult
NURG 6301: Advanced Child Health Nursing I
NURG 6301L: Advanced Child Health Nursing I Laboratory
NURG 6302: Advanced Child Health Nursing II
NURG 6302L: Advanced Child Health Nursing II Laboratory
NURG 6307: Advanced Child Health Nursing III
NURG 6307L: Advanced Child Health Nursing III Laboratory
NURG 6320C: Neonatal Care I
NURG 6321C: Neonatal Care II
NURG 6323C: Neonatal Care III
NURG 6350: Family Nurse Practitioner: Women, Adolescents, And Children
NURG 6350L: Family Nurse Practitioner: Women, Adolescents, And Children Laboratory
NURG 6360C: Nurse-Midwifery Care I
NURG 6361C: Nurse-Midwifery Care II
NURG 6364: Seminar: The Nurse Midwife
NURG 6371: Pharmacotherapeutics for Advanced Neonatal Nursing
NURG 6372C: Advanced Pediatric Procedures and Diagnostics
NURG 6500C: Individual and Family Therapy for Psychiatric-Mental Health Nursing
NURG 6501C: Group Therapy and Community Interventions for Psychiatric-Mental Health Nursing
NURG 6538: Psychopharmacology for Psychiatric Nursing
NURG 6612: Family Nurse Practitioner: Complex Family Health Care (Focus On Gerontology)
NURG 6612L: Family Nurse Practitioner: Complex Family Health Care (Focus On Gerontology) Laboratory
NURG 6636: Wellness Promotion and Disease Prevention
NURG 6726: Management of the Care Environment II
NURG 6727: Management of the Care Environment I
NURG 6740: Role Transition: Issues in Advanced Practice Nursing
NURG 6770: Leadership/Role of Clinical Nurse Leader Seminar
NURG 6771: Clinical Nurse Leader Role Seminar
NURG 6773: Clinical Nurse Leader Residency/Internship
NURG 6815: Foundations of Qualitative Research in Nursing
NURG 6840: Applied Statistical Analysis I
NURG 6845: Applied Statistical Analysis II
NURG 6850: Research Methods and Utilization for Nursing
NURG 6905: Individual Study
NURG 6914: Practicum in Nursing
NURG 6930: Special Topics in Nursing
NURG 6944: Individual Clinical Practice
NURG 6970: Research for Master's Project
NURG 6971: Research for Master's Thesis
NURG 7176: Advanced Topics in Pharmacotherapeutics in Nursing
NURG 7181: Quantitative Research Design and Measurement in Nursing
NURG 7203: Advanced Diagnostic Reasoning
NURG 7115: Philosophy of Nursing Science
NURG 7124: Theory Development in Nursing
NURG 7700: Leadership and Role Development in Advanced Nursing Practice
NURG 7709: Nurse Scientist and Scholar I
NURG 7814: Field Methods for Health Related Research
NURG 7827: Outcomes Research and Evaluation
NURG 7831: Quality Indicators in Nursing Systems
NURG 7835: Nurse Scientist and Scholar II
NURG 7871: Nursing Informatics and Data
NURG 7882: Ethical Theories and Rational Decision Making in Health
NURG 7891: Health Policy and Finance in Advanced Nursing Practice
NURG 7940L: Residency in Advanced Nursing Practice
NURG 7970L: Advanced Nursing Project
NURG 7979: Advanced Research
NURG 7980: Research for Doctoral Dissertation

Nursing Sciences

College

College of Nursing

Nursing Sciences Program

Chairs: S. Schaffer, M.J. Snider, and J. Stechmiller
Complete faculty listing by department:  Follow this link.

For more information about the Master of Science in Nursing and the Doctor of Nursing Practice, please visit Graduate Degrees or http://www.nursing.ufl.edu

The College's Ph.D. program prepares scientists, scholars, advanced practitioners, and leaders in nursing. Comprehensive research and practice preparation is achieved by pairing students with faculty. Students have access to an array of faculty members for interdisciplinary study, clinical practice, and research. Individually directed dissertation research is a major aspect of the Ph.D. program. Research in the College includes aging and health, women's health, bio-behavioral interventions, and health policy.

Progression in the program depends on the student's ability to meet academic standards and clinical competencies as defined by College policy.

To be considered for admission to the Ph.D. program, students must meet the following minimum requirements:

- A BSN or master's degree in nursing from a CCNE/NLN AC accredited program.
- A master's program GPA of 3.5 on a 4.0 scale and a score of 500 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination (GRE) General Test. In the current version of the GRE a minimum score of 153 in the verbal section and 144 in the quantitative section.

OR

- A master's program GPA of 3.2 on a 4.0 scale and a score of 600 or higher on each of the verbal and quantitative sections in the prior version of the Graduate Record Examination General Test. In the current version of the GRE a score a minimum score of 160 in the verbal section and 148 in the quantitative section.

- Completion of the GRE analytical section

- Eligibility for licensure to practice as a registered nurse in the state of Florida

A personal interview is preferred to establish a Graduate Faculty mentor who will work with the student to individualize the academic program and to structure the student's research or practice focus.

You may also call 352-273-6331 for more information.

Degrees

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

College of Nursing Courses

- NGR 5934: Cultural Influences on Health Care
- NGR 6002C: Advanced Health Assessment
- NGR 6006: Principles of Clinical Outcomes Management
- NGR 6054C: Advanced Neonatal Health Assessment and Diagnostic Reasoning
- NGR 6052C: Adult Nursing: Diagnostics and Procedures
- NGR 6101: Theory and Research for Nursing
- NGR 6140: Physiology and Pathophysiology for Advanced Nursing Practice
- NGR 6152: Pharmacotherapeutics for Advanced Practice Nursing
- NGR 6172: Health Care Policy and Organizational Delivery
- NGR 6230C: Adult Care Nurse Practitioner: Diagnostics and Procedures for the Critically Ill
- NGR 6240: Primary Care for Adults
- NGR 6241: Adult Nursing: Common Health Problems
- NGR 6241L: Adult Nurse Practitioner: Common Health Problems Laboratory
- NGR 6243: Adult Care Nurse Practitioner: Critically Ill Adult
- NGR 6243L: Adult Care Nurse Practitioner: Critically Ill Adult Laboratory
- NGR 6244: Adult Nursing: Chronic Health Problems
- NGR 6244L: Adult Nurse Practitioner: Chronic Health Problems Laboratory
- NGR 6247: Complex High Prevalence Illnesses Of Adults
- NGR 6247L: Complex High Prevalence Illnesses Of Adults Laboratory
- NGR 6248: Adult Acute Care Nurse Practitioner 3
- NGR 6248L: Adult Acute Care Nurse Practitioner 3 Laboratory
- NGR 6255: Advanced Nursing Care of Older Adult
- NGR 6301: Advanced Child Health Nursing I
- NGR 6301L: Advanced Child Health Nursing I Laboratory
- NGR 6302: Adult Acute Care Nurse Practitioner 4
College of Pharmacy

Dear J. Johnson

Complete faculty listings: Follow this link.

The College of Pharmacy offers the Doctor of Philosophy and the Master of Science in Pharmacy degrees in the pharmaceutical sciences, with concentrations in medicinal chemistry, pharmacodynamics, pharmaceutical outcomes and policy, and pharmacy which includes pharmaceutics. There are two additional concentrations in the Master of Science in Pharmacy program in pharmaceutical sciences: forensic drug chemistry, and forensic serology and DNA. Both offered in a distance-learning, nonthesis format. Complete descriptions of the minimum requirements for the M.S.P. and Ph.D. degrees are provided in the Graduate Degrees section of this catalog.

The Graduate Faculty and courses offered are listed under department headings in this catalog. The courses listed below consist of seminar, supervised teaching and research, and research for thesis or doctoral dissertation. These courses are offered in each of the departments.

Students who wish to pursue graduate studies in the College of Pharmacy must have an undergraduate degree in pharmacy, chemistry, biology, or related sciences.

Satisfactory completion of a thesis or dissertation based on research is a requirement for a graduate degree in the pharmaceutical sciences.

Inquiries regarding applications and general information about the graduate programs are processed through the

Office of Research and Graduate Studies,
College of Pharmacy,
P.O. Box 100484,
Health Science Center.

For more information, please see our website: http://pharmacy.ufl.edu.

Departments and Programs within the College of Pharmacy

College of Pharmacy Courses
Other

Pharmaceutical Sciences (Medicinal Chemistry)

College

College of Pharmacy

Department/School

Medicinal Chemistry Department

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Medicinal Chemistry

   optional second concentration in Clinical and Translational Science

concentration in Toxicology

Master of Science in Pharmacy

concentration in Pharmaceutical Chemistry

concentration in Medicinal Chemistry

concentration in Forensic Serology and DNA

concentration in Forensic Science

concentration in Forensic Drug Chemistry

concentration in Clinical Toxicology
Medicinal Chemistry Courses

- PHA5475: Synthesis of Prodrugs
- PHA6115: Equilibria, Complexations, and Interactions of Drugs
- PHA6354: Natural Medicinal Products
- PHA6356: Structure Determination of Complex Natural Products
- PHA6357: Herbal & Dietary Supplements
- PHA6417: Pharmaceutical Analysis II
- PHA6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA6432: Fundamentals of Pharmaceutical Chemistry
- PHA6444: Pharmaceutical Chemistry I
- PHA6447: Drug Design
- PHA6448: High Throughput Drug Discovery
- PHA6471: Synthetic Medicinal Chemistry
- PHA6534: Toxicology of Chemical Weapons
- PHA6535: Principles of Nucleotide Activity
- PHA6543: Pharmaceutical Chemistry II
- PHA6556: Introduction to Clinical Toxicology
- PHA6557: Clinical Toxicology I
- PHA6840: Medicinal Chemistry of Drugs of Abuse
- PHA6850: Principles of Forensic Science
- PHA6851: Forensic Analysis of DNA
- PHA6853: Biological Evidence and Serology
- PHA6854: Forensic Immunology
- PHA6855: Forensic Genetics
- PHA6856: Blood Spatter and Distribution
- PHA6905C: Research Procedures in Medicinal Chemistry
- PHA6934: Seminar in Medicinal Chemistry
- PHA6852: Mammalian Molecular Biology
- VME6602: General Toxicology
- VME6605: Toxic Substances
- VME6613: Forensic Toxicology I
- VME6614: Forensic Toxicology II
- VME6650: Principles of Mammalian Pharmacology
- VME6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA5270: Health Care and Patient Safety
- PHA5271: Health Care Risk Management
- PHA5272: Risk Management, Liability and Compliance
- PHA6227: Institutional Pharmacy Leadership I
- PHA6228: Institutional Pharmacy Leadership II
- PHA6235: Advanced Pharmaceutical Law
- PHA6236: Health Sciences Liability Law
- PHA6250: Patient Responsibility in Health Care
- PHA6264: Pharmacoconomics and Health Technology Assessment
- PHA6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA6268: Pharmacoepidemiology and Patient Safety
- PHA6269: Pharmaceutical Products and Public Policy
- PHA6273: Structure, Process, and Outcomes of Regulation
- PHA6274: Federal Regulations of Drugs and Pharmacy
- PHA6275: Federal Regulations of Controlled Substances
- PHA6276: Regulating Pharmaceutical Access and Costs
- PHA6277: Ethics in Drug Development Production and Use
- PHA6278: State Regulation of Drugs and Pharmacy
- PHA6279: Pharmaceutical Outcomes and Policy Seminar
- PHA6280: Medicare and Medicaid
- PHA6281: Practices and Procedures of Administrative Agencies
- PHA6286: Pharmaceutical Microeconomics
- PHA6287: Pharmaceutical Health Economics
- PHA6288: Critical Review of Research Methods
- PHA6289: Regulating Clinical Research
- PHA6290: Pharmaceutical Fraud and Abuse
- PHA6291: Pharmaceutical Health Care Systems
- PHA6717: Measurement in Pharmacy Administration Research
- PHA6793: Evidentiary Basis of Pharmaceutical Use
- PHA6796: Study Design in Pharmaceutical Outcomes & Policy Research
- PHA6798: The Use and Abuse of Statistics in Drug Regulation
- PHA6799: Patient Safety Program Evaluation
- PHA6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA6860: Prevention of Pharmaceutical Crimes
- PHA6891: Introduction to Pharmacoepidemiology
- PHA6892: Practices and Procedures of the IRB
- PHA6893: Research Ethics
- PHA6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
- PHA6937: Topics in Pharmaceutical Administration
- PHA6206: Introduction to Pharmaceutical Microeconomics
- PHA6282: Pharmaceutical Policy Process
- PHA6283: Commercial Applications of Pharmacoeconomics

Pharmaceutics Departmental Courses

- PHA6116: In Vivo and In Vitro Stability of Drugs
- PHA6118: Molecular Diversity
- PHA6125: Pharmacokinetics and Biopharmaceutics
- PHA6170C: Pharmaceutical Product Formulation
- PHA6183: Pharmaceutical Gene Delivery
- PHA6185: Pharmaceutical Drug Development
- PHA6416: Pharmaceutical Analysis I
- PHA6427: Pharmacogenetics of Drug Metabolism
- PHA6440: Seminar in Drug Discovery
- PHA6449: Pharmacoepidemiology
- PHA6630: Medication Therapy Management: A Hematologic Focus
- PHA6631: Foundations of Medication Therapy Management I
- PHA6632: Foundations of Medication Therapy Management II
- PHA6633: Medication Therapy Management: A Cardiovascular Focus
- PHA6634: Medication Therapy Management: An Endocrine Focus
- PHA6635: Medication Therapy Management: A Renal Focus
- PHA6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA6637: Medication Therapy Management: A Psychiatric Focus
- PHA6638: Medication Therapy Management: A Neurologic Focus
- PHA6639: Medication Therapy Management: A Respiratory Focus
- PHA6894: Introduction to Graduate Studies
- PHA6896: Preclinical Drug Evaluation

Pharmacodynamics Courses

- PHA5531: Neurotoxicology
- PHA6508: Systems Physiology and Pathophysiology I
- PHA6509: Systems Physiology and Pathophysiology II
- PHA6512L: Experiential Research Training in Pharmacodynamics
- PHA6521C: Research Techniques in Pharmacodynamics
- PHA6522L: ICBR Molecular Techniques Laboratory
- PHA6540: Neurochemical Foundation of Pharmacodynamics
- PHA7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neurosciences of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA5171: Pharmaceutical Biotechnology
- PHA6521C: Research Techniques in Pharmacodynamics
- PHA6806: Pharmacoeconomic Modeling
- PHA6910: Supervised Research
- PHA6935: Selected Topics in Pharmacy
- PHA6936: Advanced Topics in Pharmaceutical Sciences
- PHA6938: Research Seminar
- PHA6940: Supervised Teaching
- PHA6971: Research for Master's Thesis
- PHA7979: Advanced Research
- PHA7980: Research for Doctoral Dissertation

Pharmaceutical Sciences (Pharmaceutical Outcomes and Policy)

College
Pharmaceutical Outcomes and Policy Department

Pharmaceutical Outcomes and Policy Program Information

The Department offers the Master of Science in Pharmacy and Doctor of Philosophy degrees in pharmaceutical sciences with a concentration in pharmaceutical outcomes and policy. Requirements for the M.S.P. degree are the same as for the Master of Science degree.

Research in the Department emphasizes the epidemiological, socio-behavioral, administrative, regulatory, and economic aspects of drug therapy and pharmaceutical services, including assessment of safety, effectiveness, efficiency and quality aspects of patient-oriented pharmaceutical services and medication use.

The department offers both a research-oriented residential M.S.P. and Ph.D. degree programs as well as an online M.S.P. program. For the research oriented degree programs, graduate studies include core curricula and four specializations in patient safety and program evaluation, pharmacoepidemiology, and social-behavioral research in medication use. Electives and required courses draw from the resources of the entire University. Graduates are prepared for leadership positions in academia, public service, pharmaceutical industry, and health service industry with a focus on the evaluation of drugs and related services.

The online non-thesis M.S.P. program is designed for working professionals, and focuses on pharmaceutical regulation and outcomes. Prior pharmacy experience/knowledge is not required and the program is available to persons located in the United States only. Coursework is delivered in both asynchronous and live, synchronous sessions. Students may choose among six specialty tracks including Pharmacy Regulation & Policy, Applied Pharmacoepidemiology, Drug Regulatory Affairs, Clinical Research Regulation in Pharmacy, Patient Safety & Medication Risk Management, and Institutional Pharmacy Leadership.

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Pharmaceutical Outcomes and Policy

optional second concentration in Clinical and Translational Science

Master of Science in Pharmacy

concentration in Medication Therapy Management

concentration in Pharmaceutical Outcomes and Policy

Pharmaceutical Outcomes and Policy Courses

- PHA5270: Health Care and Patient Safety
- PHA5271: Health Care Risk Management
- PHA5272: Risk Management, Liability and Compliance
- PHA6227: Institutional Pharmacy Leadership I
- PHA6228: Institutional Pharmacy Leadership II
- PHA6235: Advanced Pharmacoepidemiology
- PHA6236: Health Sciences Liability Law
- PHA6250: Patient Responsibility in Health Care
- PHA6264: Pharmacoepidemiology and Health Technology Assessment
- PHA6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA6288: Pharmacoepidemiology and Patient Safety
Medicinal Chemistry Courses

- PHA5475: Synthesis of Prodrugs
- PHA6115: Equilibria, Complexations, and Interactions of Drugs
- PHA6354: Natural Medicinal Products
- PHA6356: Structure Determination of Complex Natural Products
- PHA6357: Herbal & Dietary Supplements
- PHA6417: Pharmaceutical Analysis II
- PHA6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA6432: Fundamentals of Pharmaceutical Chemistry
- PHA6444: Pharmaceutical Chemistry I
- PHA6447: Drug Design
- PHA6448: High Throughput Drug Discovery
- PHA6471: Synthetic Medicinal Chemistry
- PHA6534: Toxicology of Chemical Weapons
- PHA6536: Principles of Nucleotide Activity
- PHA6543: Pharmaceutical Chemistry II
- PHA6556: Introduction to Clinical Toxicology
- PHA6557: Clinical Toxicology I
- PHA6840: Medicinal Chemistry of Drugs of Abuse
- PHA6850: Principles of Forensic Science
- PHA6851: Forensic Analysis of DNA
- PHA6853: Biological Evidence and Serology
- PHA6854: Forensic Immunology
- PHA6855: Forensic Genetics
- PHA6856: Blood Spatter and Distribution
- PHA6905C: Research Procedures in Medicinal Chemistry
- PHA6934: Seminar in Medicinal Chemistry
- PHA6852: Mammalian Molecular Biology
- VME6602: General Toxicology
- VME6605: Toxic Substances
- VME6613: Forensic Toxicology I
- VME6614: Forensic Toxicology II
- VME6650: Principles of Mammalian Pharmacology
- VME6766: Laboratory Quality Assurance/Quality Control

Pharmaceutics Departmental Courses

- PHA6116: In Vivo and In Vitro Stability of Drugs
- PHA6118: Molecular Diversity
- PHA6125: PharmacoKinetics and Biopharmaceutics
- PHA6170C: Pharmaceutical Product Formulation
- PHA6183: Pharmaceutical Gene Delivery
- PHA6185: Pharmaceutical Drug Development
- PHA6416: Pharmaceutical Analysis I
- PHA6427: PharmacoGenetics of Drug Metabolism
- PHA6440: Seminar in Drug Discovery
- PHA 6449: Pharmacogenomics
- PHA 6630: Medication Therapy Management: A Hematologic Focus
- PHA 6631: Foundations of Medication Therapy Management I
- PHA 6632: Foundations of Medication Therapy Management II
- PHA 6633: Medication Therapy Management: A Cardiovascular Focus
- PHA 6634: Medication Therapy Management: An Endocrine Focus
- PHA 6635: Medication Therapy Management: A Renal Focus
- PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA 6637: Medication Therapy Management: A Psychiatric Focus
- PHA 6638: Medication Therapy Management: A Neurologic Focus
- PHA 6639: Medication Therapy Management: A Respiratory Focus
- PHA 6694: Introduction to Graduate Studies
- PHA 6896: Preclinical Drug Evaluation

Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA 5171: Pharmaceutical Biotechnology
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6806: Pharmacoeconomic Modeling
- PHA 6910: Supervised Research
- PHA 6935: Selected Topics in Pharmacy
- PHA 6936: Advanced Topics in Pharmaceutical Sciences
- PHA 6938: Research Seminar
- PHA 6940: Supervised Teaching
- PHA 6971: Research for Master's Thesis
- PHA 7979: Advanced Research
- PHA 7980: Research for Doctoral Dissertation

Pharmaceutical Sciences (Pharmaceutics)

College

Department/School

Pharmaceutics Department

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy
without a concentration

concentration in Clinical and Translational Science

concentration in Pharmacy

optional second concentration in Clinical and Translational Science

Master of Science in Pharmacy

without a concentration

concentration in Pharmacy

Pharmaceutics Departmental Courses

- PHA 6116: In Vivo and In Vitro Stability of Drugs
- PHA 6118: Molecular Diversity
- PHA 6125: Pharmacokinetics and Biopharmaceutics
- PHA 6170C: Pharmaceutical Product Formulation
- PHA 6183: Pharmaceutical Gene Delivery
- PHA 6185: Pharmaceutical Drug Development
- PHA 6416: Pharmaceutical Analysis I
- PHA 6427: Pharmacogenetics of Drug Metabolism
- PHA 6440: Seminar in Drug Discovery
- PHA 6449: Pharmacogenomics
- PHA 6630: Medication Therapy Management: A Hematologic Focus
- PHA 6631: Foundations of Medication Therapy Management I
- PHA 6632: Foundations of Medication Therapy Management II
- PHA 6633: Medication Therapy Management: A Cardiovascular Focus
- PHA 6634: Medication Therapy Management: An Endocrine Focus
- PHA 6635: Medication Therapy Management: A Renal Focus
- PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA 6637: Medication Therapy Management: A Psychiatric Focus
- PHA 6638: Medication Therapy Management: A Neurologic Focus
- PHA 6639: Medication Therapy Management: A Respiratory Focus
- PHA 6694: Introduction to Graduate Studies
- PHA 6696: Preclinical Drug Evaluation

Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6852: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmaceconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development, Production, and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6290: Pharmaceutical Fraud and Abuse
- PHA 6291: Pharmaceutical Health Care Systems
- PHA 6717: Measurement in Pharmacy Administration Research
- PHA 6793: Evidentiary Basis of Pharmaceutical Use
- PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
- PHA 6798: The Use and Abuse of Statistics in Drug Regulation
- PHA 6799: Patient Safety Program Evaluation
- PHA 6805: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA 6807: Prevention of Pharmaceutical Crimes
- PHA 6891: Introduction to Pharmacepidemiology
- PHA 6892: Practices and Procedures of the IRB
- PHA 6893: Research Ethics
- PHA 6899: Advanced OB/GYN and Pediatric Pharmacepidemiology
- PHA 6937: Topics in Pharmaceutical Administration
- PHA 6938: Introduction to Pharmaceutical Microeconomics
- PHA 6939: Pharmaceutical Process
- PHA 6940: Pharmaceutical Microeconomics

Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses
Pharmaceutical Sciences (Pharmacodynamics)

The Department of Pharmacodynamics offers the Doctor of Philosophy in the pharmaceutical sciences with a concentration in pharmacodynamics. The Department participates in the interdisciplinary toxicology concentration (see Interdisciplinary Graduate Studies in this catalog). Pharmacodynamics is an integrated field of study involving pharmacology, physiology, and toxicology in a holistic approach to drug action in living systems. The Department focuses on neuroendocrinology, cardiovascular pharmacology, and neuropharmacology with diverse research interests in aging, hypertension, reproduction, glaucoma, neurotoxicity, and environmental physiology.

An undergraduate degree in pharmacy, chemistry, biology, or related sciences is required. In addition to graduate courses in pharmacy, courses are taken in the College of Medicine and in statistics in the College of Liberal Arts and Sciences.

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

- concentration in Pharmacodynamics
  - optional second concentration in Clinical and Transitional Science

Master of Science in Pharmacy

- concentration in Pharmacodynamics
### Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

### Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6535: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6852: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control

### Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmaceutical Microeconomics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6290: Pharmaceutical Fraud and Abuse
- PHA 6291: Pharmaceutical Health Care Systems
- PHA 6717: Measurement in Pharmacy Administration Research
Pharmaceutics Departmental Courses

- PHA6116: In Vivo and In Vitro Stability of Drugs
- PHA6118: Molecular Diversity
- PHA6125: Pharmacokinetics and Biopharmaceutics
- PHA6170C: Pharmaceutical Product Formulation
- PHA6183: Pharmaceutical Gene Delivery
- PHA6185: Pharmaceutical Drug Development
- PHA6416: Pharmaceutical Analysis I
- PHA6427: Pharmacogenetics of Drug Metabolism
- PHA6440: Seminar in Drug Discovery
- PHA6449: Pharmacogenomics
- PHA6630: Medication Therapy Management: A Hematologic Focus
- PHA6631: Foundations of Medication Therapy Management I
- PHA6632: Foundations of Medication Therapy Management II
- PHA6633: Medication Therapy Management: A Cardiovascular Focus
- PHA6634: Medication Therapy Management: An Endocrine Focus
- PHA6635: Medication Therapy Management: A Renal Focus
- PHA6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA6637: Medication Therapy Management: A Psychiatric Focus
- PHA6638: Medication Therapy Management: A Neurologic Focus
- PHA6639: Medication Therapy Management: A Respiratory Focus
- PHA6894: Introduction to Graduate Studies
- PHA6896: Preclinical Drug Evaluation

Pharmacology Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Pharmacy Courses

- PHA5171: Pharmaceutical Biotechnology
- PHA6521C: Research Techniques in Pharmacodynamics
- PHA6806: Pharmacoconomic Modeling
- PHA6910: Supervised Research
- PHA6935: Selected Topics in Pharmacy
- PHA6936: Advanced Topics in Pharmaceutical Sciences
- PHA6938: Research Seminar
- PHA6940: Supervised Teaching
- PHA6971: Research for Master's Thesis
- PHA7979: Advanced Research
- PHA7980: Research for Doctoral Dissertation

Pharmaceutical Sciences (Pharmacotherapy and Translational Research)

Description to be added

College

College of Pharmacy
Pharmacy and Translational Research Department

Degrees Offered With a Major in Pharmaceutical Sciences

Doctor of Philosophy

concentration in Clinical Pharmaceutical Sciences

Master of Science in Pharmacy

concentration in Clinical Pharmacy

Medicinal Chemistry Courses

- PHA 5475: Synthesis of Prodrugs
- PHA 6115: Equilibria, Complexations, and Interactions of Drugs
- PHA 6354: Natural Medicinal Products
- PHA 6356: Structure Determination of Complex Natural Products
- PHA 6357: Herbal & Dietary Supplements
- PHA 6417: Pharmaceutical Analysis II
- PHA 6425: Drug Biotrans and Molecular Mechanisms of Toxicity
- PHA 6432: Fundamentals of Pharmaceutical Chemistry
- PHA 6444: Pharmaceutical Chemistry I
- PHA 6447: Drug Design
- PHA 6448: High Throughput Drug Discovery
- PHA 6471: Synthetic Medicinal Chemistry
- PHA 6534: Toxicology of Chemical Weapons
- PHA 6536: Principles of Nucleotide Activity
- PHA 6543: Pharmaceutical Chemistry II
- PHA 6556: Introduction to Clinical Toxicology
- PHA 6557: Clinical Toxicology I
- PHA 6840: Medicinal Chemistry of Drugs of Abuse
- PHA 6850: Principles of Forensic Science
- PHA 6851: Forensic Analysis of DNA
- PHA 6853: Biological Evidence and Serology
- PHA 6854: Forensic Immunology
- PHA 6855: Forensic Genetics
- PHA 6856: Blood Spatter and Distribution
- PHA 6905C: Research Procedures in Medicinal Chemistry
- PHA 6934: Seminar in Medicinal Chemistry
- PHA 6852: Mammalian Molecular Biology
- VME 6602: General Toxicology
- VME 6605: Toxic Substances
- VME 6613: Forensic Toxicology I
- VME 6614: Forensic Toxicology II
- VME 6650: Principles of Mammalian Pharmacology
- VME 6766: Laboratory Quality Assurance/Quality Control

Pharmaceutical Outcomes and Policy Courses

- PHA 5270: Health Care and Patient Safety
- PHA 5271: Health Care Risk Management
- PHA 5272: Risk Management, Liability and Compliance
- PHA 6227: Institutional Pharmacy Leadership I
- PHA 6228: Institutional Pharmacy Leadership II
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- PHA 6235: Advanced Pharmaceutical Law
- PHA 6236: Health Sciences Liability Law
- PHA 6250: Patient Responsibility in Health Care
- PHA 6264: Pharmacoeconomics and Health Technology Assessment
- PHA 6265: Introduction to Pharmaceutical Outcomes and Policy I
- PHA 6266: Introduction to Pharmaceutical Outcomes and Policy II
- PHA 6268: Pharmacoepidemiology and Patient Safety
- PHA 6269: Pharmaceutical Products and Public Policy
- PHA 6273: Structure, Process, and Outcomes of Regulation
- PHA 6274: Federal Regulations of Drugs and Pharmacy
- PHA 6275: Federal Regulations of Controlled Substances
- PHA 6276: Regulating Pharmaceutical Access and Costs
- PHA 6277: Ethics in Drug Development Production and Use
- PHA 6278: State Regulation of Drugs and Pharmacy
- PHA 6279: Pharmaceutical Outcomes and Policy Seminar
- PHA 6280: Medicare and Medicaid
- PHA 6281: Practices and Procedures of Administrative Agencies
- PHA 6286: Pharmacoeconomics and Health Economics
- PHA 6287: Pharmaceutical Health Economics
- PHA 6288: Critical Review of Research Methods
- PHA 6289: Regulating Clinical Research
- PHA 6290: Pharmaceutical Fraud and Abuse
- PHA 6291: Pharmaceutical Health Care Systems
- PHA 6717: Measurement in Pharmacy Administration Research
- PHA 6793: Evidentiary Basis of Pharmaceutical Use
- PHA 6796: Study Design in Pharmaceutical Outcomes & Policy Research
- PHA 6798: The Use and Abuse of Statistics in Drug Regulation
- PHA 6799: Applied Data Interpretation and Reporting of Findings in Pharmacy
- PHA 6860: Prevention of Pharmaceutical Crimes
- PHA 6891: Introduction to Pharmacoepidemiology
- PHA 6892: Practices and Procedures of the IRB
- PHA 6893: Research Ethics
- PHA 6899: Advanced OB/GYN and Pediatric Pharmacoepidemiology
- PHA 6937: Topics in Pharmaceutical Administration
- PHA 6938: Medication Therapy Management: A Cardiovascular Focus
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmaceutics Departmental Courses

- PHA 6116: In Vivo and In Vitro Stability of Drugs
- PHA 6118: Molecular Diversity
- PHA 6125: Pharmacokinetics and Biopharmaceutics
- PHA 6170C: Pharmaceutical Product Formulation
- PHA 6183: Pharmaceutical Gene Delivery
- PHA 6185: Pharmaceutical Drug Development
- PHA 6416: Pharmaceutical Analysis I
- PHA 6427: Pharmacoanalytics of Drug Metabolism
- PHA 6440: Seminar in Drug Discovery
- PHA 6449: Pharmacogenomics
- PHA 6630: Medication Therapy Management: A Hematologic Focus
- PHA 6631: Foundations of Medication Therapy Management I
- PHA 6632: Foundations of Medication Therapy Management II
- PHA 6633: Medication Therapy Management: A Cardiovascular Focus
- PHA 6634: Medication Therapy Management: An Endocrine Focus
- PHA 6635: Medication Therapy Management: A Renal Focus
- PHA 6636: Medication Therapy Management: A Gastrointestinal Focus
- PHA 6637: Medication Therapy Management: A Psychiatric Focus
- PHA 6638: Medication Therapy Management: A Neuromuscular Focus
- PHA 6639: Medication Therapy Management: A Respiratory Focus
- PHA 6894: Introduction to Graduate Studies
- PHA 6896: Preclinical Drug Evaluation

Pharmacodynamics Courses

- PHA 5531: Neurotoxicology
- PHA 6508: Systems Physiology and Pathophysiology I
- PHA 6509: Systems Physiology and Pathophysiology II
- PHA 6512L: Experiential Research Training in Pharmacodynamics
- PHA 6521C: Research Techniques in Pharmacodynamics
- PHA 6522L: ICBR Molecular Techniques Laboratory
- PHA 6540: Neurochemical Foundation of Pharmacodynamics
- PHA 7939: Journal Colloquy in Pharmacodynamics

Pharmacology Courses
College of Pharmacy Courses

- GMS 6563: Molecular Pharmacology
- GMS 6590: Seminar in Pharmacology
- GMS 6592: Ion Channels Journal Club: Pharmacology, Biophysics, and Neuroscience of Excitable Membranes
- GMS 6735: Neuropharmacology
- GMS 7593: Topics in Pharmacology and Toxicology

College of Public Health and Health Professions

Dear Michael G. Perri
Executive Associate Dean: Stephanie L. Hanson

Complete faculty listings: Follow this link.

The University of Florida College of Public Health and Health Professions has established a new educational model that focuses on the integration of public health problem-solving and individual patient care. The college's mission is to preserve, promote and improve the health and well-being of populations, communities and individuals. To fulfill this mission, we foster collaborations among public health and the health professions in education, research and service.

For more information, please see our website: http://phhp.ufl.edu

Departments and Programs within the College of Public Health and Health Professions

College of Public Health and Health Professions Courses

Other

Audiology

Audiology

College

College of Public Health and Health Professions

Department/School

Speech, Language and Hearing Sciences Department

Degrees Offered with a Major in Audiology

Doctor of Audiology

Speech, Language and Hearing Sciences Departmental Courses

- ASL 5406: Manual Communication with the Hearing Impaired
- LAE 6505: Applied Preschool Language Disorders: Diagnosis and Treatment
- LIN 5741: Applied English Grammar
- SPA 5051: Clinical Observation in Audiology
- SPA 5102: Auditory Anatomy and Physiology
- SPA 5128: Speech Perception
- SPA 5204: Phonological Disorders
- SPA 5211: Voice Disorders
- SPA 5225: Principles of Speech Pathology; Stuttering
- SPA 5245: Communicative Disorders Related to Cleft Palate
- SPA 5254: Neurocognitive Language Disorders
- SPA 5304: Principles of Audiological Evaluation
- SPA 5315: Peripheral and Central Auditory Disorders
- SPA 5401: Speech Pathology Language Disorder
- SPA 5405: Language Disorders II
- SPA 5553: Instrumentation and Diagnosis in Speech-Language Pathology
- SPA 5563: Psychosocial Aspects of Hearing Loss
- SPA 5646: Speech and Language of the Deaf and Hard of Hearing
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6010: Basic Auditory Sciences
- SPA 6117: Science of Singing
- SPA 6133L: Hearing Aid Analysis Laboratory
- SPA 6207: Applied Phonological Disorders: Diagnosis and Treatment
- SPA 6211: Applied Voice Disorders: Diagnosis and Treatment
- SPA 6217: Vocal Health and Habilitation
- SPA 6229: Applied Fluency Disorders: Diagnosis and Treatment
- SPA 6233: Speech Motor Control Disorders
- SPA 6270: Auditory Processing Disorders
- SPA 6805: Introduction to Graduate Research
- SPA 6806: Pediatric Audiology
- SPA 6811: Medical Audiology
- SPA 6312: Advanced Audiology and Neuro-Otology
- SPA 6317: Vestibular Disorders
- SPA 6323: Audiologic Rehabilitation for Adults
- SPA 6324: Audiologic Rehabilitation for Children
- SPA 6340: Amplification I
- SPA 6341: Amplification II
- SPA 6342: Amplification III
- SPA 6390: Proseminar: Speech-Language Pathology and Audiology
- SPA 6410: Adult Language Disorders
- SPA 6416: Applied Neurogenic Disorders: Diagnosis and Treatment
- SPA 6430: Applied Developmental Disorders: Diagnosis and Treatment in Speech and Language
- SPA 6436: Issues in Autism Spectrum Disorders
- SPA 6506: Clinical Clerkship in Audiology
- SPA 6507: Applied Augmentative and Alternative Communication
- SPA 6521: Practicum in Speech-Language Diagnostics: UF/SHC
- SPA 6524: Practicum in Speech-Language Therapy: UF/SHC
- SPA 6531: Clinical Practice in Hearing Assessment
- SPA 6533: Clinical Practice in Aural Rehabilitation
- SPA 6559: Alternative and Augmentative Communication
- SPA 6564: Communication and Aging
- SPA 6565: Seminar in Dysphagia
- SPA 6568: Clinical Evaluation in Medical Speech-Language Pathology
- SPA 6570: Seminar: Professional Aspects of Speech-Language Pathology
- SPA 6581: Special Clinical
- SPA 6830: Communication Disorders in Medically Complex Pediatric Populations
- SPA 6905: Individual Study
- SPA 6910: Supervised Research
- SPA 6930: Proseminar in Speech-Language Pathology and Audiology
- SPA 6935: Applied Reading Disabilities: Diagnosis and Treatment
- SPA 6936: Special Topics
- SPA 6940: Supervised Teaching
- SPA 6942: Externship in Speech-Language Pathology
- SPA 6971: Research for Master's Thesis
- SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
- SPA 7306: Audiologic Assessment in a Medical Setting
- SPA 7318: Clinical Auditory Electrophysiology
- SPA 7319: Balance Disorders: Evaluation and Treatment
- SPA 7325: Audiologic Rehabilitation
- SPA 7343: Cochlear Implants and Assistive Devices
- SPA 7348: Principles of Amplification
- SPA 7353: Environmental Hearing Conservation
- SPA 7354: Seminar in Audiology: Hearing Conservation and Noise Control
- SPA 7391: Business and Professional Issues in Audiology
- SPA 7415: Neulinguistics of Adult Language Disorders
- SPA 7500: Public School Practicum
- SPA 7523: Pradicum in Speech Pathology in a Medical/Dental Setting
- SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
- SPA 7566: Counseling Individuals with Hearing Losses
- SPA 7833: Audiology Research Project
- SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
- SPA 7945: Graduate Practicum in Audiology
- SPA 7946: Clinical I: Pradicum in Medical Speech and Language Pathology
- SPA 7947: Clinical II: Pradicum in Advanced Medical Speech-Language Pathology
- SPA 7958: Clinical Externship
- SPA 7979: Advanced Research
- SPA 7980: Research for Doctoral Dissertation

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
HSC 6905: Independent Study
HSC 6939: Special Topics
HSC 6940: Supervised Teaching
PHC 6000: Epidemiology Methods I
PHC 6001: Principles of Epidemiology in Public Health
PHC 6002: Epidemiology of Infectious Diseases
PHC 6003: Epidemiology of Chronic Diseases and Disability
PHC 6009: Biology and Epidemiology of HIV/AIDS
PHC 6011: Epidemiology Methods II
PHC 6016: Social Epidemiology in Public Health
PHC 6036: Environmental Infectious Diseases: A Molecular Approach
PHC 6050: Statistical Methods for Health Sciences Research I
PHC 6102: Introduction to Public Health Administrative Systems
PHC 6103: Systems Thinking for Public Health
PHC 6104: Evidence-Based Management of Public Health Programs
PHC 6146: Public Health Program Planning and Evaluation
PHC 6153: Public Policy and Aging
PHC 6183: Disaster Preparedness and Emergency Response
PHC 6194: Spatial Epidemiology
PHC 6195: Health information for Diverse Populations: Theory & Methods
PHC 6220: Overview of Long-Term Care
PHC 6251: Assessment and Surveillance in Public Health
PHC 6301: Aquatic Systems and Environmental Health
PHC 6309: Environmental Justice Issues in Public Health
PHC 6312: Water Quality and Human Health
PHC 6313: Environmental Health Concepts in Public Health
PHC 6316: Health, Risk, and Crisis Communication
PHC 6317: Risk Communication for Public Health Practice
PHC 6346: Occupational and Environmental Health Among Agriculture Workers
PHC 6370: Public Health Biology
PHC 6403: Adolescence, Risk Taking and Health
PHC 6404: Gender, Sexuality, and Health
PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
PHC 6413: Critical Incidents and Violence in Communities
PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
PHC 6419: Biomedical and Psychological Aspects of Very Late Life
PHC 6421: Public Health Law and Ethics
PHC 6441: Health Disparities in the United States
PHC 6445: Global Public Health and Development II
PHC 6447: Ecology of HIV/AIDS in the Rural South
PHC 6512: Environmental Management of Vector-Borne Diseases
PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
PHC 6519: Zoonotic Diseases in Humans and Animals
PHC 6520: Foodborne Diseases
PHC 6530: Public Health Issues of Mothers and Children
PHC 6543: Community Practice of Behavioral Health Risk Prevention
PHC 6544: Health Behavior Interventions in Practice
PHC 6561: Public Health Laboratory Techniques
PHC 6585: Health Promotion and Disease Prevention
PHC 6586: Interventions for Public Health
PHC 6607: Critical Issues in Public Health
PHC 6700: Social and Behavioral Research Methods
PHC 6702: Exposure Measurement and Assessment
PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
PHC 6762: International Public Health
PHC 6905: Independent Study
PHC 6917: Supervised Research Project
PHC 6931: Seminars in Public Health
PHC 6937: Special Topics in Public Health
PHC 6945: Public Health Practicum
PHC 6946: Public Health Internship
PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
PHC 7038: Psychiatric Epidemiology
PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
PHC 7727: Grant Writing for Population Health Research
PHC 7752: Seminar in Instrument Development for Public Health
PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
PHC 7907: Social and Behavioral Science Journal Club
PHC 7979: Advanced Research
PHC 7980: Research for Doctoral Dissertation
RHT 5156: Exercise Physiology
RHT 6125C: Concepts in Clinical Biomechanics
RHT 6127C: Control of Gait and Posture
RHT 6167C: Applied Neurophysiology for Physical Therapy
RHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
RHT 6316: Neurological Aspects of Orthopedic Rehabilitation
RHT 6615L: Research Instrumentation in Physical Therapy
RHT 6718: Neuropsychology: A Foundation for Neuropsychological Rehabilitation
RSD 6110: Rehabilitation Science Theory and Application I
RSD 6112: Rehabilitation Science Theory and Application II
RSD 6114: Rehabilitation in the United Kingdom
RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
RSD 6700: Rasch Measurement: Introduction and Application
RSD 6705: Research Methods in Rehabilitation
Biostatistics (PHHP)

College

College of Public Health and Health Professions
College of Medicine

Department

Biostatistics Department

Biostatistics Program

Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. Students must have a directly related master's degree (i.e., Master of Science in statistics or biostatistics). All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits will typically be transferred from a Master of Science program), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/phd-in-biostatistics/](http://biostat.ufl.edu/education/phd-in-biostatistics/).

Master of Science

The biostatistics masters degree (MS) requires a minimum of 36 semester credits beyond the bachelor's degree. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine. We expect our graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website [http://biostat.ufl.edu/education/ms-in-biostatistics/](http://biostat.ufl.edu/education/ms-in-biostatistics/).

Degrees
Doctor of Philosophy

Master of Science

Biostatistics Departmental Courses

- GMS 6818: Design and Conduct Clinical Trials I
- GMS 6819: Design and Conduct Clinical Trials II
- GMS 6827: Advanced Clinical Trial Methods
- GMS 6841: Design and Analysis of Translational Research in Biomedical Sciences
- GMS 6861: Applied Biostatistics I
- GMS 6862: Applied Biostatistics II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6020: Clinical Trial Methods
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6050C: Biostatistical Methods I
- PHC 6051: Biostatistical Methods II
- PHC 6052: Introduction to Biostatistical Methods
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6055: Biostatistical Computing Using R
- PHC 6063: Biostatistical Consulting
- PHC 6080: SAS for Public Health - Data
- PHC 6081: SAS for Public Health - Analysis
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6937: Special Topics in Public Health
- PHC 6946: Public Health Internship
- PHC 7013: Bias in Observational Research
- PHC 7056: Analysis of Longitudinal Data
- PHC 7066: Large Sample Theory
- PHC 7925: Biostatistics Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- STA 5223: Applied Sample Survey Methods
- STA 5325: Fundamentals of Probability
- STA 5328: Fundamentals of Statistical Theory
- STA 5503: Categorical Data Methods
- STA 5701: Applied Multivariate Methods
- STA 5715: Applied Survival Analysis
- STA 6092: Applied Statistical Practice
- STA 6166: Statistical Methods in Research I
- STA 7249: Generalized Linear Models
- STA 7346: Statistical Inference

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
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- HSC 6909: Special Topics
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<td>PHC 7752</td>
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<td>Neuroplasticity: A Foundation for Neurorehabilitation</td>
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<td>RSD 6114</td>
<td>Rehabilitation in the United Kingdom</td>
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<td>RSD 6400</td>
<td>Models and Principles of Motor Learning and Control: Application in Rehabilitation Science</td>
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<td>Rasch Measurement: Introduction and Application</td>
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<td>Research Methods in Rehabilitation</td>
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<td>RSD 6706</td>
<td>Scientific Writing for the Rehabilitation Professional</td>
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<td>College Classroom: Teaching Process and Practice</td>
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<td>Individual Work</td>
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<td>RCS 5245</td>
<td>Psychosocial and Cultural Foundations of Rehabilitation Counseling</td>
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<td>Rehabilitation Issues in Human Growth and Development</td>
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<td>RCS 6080</td>
<td>Medical and Psychosocial Aspects of Rehabilitation Counseling</td>
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<td>RCS 6602</td>
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<td>RCS 6625</td>
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<td>Applied Case Management and Consultation in Rehabilitation Counseling</td>
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<td>Rehabilitation Research</td>
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<td>RCS 6780</td>
<td>Ethical, Legal, and Professional Issues in Rehabilitation</td>
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<td>RCS 6801</td>
<td>Rehabilitation Counseling Practicum</td>
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<td>Internship in Rehabilitation Counseling</td>
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<td>RCS 6905</td>
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Communication Sciences and Disorders

College

College of Public Health and Health Professions

Department/School

Speech, Language and Hearing Sciences Department

Degrees Offered with a Major in Communication Sciences and Disorders

Doctor of Philosophy

Master of Arts

Speech, Language and Hearing Sciences Departmental Courses

- ASL 5406: Manual Communication with the Hearing Impaired
- LAE 6505: Applied Preschool Language Disorders: Diagnosis and Treatment
- LIN 5741: Applied English Grammar
- SPA 5051: Clinical Observation in Audiology
- SPA 5102: Auditory Anatomy and Physiology
- SPA 5128: Speech Perception
- SPA 5204: Phonological Disorders
- SPA 5211: Voice Disorders
- SPA 5225: Principles of Speech Pathology Stuttering
- SPA 5245: Communicative Disorders Related to Cleft Palate
- SPA 5254: Neurocognitive Language Disorders
- SPA 5304: Principles of Audiological Evaluation
- SPA 5315: Peripheral and Central Auditory Disorders
- SPA 5401: Speech Pathology Language Disorder
- SPA 5406: Language Disorders II
- SPA 5553: Instrumentation and Diagnosis in Speech-Language Pathology
- SPA 5563: Psychosocial Aspects of Hearing Loss
- SPA 5646: Speech and Language of the Deaf and Hard of Hearing
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6010: Basic Auditory Sciences
- SPA 6117: Science of Singing
- SPA 6133L: Hearing Aid Analysis Laboratory
- SPA 6207: Applied Phonological Disorders: Diagnosis and Treatment
- SPA 6211: Applied Voice Disorders: Diagnosis and Treatment
- SPA 6217: Vocal Health and Habilitation
- SPA 6229: Applied Fluency Disorders: Diagnosis and Treatment
- SPA 6233: Speech Motor Control Disorders
- SPA 6270: Auditory Processing Disorders
- SPA 6805: Introduction to Graduate Research
- SPA 6905: Pediatric Audiology
- SPA 6911: Medical Audiology
- SPA 6912: Advanced Audiology and Neuro-Otology
- SPA 6917: Vestibular Disorders
- SPA 6923: Audiologic Rehabilitation for Adults
- SPA 6924: Audiologic Rehabilitation for Children
- SPA 6940: Amplification I
- SPA 6941: Amplification II
- SPA 6942: Amplification III
- SPA 6990: Proseminar: Speech-Language Pathology and Audiology
- SPA 6940: Adult Language Disorders
- SPA 6946: Applied Neurogenic Disorders: Diagnosis and Treatment
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<td>SPA 6430</td>
<td>Applied Developmental Disorders: Diagnosis and Treatment in Speech and Language</td>
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<td>Issues in Autism Spectrum Disorders</td>
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<td>SPA 6506</td>
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<td>SPA 6507</td>
<td>Applied Augmentative and Alternative Communication</td>
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<td>Pracduction in Speech-Language Diagnostics: UFSC</td>
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<td>Clinical Practice in Hearing Assessment</td>
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<td>SPA 6533</td>
<td>Clinical Practice in Aural Rehabilitation</td>
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<td>SPA 6559</td>
<td>Alternative and Augmentative Communication</td>
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<td>SPA 6564</td>
<td>Communication and Aging</td>
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<td>SPA 6565</td>
<td>Seminar in Dysphagia</td>
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<td>SPA 6568</td>
<td>Clinical Evaluation in Medical Speech-Language Pathology</td>
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<td>Seminar: Professional Aspects of Speech-Language Pathology</td>
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<td>Applied Reading Disabilities: Diagnosis and Treatment</td>
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<td>Diagnosis and Treatment of Language and Language-Based Literacy Disorders</td>
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<tr>
<td>SPA 7566</td>
<td>Counseling Individuals with Hearing Losses</td>
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<tr>
<td>SPA 7833</td>
<td>Audiology Research Project</td>
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<tr>
<td>SPA 7937</td>
<td>Seminar in Advanced Studies of Language and Literacy Development and Disabilities</td>
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<tr>
<td>SPA 7945</td>
<td>Graduate Practicum in Audiology</td>
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<tr>
<td>SPA 7946</td>
<td>Clinical I: Practicum in Medical Speech and Language Pathology</td>
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<tr>
<td>SPA 7947</td>
<td>Clinical II: Practicum in Advanced Medical Speech-Language Pathology</td>
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<td>SPA 7958</td>
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<td>SPA 7979</td>
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<td>SPA 7980</td>
<td>Research for Doctoral Dissertation</td>
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College of Public Health and Health Professions Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HSC 5938</td>
<td>Special Topics</td>
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<td>HSC 6905</td>
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<td>HSC 6939</td>
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<td>HSC 6940</td>
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<tr>
<td>PHC 6000</td>
<td>Epidemiology Methods I</td>
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<td>PHC 6001</td>
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<td>PHC 6002</td>
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<td>PHC 6003</td>
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<td>PHC 6009</td>
<td>Biology and Epidemiology of HIV/AIDS</td>
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<td>PHC 6011</td>
<td>Epidemiology Methods II</td>
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<tr>
<td>PHC 6016</td>
<td>Social Epidemiology in Public Health</td>
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<td>PHC 6036</td>
<td>Environmental Infectious Diseases: A Molecular Approach</td>
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<tr>
<td>PHC 6050</td>
<td>Statistical Methods for Health Sciences Research I</td>
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<tr>
<td>PHC 6102</td>
<td>Introduction to Public Health Administrative Systems</td>
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<td>PHC 6103</td>
<td>Systems Thinking for Public Health</td>
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<tr>
<td>PHC 6104</td>
<td>Evidence-Based Management of Public Health Programs</td>
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<td>PHC 6146</td>
<td>Public Health Program Planning and Evaluation</td>
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<td>PHC 6153</td>
<td>Public Policy and Aging</td>
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<tr>
<td>PHC 6183</td>
<td>Disaster Preparedness and Emergency Response</td>
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<tr>
<td>PHC 6194</td>
<td>Spatial Epidemiology</td>
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<tr>
<td>PHC 6195</td>
<td>Health information for Diverse Populations: Theory &amp; Methods</td>
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<tr>
<td>PHC 6200</td>
<td>Overview of Long-Term Care</td>
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<tr>
<td>PHC 6251</td>
<td>Assessment and Surveillance in Public Health</td>
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<td>PHC 6301</td>
<td>Aquatic Systems and Environmental Health</td>
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<td>PHC 6309</td>
<td>Environmental Justice Issues in Public Health</td>
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<td>PHC 6312</td>
<td>Water Quality and Human Health</td>
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<td>PHC 6313</td>
<td>Environmental Health Concepts in Public Health</td>
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<tr>
<td>PHC 6316</td>
<td>Health, Risk, and Crisis Communication</td>
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<tr>
<td>PHC 6317</td>
<td>Risk Communication for Public Health Practice</td>
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<tr>
<td>PHC 6346</td>
<td>Occupational and Environmental Health Among Agriculture Workers</td>
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<tr>
<td>PHC 6370</td>
<td>Public Health Biology</td>
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<tr>
<td>PHC 6403</td>
<td>Adolescence, Risk Taking and Health</td>
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<tr>
<td>PHC 6404</td>
<td>Gender, Sexuality, and Health</td>
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</tbody>
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- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology, Zoonotic Diseases, and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6565: Health Promotion and Disease Prevention
- PHC 6566: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6961: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7003: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- RHT 5156: Exercise Physiology
- RHT 6125C: Concepts in Clinical Biomechanics
- RHT 6127C: Control of Gait and Posture
- RHT 6167C: Applied Neurophysiology for Physical Therapy
- RHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- RHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- RHT 6615L: Research Instrumentation in Physical Therapy
- RHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6932: Supervised Teaching
- RSD 6979: Advanced Research
- RSD 7980: Research for Doctoral Dissertation
- RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
- RCS 6066: Rehabilitation Issues in Human Growth and Development
- RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
- RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
- RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
- RCS 6412: Rehabilitation Counseling Theory and Practice
- RCS 6470: Human Sexuality and Disability
- RCS 6601: Forensic Rehabilitation Consultation I
- RCS 6602: Forensic Rehabilitation Consultation II
- RCS 6625: Community Counseling and Case Management
- RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
- RCS 6740: Rehabilitation Research
- RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
- RCS 6801: Rehabilitation Counseling Practicum
- RCS 6825: Internship in Rehabilitation Counseling
- RCS 6905: Individual Work
- RCS 6910: Supervised Research
- RCS 6931: Special Topics
- RCS 6940: Supervised Teaching
- RCS 6945: Advanced Rehabilitation Counseling Practicum
- RCS 6971: Research for Master's Degree
Environmental and Global Health (M.H.S. - One Health)

College

College of Public Health and Health Professions

Department

Environmental and Global Health Department

Degrees Offered With a Major in Environmental and Global Health

Master of Health Science

concentration in One Health

Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6601: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neurophysiology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuropasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
- RCS 6066: Rehabilitation Issues in Human Growth and Development
- RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
- RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
- RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
- RCS 6412: Rehabilitation Counseling Theory and Practice
- RCS 6470: Human Sexuality and Disability
- RCS 6601: Forensic Rehabilitation Consultation I
- RCS 6602: Forensic Rehabilitation Consultation II
- RCS 6625: Community Counseling and Case Management
- RCS 6941: Applied Case Management and Consultation in Rehabilitation Counseling
- RCS 6740: Rehabilitation Research
- RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
- RCS 6801: Rehabilitation Counseling Practicum
- RCS 6825: Internship in Rehabilitation Counseling
- RCS 6905: Individual Work
- RCS 6910: Supervised Research
- RCS 6931: Special Topics
- RCS 6940: Supervised Teaching
- RCS 6945: Advanced Rehabilitation Counseling Practicum
- RCS 6971: Research for Master's Degree

**Epidemiology (PHHP)**

**College**

[College of Public Health and Health Professions](#)
Epidemiology Program Information

The Ph.D. in Epidemiology program is in the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The program requires a minimum of 90 semester credits beyond the bachelor's degree. All students must complete a minimum of 9 credits in Epidemiology foundation course work, at least 36 credits of epidemiology core courses, 6 credits of statistics electives, 18 credits of epidemiology electives, 15 credits of general electives, and 12 credits of dissertation research. Students must also complete at least two mentored teaching experiences. All entering students who do not hold MPH or equivalent degrees are also required by the College of Public Health and Health Professions to complete an Introduction to Public Health course.

Students in the Ph.D. program in Epidemiology are admitted to work with a research mentor on that mentor's project, and that research mentor funds the student. Other funding sources are available such as the Graduate School and the Department.

The core course work is designed to incorporate competencies recommended in the report of the 2002 workshop on doctoral education in epidemiology from the American College of Epidemiology and the Association of Schools and Programs of Public Health, and criteria for applied epidemiology competencies. The overall outcomes expected of all graduates are as follows:

1. Apply epidemiological methods to address critical and/or emerging public health issues through the use of:
   - Appropriate epidemiological research designs
   - Advanced statistical analysis methods for health studies
   - Data structures and measurement methods for health research
   - Biological, behavioral and social theory applied to the understanding and prevention of contemporary threats to health and well-being
   - Depth of knowledge in an area of specialization

2. Assimilate the history, philosophy, and ethical principles of epidemiology into current research

3. Develop grant proposals and manage research projects

4. Write scientific papers for publication in peer-reviewed journals, and communicate research results to scientists, policy makers, and the public

5. Compete successfully for research and teaching positions in academic institutions, federal or state agencies, or private institutions.

Details of the Ph.D. in Epidemiology program and application information are available at our website: [http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2](http://epidemiology.phhp.ufl.edu/about/ph-d-in-epidemiology-2).

The Master of Science in Epidemiology degree is offered by the Department of Epidemiology, which is jointly governed by both the College of Public Health and Health Professions and the College of Medicine. The 36 credit program prepares students for careers in the public health arena that are focused on the surveillance and prevention of illnesses among diverse populations around the world. Students are trained in the foundational aspects of epidemiology including person, place and time, risk and protective factors, and the social determinants of health. Areas of focus include chronic disease, infectious disease, geriatric, environmental, psychiatric, social, cancer and maternal and child health epidemiology.

Graduates of the M.S. in Epidemiology program are trained to:

- Apply surveillance, assessment, evaluation, and other foundational epidemiological research designs to areas of interest,
- Choose appropriate measurement and analytic methods to study health and disease in a population,
- Utilize biological, behavioral and social theory to understand how to prevent and intervene to promote the public health.

The program consists of required coursework and the successful completion of a thesis. The thesis is required to demonstrate skill in independent inquiry and investigation, under the tutelage of a mentor. Students may complete the course in three semesters with 36 credits.

More program information, including specific course requirements and elective options, is described at the program website: [http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2](http://epidemiology.phhp.ufl.edu/about/masters-of-science-in-epidemiology/mse-curriculum-2).

Degrees Offered with a Major in Epidemiology

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Master of Science
Epidemiology (PHHP/COM) Departmental Courses

- GMS 6820: Advanced Epidemiology Methods
- PHC 6008: Cardiovascular Epidemiology
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
- PHC 6034: Epidemic Investigation
- PHC 6070: Epidemiology of Aging
- PHC 6517: Public Health Concepts in Infectious Diseases
- PHC 6711: Measurement in Epidemiology and Outcomes Research
- PHC 6937: Special Topics in Public Health
- PHC 6938: Oral and Craniofacial Epidemiology
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7007: Cancer Epidemiology
- PHC 7038: Psychiatric Epidemiology
- PHC 7065: Critical Skills in Epidemiological Data Management
- PHC 7427: Ethics in Population Science
- PHC 7727: Grant Writing for Population Health Research
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7902: Epidemiology Supervised Research Writing Circle
- PHC 7910: International Field Epidemiology
- PHC 7916: National Field Epidemiology
- PHC 7934: Seminar I: Epidemiology Past, Present, and Future
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
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- PHC 6515: Introduction to Entomology: Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
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- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
• PHC 6585: Health Promotion and Disease Prevention
• PHC 6586: Interventions for Public Health
• PHC 6607: Critical Issues in Public Health
• PHC 6700: Social and Behavioral Research Methods
• PHC 6702: Exposure Measurement and Assessment
• PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
• PHC 6762: International Public Health
• PHC 6905: Independent Study
• PHC 6917: Supervised Research Project
• PHC 6601: Seminar in Contemporary Public Health Issues
• PHC 6931: Seminars in Public Health
• PHC 6937: Special Topics in Public Health
• PHC 6945: Public Health Practicum
• PHC 6946: Public Health Internship
• PHC 7000: Epidemiology Seminar I: Critical Evaluation, Research Proposals, and Methods
• PHC 7038: Psychiatric Epidemiology
• PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
• PHC 7727: Grant Writing for Population Health Research
• PHC 7752: Seminar in Instrument Development for Public Health
• PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
• PHC 7907: Social and Behavioral Science Journal Club
• PHC 7979: Advanced Research
• PHC 7980: Research for Doctoral Dissertation
• PHT 5156: Exercise Physiology
• PHT 6125C: Concepts in Clinical Biomechanics
• PHT 6127C: Control of Gait and Posture
• PHT 6167C: Applied Neuropsychology for Physical Therapy
• PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
• PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
• PHT 6615L: Research Instrumentation in Physical Therapy
• PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
• RSD 6110: Rehabilitation Science Theory and Application I
• RSD 6112: Rehabilitation Science Theory and Application II
• RSD 6114: Rehabilitation in the United Kingdom
• RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
• RSD 6700: Rasch Measurement: Introduction and Application
• RSD 6705: Research Methods in Rehabilitation
• RSD 6706: Scientific Writing for the Rehabilitation Professional
• RSD 6900: College Classroom: Teaching Process and Practice
• RSD 6905: Individual Work
• RSD 6910: Supervised Research
• RSD 6930: Special Topics in Rehabilitation Science
• RSD 6940: Supervised Teaching
• RSD 7979: Advanced Research
• RSD 7980: Research for Doctoral Dissertation
• RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
• RCS 6066: Rehabilitation Issues in Human Growth and Development
• RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
• RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
• RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
• RCS 6412: Rehabilitation Counseling Theory and Practice
• RCS 6470: Human Sexuality and Disability
• RCS 6601: Forensic Rehabilitation Consultation I
• RCS 6602: Forensic Rehabilitation Consultation II
• RCS 6625: Community Counseling and Case Management
• RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
• RCS 6740: Rehabilitation Research
• RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
• RCS 6801: Rehabilitation Counseling Practicum
• RCS 6825: Internship in Rehabilitation Counseling
• RCS 6905: Individual Work
• RCS 6910: Supervised Research
• RCS 6931: Special Topics
• RCS 6940: Supervised Teaching
• RCS 6945: Advanced Rehabilitation Counseling Practicum
• RCS 6971: Research for Master's Degree

Health Administration

College

College of Public Health and Health Professions

Department/School

Health Services Research, Management, and Policy Department
Health Administration Program Information

The Master of Health Administration (M.H.A.) is a two-year, lock-step program with a summer internship between the first and second years. Small class size permits individual attention and guidance from faculty members. The program prepares qualified individuals motivated by a social mission and responsibility to the community for various management positions in the health services industry. Organizations seek individuals who have the ability to solve business problems and build strategic relationships in a climate of continuous change.

The UF M.H.A. program develops engaged early health care careerists to use evidence-based strategies to improve healthcare quality, affordability, and access. We provide students with fundamental knowledge using a cohort model in a campus-based setting that emphasizes experiential learning and data-driven problem solving both in the classroom and in the practice environment. Students will develop proficiency to detect, analyze, manage, and respond to critical administrative issues in both provider and non-provider healthcare organizations. Our program embraces ethical conduct and professionalism, diversity, and inclusion, practitioner involvement, and team-based learning. Faculty inform practice with research and service to the community.

Applicants from any undergraduate major are considered. For more information about our program and details about the MBA/MHA dual degree, please see our website: [http://hsrmp.phhp.ufl.edu/academic-programs/master-of-health-administration](http://hsrmp.phhp.ufl.edu/academic-programs/master-of-health-administration).

Degrees

Master of Health Administration

Health Administration Program Courses

- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6177: Advanced Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6196: Health Services Operations Management
- HSA6198: Information Management in Health Administration
- HSA6342: Human Resource Management for Health Care Managers
- HSA6385: Performance Management for Health Care Managers
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6436: Health Economics
- HSA6855: Internship in Health Administration
- HSA6905: Individual Study in Health Administration
- HSA6939: Capstone Seminar in Health Administration

Health Services Research, Management, and Policy Departmental Courses

- HSA5103: Introduction to the U.S. Health Care System
- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6175: Health Care Financial Management
- HSA6177: Advanced Health Care Finance
- HSA6179: Introduction to Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6196: Health Services Operations Management
- HSA6197: Information Management in Health Administration
- HSA6198: Information Management in Health Administration
- HSA6342: Human Resource Management for Health Services Managers
- HSA6385: Performance Management for Health Care Managers
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6436: Health Economics
- HSA6855: Internship in Health Administration
- HSA6858: Internship in Health Services Research
- HSA6878: Internship in Legal Aspects of Health Services Administration
- HSA6905: Individual Study in Health Administration
- HSA6910: Supervised Research
- HSA6911: Research Seminar in Health Services Research
- HSA6930: Special Topics in Health Services Administration
- HSA6935: Seminar in Health Administration
HSA 6939: Capstone Seminar in Health Administration

HSA 6940: Supervised Teaching

HSA 6946: Internship in Public Health Management and Policy

HSA 7106: Seminar in Health Care Access and Utilization

HSA 7116: Health Services Organizational Research

HSA 7157: Research Foundations of Health Policy

HSA 7414: Society, Health, and Medical Care

HSA 7437: Advanced Health Economics

HSA 7707: Health Services Research Methods I

HSA 7708: Health Services Research Methods II

HSA 7759: Quality and Outcomes in Health Services Research

HSA 7905: Advanced Individual Study in Health Services Research

HSA 7936: Seminar in Health Care Costs and Financing

HSA 7938: Advanced Seminar in Health Services Research

HSA 7979: Advanced Research

HSA 7980: Research for Doctoral Dissertation

PHC 6313: Environmental Health Concepts in Public Health

College of Public Health and Health Professions Courses

HSC 5938: Special Topics

HSC 6905: Independent Study

HSC 6939: Special Topics

HSC 6940: Supervised Teaching

PHC 6000: Epidemiology Methods I

PHC 6001: Principles of Epidemiology in Public Health

PHC 6002: Epidemiology of Infectious Diseases

PHC 6003: Epidemiology of Chronic Diseases and Disability

PHC 6009: Biology and Epidemiology of HIV/AIDS

PHC 6011: Epidemiology Methods II

PHC 6016: Social Epidemiology in Public Health

PHC 6036: Environmental Infectious Diseases: Molecular Approach

PHC 6050: Statistical Methods for Health Sciences Research I

PHC 6102: Introduction to Public Health Administrative Systems

PHC 6103: Systems Thinking for Public Health

PHC 6104: Evidence-Based Management of Public Health Programs

PHC 6146: Public Health Program Planning and Evaluation

PHC 6153: Public Policy and Aging

PHC 6183: Disaster Preparedness and Emergency Response

PHC 6194: Spatial Epidemiology

PHC 6195: Health information for Diverse Populations: Theory & Methods

PHC 6220: Overview of Long-Term Care

PHC 6251: Assessment and Surveillance in Public Health

PHC 6301: Aquatic Systems and Environmental Health

PHC 6309: Environmental Justice Issues in Public Health

PHC 6312: Water Quality and Human Health

PHC 6313: Environmental Health Concepts in Public Health

PHC 6316: Health, Risk, and Crisis Communication

PHC 6317: Risk Communication for Public Health Practice

PHC 6346: Occupational and Environmental Health Among Agriculture Workers

PHC 6370: Public Health Biology

PHC 6403: Adolescence, Risk Taking and Health

PHC 6404: Gender, Sexuality, and Health

PHC 6410: Psychological, Behavioral, and Social Issues in Public Health

PHC 6413: Critical Incidents and Violence in Communities

PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology

PHC 6419: Biomedical and Psychological Aspects of Very Late Life

PHC 6421: Public Health Law and Ethics

PHC 6441: Health Disparities in the United States

PHC 6445: Global Public Health and Development II

PHC 6447: Ecology of HIV/AIDS in the Rural South

PHC 6512: Environmental Management of Vector-Borne Diseases

PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety

PHC 6519: Zoonotic Diseases in Humans and Animals

PHC 6530: Public Health Issues of Mothers and Children

PHC 6543: Community Practice of Behavioral Health Risk Prevention

PHC 6544: Health Behavior Interventions in Practice

PHC 6561: Public Health Laboratory Techniques

PHC 6585: Health Promotion and Disease Prevention

PHC 6586: Interventions for Public Health

PHC 6607: Critical Issues in Public Health

PHC 6700: Social and Behavioral Research Methods

PHC 6702: Exposure Measurement and Assessment

PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective

PHC 6762: International Public Health

PHC 6905: Independent Study

PHC 6917: Supervised Research Project

PHC 6961: Seminar in Contemporary Public Health Issues

PHC 6981: Seminars in Public Health

PHC 6983: Special Topics in Public Health

PHC 6945: Public Health Practicum
Health Services Research

College

College of Public Health and Health Professions

Department/School

Health Services Research, Management, and Policy Department

Health Services Research Program Information

The Department of Health Services Research, Management and Policy offers a doctoral degree in Health Services Research. Health services research is a multidisciplinary field of inquiry, both basic and applied, that examines the use, costs, quality, accessibility, delivery, organization, financing, and outcomes of healthcare services. The objective is to increase knowledge and understanding of the structure and processes of healthcare systems and to assess subsequent effects on individuals and populations. Health services research draws on a variety of disciplines, and integrates their conceptual frameworks and methods to provide new ways of studying and understanding the health care system.

The Ph.D. Program in Health Services Research prepares individuals to conduct inquiry that will inform government officials, corporate leaders, clinicians, health plan managers, and others making decisions about complex health-related problems and issues. Students in the Ph.D. Program in Health Services Research learn to apply research methods and scientific knowledge to the study of health services organizations and systems.

Graduates of the Ph.D. Program in Health Services Research will find career opportunities in academic, private sector, and public service settings. For example, some graduates will combine...
Graduates of the Ph.D. Program in Health Services Research will find career opportunities in academic, private sector, and public service settings. For example, some graduates will combine research interests with a teaching career and accept academic appointments in a wide range of health-related departments in the nation's colleges and universities. Other graduates will pursue health services research in the context of healthcare delivery and choose employment opportunities with hospitals and health systems, managed care companies, the pharmaceutical industry and consulting firms. Finally, graduates may pursue careers in government or other public service entities (such as private foundations), whose programs are increasingly dependent upon the findings and methodologies of health services research.

For more details about our program, please see our website: http://hsrmp.phhp.ufl.edu/academic-programs/ph-d-in-health-services-research

Degrees

Doctor of Philosophy

Health Services Research Program Courses

- HSA6910: Supervised Research
- HSA6911: Research Seminar in Health Services Research
- HSA6930: Special Topics in Health Services Administration
- HSA6940: Supervised Teaching
- HSA7106: Seminar in Health Care Access and Utilization
- HSA7116: Health Services Organizational Research
- HSA7157: Research Foundations of Health Policy
- HSA7414: Society, Health, and Medical Care
- HSA7437: Advanced Health Economics
- HSA7707: Health Services Research Methods I
- HSA7708: Health Services Research Methods II
- HSA7759: Quality and Outcomes in Health Services Research
- HSA7905: Advanced Individual Study in Health Services Research
- HSA7936: Seminar in Health Care Costs and Financing
- HSA7938: Advanced Seminar in Health Services Research
- HSA7979: Advanced Research
- HSA7980: Research for Doctoral Dissertation

Health Services Research, Management, and Policy Departmental Courses

- HSA5103: Introduction to the U.S. Health Care System
- HSA5174: Fundamentals of Health Care Finance
- HSA6105: Professional Skills Seminar
- HSA6114: U.S. Health Care System
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6126: U.S. Health Insurance System
- HSA6152: Overview of U.S. Health Policy
- HSA6175: Health Care Financial Management
- HSA6177: Advanced Health Care Finance
- HSA6179: Introduction to Health Care Finance
- HSA6188: Strategic Management in Health Administration
- HSA6196: Health Services Operations Management
- HSA6197: Information Management in Health Administration
- HSA6198: Information Management in Health Administration
- HSA6342: Human Resource Management for Health Services Managers
- HSA6385: Performance Management for Health Care Managers
- HSA6427: Legal and Ethical Issues in Health Administration
- HSA6436: Health Economics
- HSA6855: Internship in Health Administration
- HSA6858: Internship in Health Services Research
- HSA6878: Endorsement in Legal Aspects of Health Services Administration
- HSA6905: Individual Study in Health Administration
- HSA6910: Supervised Research
- HSA6911: Research Seminar in Health Services Research
- HSA6930: Special Topics in Health Services Administration
- HSA6935: Seminar in Health Administration
- HSA6936: Capstone Seminar in Health Administration
- HSA6940: Supervised Teaching
- HSA6946: Internship in Public Health Management and Policy
- HSA7106: Seminar in Health Care Access and Utilization
- HSA7116: Health Services Organizational Research
- HSA7157: Research Foundations of Health Policy
- HSA7414: Society, Health, and Medical Care
- HSA7437: Advanced Health Economics
- HSA7707: Health Services Research Methods I
HSA 7708: Health Services Research Methods II
HSA 7759: Quality and Outcomes in Health Services Research
HSA 7905: Advanced Individual Study in Health Services Research
HSA 7936: Seminar in Health Care Costs and Financing
HSA 7938: Advanced Seminar in Health Services Research
HSA 7979: Advanced Research
HSA 7980: Research for Doctoral Dissertation
PHC 6313: Environmental Health Concepts in Public Health

College of Public Health and Health Professions Courses

HSC 5938: Special Topics
HSC 6905: Independent Study
HSC 6939: Special Topics
HSC 6940: Supervised Teaching
PHC 6000: Epidemiology Methods I
PHC 6001: Principles of Epidemiology in Public Health
PHC 6002: Epidemiology of Infectious Diseases
PHC 6003: Epidemiology of Chronic Diseases and Disability
PHC 6009: Biology and Epidemiology of HIV/AIDS
PHC 6011: Epidemiology Methods II
PHC 6016: Social Epidemiology in Public Health
PHC 6036: Environmental Infectious Diseases: A Molecular Approach
PHC 6050: Statistical Methods for Health Sciences Research I
PHC 6102: Introduction to Public Health Administrative Systems
PHC 6103: Systems Thinking for Public Health
PHC 6104: Evidence-Based Management of Public Health Programs
PHC 6146: Public Health Program Planning and Evaluation
PHC 6153: Public Policy and Aging
PHC 6183: Disaster Preparedness and Emergency Response
PHC 6194: Spatial Epidemiology
PHC 6195: Health information for Diverse Populations: Theory & Methods
PHC 6220: Overview of Long-Term Care
PHC 6251: Assessment and Surveillance in Public Health
PHC 6301: Aquatic Systems and Environmental Health
PHC 6309: Environmental Justice Issues in Public Health
PHC 6312: Water Quality and Human Health
PHC 6313: Environmental Health Concepts in Public Health
PHC 6316: Health, Risk, and Crisis Communication
PHC 6317: Risk Communication for Public Health Practice
PHC 6346: Occupational and Environmental Health Among Agriculture Workers
PHC 6370: Public Health Biology
PHC 6403: Adolescence, Risk Taking and Health
PHC 6404: Gender, Sexuality, and Health
PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
PHC 6413: Critical Incidents and Violence in Communities
PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
PHC 6419: Biomedical and Psychological Aspects of Very Late Life
PHC 6421: Public Health Law and Ethics
PHC 6441: Health Disparities in the United States
PHC 6445: Global Public Health and Development II
PHC 6447: Ecology of HIV/Aids in the Rural South
PHC 6512: Environmental Management of Vector-Borne Diseases
PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
PHC 6519: Zoonotic Diseases in Humans and Animals
PHC 6520: Foodborne Diseases
PHC 6530: Public Health Issues of Mothers and Children
PHC 6543: Community Practice of Behavioral Health Risk Prevention
PHC 6544: Health Behavior Interventions in Practice
PHC 6561: Public Health Laboratory Techniques
PHC 6585: Health Promotion and Disease Prevention
PHC 6586: Interventions for Public Health
PHC 6607: Critical Issues in Public Health
PHC 6700: Social and Behavioral Research Methods
PHC 6702: Exposure Measurement and Assessment
PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
PHC 6762: International Public Health
PHC 6905: Independent Study
PHC 6917: Supervised Research Project
PHC 6901: Seminar in Contemporary Public Health Issues
PHC 6931: Seminars in Public Health
PHC 6937: Special Topics in Public Health
PHC 6945: Public Health Practicum
PHC 6946: Public Health Internship
PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
PHC 7038: Psychiatric Epidemiology
PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
PHC 7727: Grant Writing for Population Health Research
PHC 7752: Seminar in Instrument Development for Public Health
PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
PHC 7907: Social and Behavioral Science Journal Club
PHC 7979: Advanced Research
Occupational Therapy

College

College of Public Health and Health Professions

Department/School

Occupational Therapy Department

Occupational Therapy Program Information

The UF Department of Occupational Therapy offers a Masters in Occupational Therapy (MOT). This program prepares students to meet the demands of a highly technological and fast paced American health care system.

The Masters in Occupational Therapy Degree Program is designed for students who do not have a entry-level professional level OT degree. To prepare to enter the Masters in Occupational Therapy program, undergraduate students may complete the University of Florida Health Science (BHS) degree program and the pre-OT track.

Applicants that have earned an undergraduate degree in a program other than UF's Health Science program can enter the MOT program through our Conditional Graduate program.

By completing the Liberal Arts prerequisites for the program, students study the biological, psychological and social systems that impact on the performance of occupational roles. The MOT program provides a strong background in theory, assessment and therapeutic interventions and assists student to develop a strong professional identity.

Students selected from the Health Science/pre-OT track undergraduate program can apply the 6 pre-OT track course toward the MOT requirements for the MOT program. Students who have graduated from the other colleges or universities can be admitted to the MOT program and complete the 6 pre-OT track courses as part of their graduate program prior to initiating coursework in the Masters in Occupational Therapy Degree Program. The six Health Science prerequisite courses are offered the Fall and Spring semesters preceding the Summer start of the MOT coursework.

For more information, please see our website: http://ot.phhp.ufl.edu/academics/mot/program-description.
Degrees

Master of Health Science

Master of Occupational Therapy

Occupational Therapy Courses

- OTH 5002: Foundations of Occupational Therapy
- OTH 5115C: Therapeutic Skills II: Areas of Occupation
- OTH 5324: Psychosocial Intervention
- OTH 5435: Therapeutic Skills I
- OTH 5722: Professional Development in Occupational Therapy
- OTH 5726C: Service Delivery and OT Management
- OTH 5770C: Research for Occupational Therapy
- OTH 5812: Practicum I
- OTH 5816: Practicum II
- OTH 5848: Internship I
- OTH 5849: Internship II
- OTH 6008: Neuroscience of Human Occupation
- OTH 6106: Assistive Technology and Occupational Performance
- OTH 6539: Occupational Therapy Theory
- OTH 6635: Principles of Occupational Therapy Screening and Evaluation I
- OTH 6636: Principles of Occupational Therapy Screening and Evaluation II
- OTH 6641: Occupational Therapy Interventions I
- OTH 6642: Occupational Therapy Interventions II
- OTH 6707: OT Manager
- OTH 6708: Issues in Occupational Therapy Practice I
- OTH 6709: Issues in Occupational Therapy Practice II
- OTH 6720: Trends and Issues in Health Care
- OTH 6763: Evidence Based Practice
- OTH 6861: Specialty Internship
- OTH 6905: Individual Work
- OTH 6907: Professional Development Project
- OTH 6933: Special Topics in Occupational Therapy
- OTH 6971: Research for Master's Thesis

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health Information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6961: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7567: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7970: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neuropsychology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6771: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6940: Supervised Teaching
- RSD 7970: Advanced Research
- RSD 7980: Research for Doctoral Dissertation
- RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
- RCS 6066: Rehabilitation Issues in Human Growth and Development
- RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
- RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
- RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
- RCS 6412: Rehabilitation Counseling Theory and Practice
- RCS 6470: Human Sexuality and Disability
- RCS 6601: Forensic Rehabilitation Consultation I
- RCS 6602: Forensic Rehabilitation Consultation II
- RCS 6625: Community Counseling and Case Management
- RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
- RCS 6740: Rehabilitation Research
- RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
- RCS 6801: Rehabilitation Counseling Practicum
- RCS 6825: Internship in Rehabilitation Counseling
- RCS 6905: Individual Work
- RCS 6910: Supervised Research
- RCS 6931: Special Topics
- RCS 6940: Supervised Teaching
Psychology (Clinical and Health Psychology - PHHP)

College

College of Public Health and Health Professions

Department/School

Clinical and Health Psychology Department

Psychology (Clinical and Health Psychology) Program Information

The department of Clinical and Health Psychology is an academic and professional unit in the College of Public Health and Health Professions at the Health Science Center on the University of Florida campus in Gainesville. The doctoral program in clinical psychology has been accredited by the American Psychological Association since 1953 and adheres to the Scientist-Practitioner Model of education and training. The Clinical Psychology Doctoral program is unique in the country in that it is housed in an independent department of Clinical and Health Psychology in a major academic health science setting along with an APA accredited internship. These features foster program strengths in research, teaching and professional training in health care psychology.

To accommodate the broad range of career trajectories possible within Scientist-Practitioner education and training, the program offers a Scientist-Practitioner Emphasis and a Clinical Researcher Emphasis.

The Scientist-Practitioner Emphasis allows the student to obtain broad clinical, academic, and research training that readies them for careers anywhere along the science-practice continuum. The student obtains focused research mentorship in a faculty member's laboratory and obtains broad training in clinical assessment and intervention both in and outside of their designated area of concentration.

The Clinical Researcher Emphasis is designed to provide the interested student with more intensive mentor-based training for purposes of preparing for a research career. The Clinical Researcher Emphasis is designed for students who are clearly focused on a research career and therefore want an increased opportunity to perform mentored empirical work. This emphasis focuses on the acquisition of research skills, training in scientific methods and technologies to better understand behavior problems, psychopathology and psychological adjustment to illness and wellness, and to develop empirically validated assessment and treatment procedures. The primary goal of the Clinical Researcher emphasis is to train psychologists for academic settings and other employment venues in which research productivity and innovation is a major job expectancy. In comparison to the scientist-practitioner emphasis, more time is dedicated to research (less time is spent in supervised practicum with the general faculty), and advanced clinical training is focused on patient populations and methods in the student’s area of research interest. The Clinical Researcher emphasis follows a "mentorship" model in which the faculty mentor is the student's overall guide and supervisor, and the student's primary research training is accomplished in his/her laboratory.

Students can elect the Clinical Researcher emphasis in the first or second year of study, based on their commitment to a clinical research career and the agreement of a faculty mentor. Students can apply for admission consideration to the Scientist-Practitioner emphasis, the Clinical Researcher emphasis, or both (see Application Procedures).

The Doctoral Program provides the student with training in the concepts, tools, roles, and functions of the clinical psychologist. The overall goals of the graduate program are to prepare the student to:

1. investigate meaningful, empirically testable questions in the quest for understanding a behavioral process, a patient's problem, or a professional issue;
2. function as a professional psychologist;
3. practice competently in the applied areas of psychological assessment/diagnosis, intervention/therapy, and consultation; and
4. contribute to the advancement of psychological knowledge through research or other creative scholarly activity.

Through a combination of general and specialized experiences in the classroom, laboratory, and clinic students develop knowledge and skills as scientist-practitioners. Attitudes are developed toward the practice of psychology and toward related professions which enable effective personal interaction and participation in the interdisciplinary approach to problems of research and practice. As students progress in the program, they develop professional identity through acceptance of increased responsibility for professional decisions, through the execution of significant research projects, and through their contributions to the understanding of psychological problems and processes.

For more information please see our website: http://chp.phhp.ufl.edu

Degrees

Doctor of Philosophy

concentration in Clinical and Health Psychology

optional second concentration in Clinical and Translational Science

concentration in Clinical and Translational Science
Master of Arts

Master of Science

Clinical and Health Psychology Departmental Courses

- CLP 5316: Health Psychology
- CLP 5426: Introduction to Neuropsychology
- CLP 6304: Psychological Foundations of Clinical Psychology I
- CLP 6307: Human Higher Cortical Functioning
- CLP 6308: Psychological Foundations of Clinical Psychology II
- CLP 6309: Psychological Foundations of Clinical Psychology III
- CLP 6344C: Lifespan Foundations of Behavioral Health and Illness I
- CLP 6345: Lifespan Foundations of Behavioral Health and Illness II
- CLP 6375: Introduction to Clinical Psychology
- CLP 6407: Psychological Treatment I
- CLP 6417: Psychological Treatment II
- CLP 6425: Seminar in Clinical Neuropsychology
- CLP 6430: Clinical Psychological Assessment
- CLP 6434C: Clinical Psychology Assessment I
- CLP 6435C: Clinical Psychology Assessment II
- CLP 6446C: Psychological Assessment of Children
- CLP 6447C: Psychological Assessment of Adults
- CLP 6476: Lifespan Psychopathology
- CLP 6497: Psychopathological Disturbances
- CLP 6528C: Measurement, Research Design, and Statistical Analysis in Clinical Psychology II
- CLP 6529: Applied Multivariate Methods in Psychology
- CLP 6905: Individual Work
- CLP 6910: Supervised Research
- CLP 6940: Supervised Teaching
- CLP 6943: Core Practicum in Clinical Psychology
- CLP 6945: Advanced Practicum in Neuropsychology
- CLP 6946: Advanced Practicum in Applied Medical Psychology
- CLP 6947: Practicum in Intervention
- CLP 6948: Advanced Practicum in Clinical Child Psychology
- CLP 6971: Research for Master's Thesis
- CLP 7317: Advanced Health Psychology and Behavior Medicine
- CLP 7404C: Special Issues, Methods, and Techniques in Psychological Treatment
- CLP 7427C: Neuropsychological Assessment of Children
- CLP 7428C: Neuropsychological Assessment of Adults
- CLP 7934: Special Topics in Clinical Psychology
- CLP 7949: Internship
- CLP 7979: Advanced Research
- CLP 7980: Research for Doctoral Dissertation
- DEP 6216: Psychological Disturbances of Children
- GEY 6306: Interpersonal Communication Within the Aging Network
- GEY 7408: Psychotherapy with Older Adults

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
• PHC 6153: Public Policy and Aging
• PHC 6183: Disaster Preparedness and Emergency Response
• PHC 6194: Spatial Epidemiology
• PHC 6195: Health information for Diverse Populations: Theory & Methods
• PHC 6220: Overview of Long-Term Care
• PHC 6251: Assessment and Surveillance in Public Health
• PHC 6301: Aquatic Systems and Environmental Health
• PHC 6309: Environmental Justice Issues in Public Health
• PHC 6312: Water Quality and Human Health
• PHC 6313: Environmental Health Concepts in Public Health
• PHC 6316: Health, Risk, and Crisis Communication
• PHC 6317: Risk Communication for Public Health Practice
• PHC 6346: Occupational and Environmental Health Among Agriculture Workers
• PHC 6370: Public Health Biology
• PHC 6403: Adolescence, Risk Taking and Health
• PHC 6404: Gender, Sexuality, and Health
• PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
• PHC 6413: Critical Incidents and Violence in Communities
• PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
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• PHC 6441: Health Disparities in the United States
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• PHC 6447: Ecology of HIV/AIDS in the Rural South
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• PHC 6607: Critical Issues in Public Health
• PHC 6700: Social and Behavioral Research Methods
• PHC 6702: Exposure Measurement and Assessment
• PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
• PHC 6762: International Public Health
• PHC 6905: Independent Study
• PHC 6917: Supervised Research Project
• PHC 6961: Seminar in Contemporary Public Health Issues
• PHC 6931: Seminars in Public Health
• PHC 6937: Special Topics in Public Health
• PHC 6945: Public Health Practicum
• PHC 6946: Public Health Internship
• PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
• PHC 7038: Psychiatric Epidemiology
• PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
• PHC 7727: Grant Writing for Population Health Research
• PHC 7752: Seminar in Instrument Development for Public Health
• PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
• PHC 7907: Social and Behavioral Science Journal Club
• PHC 7979: Advanced Research
• PHC 7980: Research for Doctoral Dissertation
• RHT 5156: Exercise Physiology
• RHT 6125C: Concepts in Clinical Biomechanics
• RHT 6127C: Control of Gait and Posture
• RHT 6167C: Applied Neurophysiology for Physical Therapy
• RHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
• RHT 6316: Neurological Aspects of Orthopedic Rehabilitation
• RHT 6615L: Research Instrumentation in Physical Therapy
• RHT 6718: Neuropsychology: A Foundation for Neurorehabilitation
• RSD 6110: Rehabilitation Science Theory and Application I
• RSD 6112: Rehabilitation Science Theory and Application II
• RSD 6114: Rehabilitation in the United Kingdom
• RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
• RSD 6700: Rasch Measurement: Introduction and Application
• RSD 6705: Research Methods in Rehabilitation
• RSD 6706: Scientific Writing for the Rehabilitation Professional
• RSD 6900: College Classroom: Teaching Process and Practice
• RSD 6905: Individual Work
• RSD 6910: Supervised Research
• RSD 6930: Special Topics in Rehabilitation Science
• RSD 6940: Supervised Teaching
• RSD 7079: Advanced Research
• RSD 7980: Research for Doctoral Dissertation
• RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
• RCS 6068: Rehabilitation Issues in Human Growth and Development
• RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
• RCS 6242C: Vocation and Lifestyle Assessment in Rehabilitation Counseling
• RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
• RCS 6412: Rehabilitation Counseling Theory and Practice
• RCS 6470: Human Sexuality and Disability
• RCS 6601: Forensic Rehabilitation Consultation I
Master of Public Health

Degrees Offered with a Major of Public Health

Students select one of six concentration areas:

- Biostatistics
- Environmental health
- Epidemiology
- Public health management and policy
- Public health practice
- Social and behavioral sciences

Both a 48-credit program for students without terminal health science degrees and a 42-credit program for students with terminal degrees are offered. A combined bachelor's/master of public health program is available, as well as a 15-credit college certificate program. Students interested in collaborative programs may pursue joint M.P.H. and D.V.M., M.D., J.D., Pharm.D., D.P.T., or DMD degrees, or concurrent master's and Ph.D. programs. The MPH degree program and the Public Health certificate are available on campus and online. For program descriptions and information on applying, visit the website: www.mph.ufl.edu.

48-credit Master of Public Health: Students who do not hold a terminal degree in a health science discipline are eligible to apply for the 48-credit program. The program provides comprehensive coverage of core public health content and allows selection of a concentration. Students must complete 16 credits of core public health course work, 15-21 credits of concentration core courses, up to 12 credits of elective courses, and 5-8 credits of internship. The course work representing these requirements is described below.

42-credit accelerated Master of Public Health: Students who hold a terminal degree (usually a doctoral degree) in a health science discipline may be eligible for the 42-credit accelerated program. This program requires completion of 16 credits of core public health course work, 21 credits of concentration and elective course work, and a 5-credit internship.

Combined degree program: The College offers a combined degree program to allow qualified undergraduates to earn both a bachelor's degree and the Master of Public Health degree efficiently. Seniors with any undergraduate major are eligible for the combined degree program as long as they have an undergraduate GPA of at least 3.2 and competitive scores on the verbal and quantitative portions of the GRE, and their career interests match the M.P.H. program. Students accepted into the combined degree program complete 15 credits of public health course work while still undergraduates, leaving only 33 credits after admission to graduate school. Students must achieve a B or better in public health courses taken as an undergraduate and be accepted to graduate school to complete the program.

Core Courses: All M.P.H. students take five public health core courses. The core courses in environmental health, epidemiology, public health management and policy, and social and behavioral sciences are taken by all students. The biostatistics course varies across concentration areas. Students in the biostatistics, environmental health, and epidemiology concentrations must take PHC 6052: Introduction to Biostatistical Methods. All other M.P.H. students must take PHC 6050: Statistical Methods for Health Sciences Research I. In addition, all students must take a 1-credit seminar in contemporary public health issues and 5 to 8 credits of PHC 6946: Public Health Internship.

Internship, major paper, and oral presentation: Each student completes an internship, which provides an opportunity to apply knowledge acquired in the classroom to a real public health problem in a practice setting. The internship is usually completed in the student's final term in the program. Students may engage in many activities during an internship, but each student must have one special project which serves as the basis for a major paper and an oral presentation. The written and oral presentations represent the culmination of the academic experience in the M.P.H. program. Presentations, which are scheduled on Public Health Day near the end of each semester, provide each student with an opportunity to organize and present the details of the special project to faculty, students, and invited guests. Students are expected to display their understanding of their projects in the larger context of public health as a cross-disciplinary field, and in relation to the competencies expected of all M.P.H. graduates. Three faculty members, including the supervisory committee chair, attend each presentation and are responsible for assessing whether the student has successfully demonstrated a broad knowledge of the field of public health and depth in his or her concentration area.

Degrees Offered with a Major of Public Health
Master of Public Health - Biostatistics

Master of Public Health - Environmental Health

Master of Public Health - Epidemiology

Master of Public Health - Health Management and Policy

Master of Public Health - Public Health Practice

Master of Public Health - Social and Behavioral Sciences

Public Health Courses

- HMG 6747: Marketing in Hospitality/Tourism
- HSA 6114: U.S. Health Care System
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6010: Data Management and Statistical Computing for Epidemiology
- PHC 6014: Epidemiology, Prevention, and Control of Chronic Diseases II
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6052: Introduction to Biostatistical Methods
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6055: Biostatistical Computing Using R
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6370: Public Health Biology
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6710: Measurement in Epidemiology and Outcomes Research
- PHC 6716: Survey Research Methods
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 6905: Independent Study
- PHC 6913: Biostatistics Project
- PHC 6930: Integrated Public Health Seminar
- PHC 6601: Seminar in Contemporary Public Health Issues
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7056: Analysis of Longitudinal Data
- PHC 7066: Large Sample Theory
- PHC 7980: Research for Doctoral Dissertation
- STA 6177: Applied Survival Analysis
- STA 6208: Basic Design and Analysis of Experiments

Statistics Courses
Master of Public Health with a Concentration in Biostatistics

The contribution of biostatisticians is far reaching and includes both core public health research and consultation with other health professionals. The biostatistics concentration is designed primarily for students with a previous graduate degree (particularly in the health sciences) who want to obtain a solid background in quantitative and analytical methods for public health research. The course work exposes students to methodology typically used to analyze different types of public health data and gives them opportunities to apply these methodologies themselves.

Graduates of the M.P.H. program with a concentration in biostatistics return to their careers with an improved understanding of quantitative methods for public health research. This increased knowledge will facilitate their own research programs and will enhance their ability to critically read the literature in their field. The biostatistics concentration requires completion of 6 concentration core courses: PHC 6053 Regression Methods for the Health and Life Sciences, PHC 6000 Epidemiology Research Methods I, PHC 6080 SAS for Public Health Data, PHC 6081 SAS for Public Health Analysis, and PHC 6055 Biostatistical Computing Using R. Remaining courses include the public health internship (PHC 6946) and electives in statistics and public health. Visit the biostatistics concentration website for the most up-to-date information about course options: http://mph.ufl.edu/programs/master-of-public-health/biostatistics.

See the department Biostatistics website for information about other programs offered by the department: http://biostat.ufl.edu/.

Master of Public Health with a Concentration in Environmental Health

Professionals trained in environmental health study the impact of our surroundings on our health. They understand how environmental risk factors can cause diseases like asthma, cancer, and food poisoning. Environmental health professionals make up approximately half of public health personnel and the field accounts for about half of public health expenditures. Students interested in environmental health typically have a background in biological or physical sciences, engineering, nursing, medicine, and veterinary medicine. Prior experience in chemistry, biology, statistics, and Microsoft Excel software is desirable. Please note the prerequisites for Environmental Health courses and speak with the instructor if you have not successfully completed the prerequisites. The following courses are required for all students pursuing the environmental health concentration: VME 6602, VME 6607, PHC 6702, and PHC 6316. Students may also choose from elective course work listed on the department website below. Environmental health students complete their programs with an internship (PHC 6946) and electives on a wide variety of environmental health and public health topics.

Visit the environmental health concentration website for the most up-to-date information about course options: http://mph.ufl.edu/programs/master-of-public-health/environmental-health. And visit the website of the Department of Environmental and Global Health for information about other academic programs and activities in the department: http://egh.phhp.ufl.edu.

Environmental Health Courses

- EES 5245: Water Quality Analysis
- ENV 5105: Foundations of Air Pollution
- FOS 5206: Current Issues in Food Safety and Sanitation
- PHC 6702: Exposure Measurement and Assessment
- SWS 5551: Soils, Water, and Public Health
- VME 6602: General Toxicology
- VME 6603: Advanced Toxicology
- VME 6605: Toxic Substances
- VME 6607: Human Health Risk Assessment

Master of Public Health with a Concentration in Epidemiology

Epidemiology focuses on the study of the distribution and determinants of health in populations and communities. It is the scientific foundation of public health research that seeks to reduce risk factors and improve health. The discipline also contributes to public health practice and policy, and research in other health-related fields such as medicine and pharmacy. This concentration area is designed to train professionals to apply the principles and methods of epidemiological investigation in a broad range of settings. The required concentration core courses in epidemiology are PHC 6000, PHC 6002, PHC 6003, PHC 6011, and PHC 6053. Epidemiology concentration students complete their programs with an internship (PHC 6946) and electives in epidemiology and public health.

Additional detail and options for epidemiology elective course work is at the website: http://mph.ufl.edu/programs/master-of-public-health/epidemiology. Please also visit the website of the Department of Epidemiology for up-to-date information about other epidemiology programs and activities: http://epidemiology.phhp.ufl.edu.

Epidemiology Courses

- PHC 6000: Epidemiology Methods I
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6011: Epidemiology Methods II
- PHC 6053: Regression Methods for the Health and Life Sciences
- PHC 6405: Theoretical Foundations of Public Health
- PHC 6912: Special Project: Independent Research
- PHC 6938: Oral and Craniofacial Epidemiology
- PHC 6946: Public Health Internship

Master of Public Health with a Concentration in Public Health Management and Policy (PHMP)

This concentration focuses on the structure and administration of health organizations and the policies that impact health programs and reimbursement of health services. The concentration...
The PHMP concentration requires six core courses: HSA 5174, HSA 6115, HSA 6152, PHC 6104, PHC 6421, and PHC 6103. In addition, students take two elective courses in one of three areas of specialization:

- Public health management
- Public policy
- Pharmaceutical use and policy.

The PHMP students complete their programs with an internship (PHC 6946) and public health elective courses. Visit the public health management and policy concentration website for the most up-to-date information about course options: http://mph.ufl.edu/programs/oncampusprograms/concentrations-2/management/policy.

The website of Department of Health Services Research, Management, and Policy provides additional information about activities and other academic programs in the department: http://hsmr.phhp.ufl.edu.

Public Health Management and Policy Courses

- HSA5174: Fundamentals of Health Care Finance
- HSA6115: Introduction to Management of Health Services Organizations
- HSA6152: Overview of U.S. Health Policy
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6421: Public Health Law and Ethics

Master of Public Health with a Concentration in Public Health Practice

This concentration provides the opportunity to develop breadth in public health by taking coursework in two, three, or four of the core public health concentrations. Such breadth is often required of professionals who assume positions of leadership in public health. It is available to students in joint and concurrent degree programs, medical and other health scientists, and working professionals. Public Health Practice is the only M.P.H. concentration available online.

The campus curriculum for this concentration follows the same model as the other concentrations. Students pursuing public health practice begin their programs with the 5 core courses required of all MPH students. Instead of a specified set of concentration core courses, however, these students may choose 2 or more courses from advanced course options in two to four of the other concentrations. Students complete their degree with a 5 to 8 credit internship. All students in this concentration must hold a prior professional degree or be enrolled in a joint or concurrent graduate program. To be eligible for the accelerated option, applicants must hold a terminal degree in a health or health-related field.

The online Public Health Practice curriculum begins with the 5 core courses and then offers two or more courses in epidemiology, environmental health, public health management and policy and social and behavioral sciences. Students complete their degree with a 5 to 8 credit internship. Online students are not available to pursue the MPH on campus in Gainesville, either due to employment or geographic distance.

Master of Public Health with a Concentration in Social and Behavioral Sciences

The social and behavioral sciences concentration is based on the assumption that health and health behavior are influenced by multiple psychological, behavioral, social, and cultural factors. Central to addressing health problems and eliminating health disparities and inequalities, these factors must be understood and addressed using a framework that explores multiple levels (individual, interpersonal, organizational, community, and population) and the interactions among them. Through classroom instruction, research, and field practice, MPH students who concentrate in social and behavioral sciences explore the unique issues faced by diverse groups and populations and acquire skills to achieve social and behavioral change. Students in the social and behavioral sciences concentration are required to take five courses: PHC 6251 (Assessment and Surveillance in Public Health), PHC 6421 (Public Health Program Planning and Evaluation), PHC 6700 (Social and Behavioral Research Methods), PHC 6195 (Public Health Information for Diverse Populations), and PHC 6405 (Theoretical Foundations of Public Health). In addition, they may choose two courses from ten concentration electives (e.g., PHC 6762, PHC 6441). Social and behavioral science students complete their program with an internship (PHC 6946) and elective courses in public health or related fields.

Visit the social and behavioral science concentration website for the most up-to-date information about course options: http://mph.ufl.edu/programs/master-of-public-health/socialbehavioralscience.

The website of Department of Behavioral Science and Community Health provides additional information about activities and other academic programs in the department: http://bsch.phhp.ufl.edu.

Social and Behavioral Sciences Courses

- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6441: Health Disparities in the United States
- PHC 6700: Social and Behavioral Research Methods
- PHC 6762: International Public Health
- PHC 6937: Special Topics in Public Health

College of Public Health and Health Professions Courses
- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- HSC 6000: Epidemiology Methods I
- HSC 6001: Principles of Epidemiology in Public Health
- HSC 6002: Epidemiology of Infectious Diseases
- HSC 6003: Epidemiology of Chronic Diseases and Disability
- HSC 6009: Biology and Epidemiology of HIV/AIDS
- HSC 6011: Epidemiology Methods II
- HSC 6016: Social Epidemiology in Public Health
- HSC 6036: Environmental Infectious Diseases: A Molecular Approach
- HSC 6050: Statistical Methods for Health Sciences Research I
- HSC 6102: Introduction to Public Health Administrative Systems
- HSC 6103: Systems Thinking for Public Health
- HSC 6104: Evidence-Based Management of Public Health Programs
- HSC 6146: Public Health Program Planning and Evaluation
- HSC 6153: Public Policy and Aging
- HSC 6183: Disaster Preparedness and Emergency Response
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
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- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
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- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6601: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
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- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
Public Health (Ph.D. - Environmental and Global Health)

College

College of Public Health and Health Professions

Department/School

Environmental and Global Health

Degrees Offered With a Major in Public Health

Doctor of Philosophy

concentration in Environmental Health

Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Journal Club
- PHC 6957: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses
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<td>PHC 6607</td>
<td>Critical Issues in Public Health</td>
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<td>PHC 6700</td>
<td>Social and Behavioral Research Methods</td>
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<td>PHC 6702</td>
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<td>Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective</td>
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<td>PHC 7000</td>
<td>Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods</td>
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<td>PHC 7038</td>
<td>Psychiatric Epidemiology</td>
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<tr>
<td>PHC 7587</td>
<td>Theory Development and Testing in Behavioral &amp; Community Public Health</td>
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<td>PHC 7727</td>
<td>Grant Writing for Population Health Research</td>
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<tr>
<td>PHC 7752</td>
<td>Seminar in Instrument Development for Public Health</td>
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<tr>
<td>PHC 7901</td>
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<td>PHC 7907</td>
<td>Social and Behavioral Science Journal Club</td>
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<td>PHC 7979</td>
<td>Advanced Research</td>
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<td>PHC 7980</td>
<td>Research for Doctoral Dissertation</td>
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<tr>
<td>RHT 5156</td>
<td>Exercise Physiology</td>
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<td>RHT 6615L</td>
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<td>RHT 6718</td>
<td>Neuroplasticity: A Foundation for Neurorehabilitation</td>
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<tr>
<td>RSD 6110</td>
<td>Rehabilitation Science: Theory and Application I</td>
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<td>RSD 6112</td>
<td>Rehabilitation Science: Theory and Application II</td>
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<tr>
<td>RSD 6114</td>
<td>Rehabilitation in the United Kingdom</td>
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</table>
Public Health (Ph.D. - One Health)

College of Public Health and Health Professions

Environmental and Global Health Department

Degrees Offered With a Major in Public Health

Doctor of Philosophy

concentration in One Health

Environmental and Global Health Departmental Courses

- PHC 6006: An Introduction to One Health Problem Solving
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6722: Environmental and Global Health Research Methods Rotation
- PHC 6900: Environmental and Global Health Theory Journal Club
- PHC 6947: Occupational Health Field Research Experience
- PHC 7935: Critical Thinking in Environmental and Global Health

College of Public Health and Health Professions Courses
- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6901: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- RHT 5156: Exercise Physiology
- RHT 6125C: Concepts in Clinical Biomechanics
- RHT 6127C: Control of Gait and Posture
- RHT 6167C: Applied Neurophysiology for Physical Therapy
- RHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- RHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- RHT 6613L: Research Instrumentation in Physical Therapy
- RHT 6716: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
Public Health (Ph.D. - Social and Behavioral Sciences)

College

College of Public Health and Health Professions

Department/School

Behavioral Science and Community Health Department

Behavioral Science and Community Health Program Information

Social & Behavioral Sciences

The PhD in Public Health -Social and Behavioral Sciences (SBS) Track is targeted to individuals who wish to develop advanced knowledge and skills in the social and behavioral sciences theories and methods used in public health. Training is designed for those who desire public health careers in research, academics, government, or related health organizations. A prior graduate degree in public health or a related field is strongly preferred.

The program is focused upon the assumption that health and health behavior are impacted by multiple psychological, behavioral, social, and cultural factors. Central to addressing health problems and eliminating health disparities and inequalities, these factors must be understood and addressed at multiple social-ecological levels (individual, interpersonal, organizational, community, and population).

PhD students who concentrate in social and behavioral sciences explore the unique issues faced by diverse groups and populations and acquire skills to achieve social and behavioral change.

Contact
Dr. Giselle Carnaby (nee Mann), Program Director
gmann@phhp.ufl.edu
Phone: 352-273-6745 ext. 36497; ext. 36164 (lab)
Office: HPNP 4172; DG-140 (lab)

For more information, please visit http://sbs.phhp.ufl.edu/

Degrees Offered with a Major in Public Health

Doctor of Philosophy
concentration in Social and Behavioral Sciences

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
- PHC 6050: Statistical Methods for Health Sciences Research I
- PHC 6102: Introduction to Public Health Administrative Systems
- PHC 6103: Systems Thinking for Public Health
- PHC 6104: Evidence-Based Management of Public Health Programs
- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
- PHC 6195: Health information for Diverse Populations: Theory & Methods
- PHC 6220: Overview of Long-Term Care
- PHC 6251: Assessment and Surveillance in Public Health
- PHC 6301: Aquatic Systems and Environmental Health
- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
- PHC 6316: Health, Risk, and Crisis Communication
- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
- PHC 6403: Adolescence, Risk Taking and Health
- PHC 6404: Gender, Sexuality, and Health
- PHC 6410: Psychological, Behavioral, and Social Issues in Public Health
- PHC 6413: Critical Incidents and Violence in Communities
- PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
- PHC 6419: Biomedical and Psychological Aspects of Very Late Life
- PHC 6421: Public Health Law and Ethics
- PHC 6441: Health Disparities in the United States
- PHC 6445: Global Public Health and Development II
- PHC 6447: Ecology of HIV/AIDS in the Rural South
- PHC 6512: Environmental Management of Vector-Borne Diseases
- PHC 6515: Introduction to Entomology, Zoonotic Diseases, and Food Safety
- PHC 6519: Zoonotic Diseases in Humans and Animals
- PHC 6520: Foodborne Diseases
- PHC 6530: Public Health Issues of Mothers and Children
- PHC 6543: Community Practice of Behavioral Health Risk Prevention
- PHC 6544: Health Behavior Interventions in Practice
- PHC 6561: Public Health Laboratory Techniques
- PHC 6585: Health Promotion and Disease Prevention
- PHC 6586: Interventions for Public Health
- PHC 6607: Critical Issues in Public Health
- PHC 6700: Social and Behavioral Research Methods
- PHC 6702: Exposure Measurement and Assessment
- PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
- PHC 6762: International Public Health
- PHC 6905: Independent Study
- PHC 6917: Supervised Research Project
- PHC 6901: Seminar in Contemporary Public Health Issues
- PHC 6931: Seminars in Public Health
- PHC 6937: Special Topics in Public Health
- PHC 6945: Public Health Practicum
- PHC 6946: Public Health Internship
- PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
- PHC 7038: Psychiatric Epidemiology
- PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
- PHC 7727: Grant Writing for Population Health Research
- PHC 7752: Seminar in Instrument Development for Public Health
- PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
- PHC 7907: Social and Behavioral Science Journal Club
- PHC 7979: Advanced Research
- PHC 7980: Research for Doctoral Dissertation
- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neurophysiology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6615L: Research Instrumentation in Physical Therapy
- PHT 6718: Neuroplasticity: A Foundation for Neurorehabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6940: Supervised Teaching
- RSD 7979: Advanced Research
- RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
- RCS 6066: Rehabilitation Issues in Human Growth and Development
- RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
- RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
- RCS 6412: Rehabilitation Counseling Theory and Practice
- RCS 6470: Human Sexuality and Disability
- RCS 6601: Forensic Rehabilitation Consultation I
- RCS 6602: Forensic Rehabilitation Consultation II
- RCS 6625: Community Counseling and Case Management
- RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
- RCS 6740: Rehabilitation Research
- RCS 6730: Ethical, Legal, and Professional Issues in Rehabilitation
- RCS 6801: Rehabilitation Counseling Practicum
- RCS 6825: Internship in Rehabilitation Counseling
- RCS 6905: Individual Work
- RCS 6910: Supervised Research
- RCS 6931: Special Topics
- RCS 6940: Supervised Teaching
- RCS 6945: Supervised Teaching
- RCS 6945: Advanced Rehabilitation Counseling Practicum
- RCS 6971: Research for Master's Degree

Public Health (Ph.D.)

College

College of Public Health and Health Professions

Degrees Offered with a Major in Public Health

Doctor of Philosophy

College of Public Health and Health Professions Courses

- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- HSC 6000: Epidemiology Methods I
- HSC 6001: Principles of Epidemiology in Public Health
- HSC 6002: Epidemiology of Infectious Diseases
- HSC 6003: Epidemiology of Chronic Diseases and Disability
- HSC 6009: Biology and Epidemiology of HIV/AIDS
- HSC 6011: Epidemiology Methods II
- HSC 6016: Social Epidemiology in Public Health
Rehabilitation Science

College of Public Health and Health Professions

Rehabilitation Science Program Information

Director: David D. Fuller
Graduate Coordinator: Ellen Esparolini
Admissions Coordinator: Amy Ladendorf

Complete faculty listing by department: [Follow this link](http://rehabsci.phhp.ufl.edu).

The interdisciplinary Ph.D. program in rehabilitation science is offered through the College of Public Health and Health Professions. It is designed to prepare rehabilitation scholars. Students are given the opportunity to develop skills in teaching, research, service leadership, and interdisciplinary teamwork. Students work closely with their faculty mentor within the broad categories of Movement Science, Disability Science, and Communication and Swallowing Science. On successful completion of the program, graduates typically take positions in research universities and research centers. Requirements for the Ph.D. degree are provided elsewhere in this catalog.

Admissions decisions are determined by an interdisciplinary admissions committee. The program is a minimum of 90 credit hours of study beyond the Bachelor's degree. The curriculum includes 25 graduate credits in core rehabilitation courses (rehabilitation science theory, research, and teaching) required of all students; 50 credits in specialty areas; and 15 credits of dissertation research. The 50 credits of specialty courses includes 18 credits from one (or a combination) of the three major emphases in rehabilitation mentioned above. The remaining 32 credit hours may be electives, or 30 credits may be transferred in from a master's degree program (with the approval of the supervisory committee). Specialty course work must be chosen by the student with supervisory committee input and approval.

For more information, please see our website: [http://rehabsci.phhp.ufl.edu](http://rehabsci.phhp.ufl.edu).

Degrees Offered with a Major in Rehabilitation Science

Doctor of Philosophy

without a concentration

concentration in Clinical and Translational Science

Rehabilitation Sciences Courses

- PHT 5156: Exercise Physiology
- PHT 6125C: Concepts in Clinical Biomechanics
- PHT 6127C: Control of Gait and Posture
- PHT 6167C: Applied Neurophysiology for Physical Therapy
- PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
- PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
- PHT 6718: Neuroplasticity: A Foundation for Neurorhabilitation
- RSD 6110: Rehabilitation Science Theory and Application I
- RSD 6112: Rehabilitation Science Theory and Application II
- RSD 6114: Rehabilitation in the United Kingdom
- RSD 6400: Models and Principles of Motor Learning and Control: Application in Rehabilitation Science
- RSD 6700: Rasch Measurement: Introduction and Application
- RSD 6705: Research Methods in Rehabilitation
- RSD 6706: Scientific Writing for the Rehabilitation Professional
- RSD 6900: College Classroom: Teaching Process and Practice
- RSD 6905: Individual Work
- RSD 6910: Supervised Research
- RSD 6930: Special Topics in Rehabilitation Science
- RSD 6940: Supervised Teaching
- RSD 7979: Advanced Research
- RSD 7980: Research for Doctoral Dissertation
- SPA 5401: Speech Pathology/Language Disorder
- SPA 6008: Medical Aspects of Speech-Language Pathology
- SPA 6117: Science of Singing
- SPA 6217: Vocal Health and Habilitation
- SPA 6311: Medical Audiology
- SPA 6312: Advanced Audiology and Neuro-otology
- SPA 6340: Amplification I
- SPA 6341: Amplification II
- SPA 6342: Amplification III
- SPA 6346: Issues in Autism Spectrum Disorders
- SPA 6368: Clinical Evaluation in Medical Speech-Language Pathology
- SPA 6581: Special Clinical
- SPA 6830: Communication Disorders in Medically Complex Pediatric Populations
- SPA 7132C: Clinical Instrumentation for Evaluating Upper Aerodigestive Tract Functions
- SPA 7306: Audiologic Assessment in a Medical Setting
- SPA 7391: Business and Professional Issues in Audiology
- SPA 7415: Neolinguistics of Adult Language Disorders
- SPA 7540: Diagnosis and Treatment of Language and Language-Based Literacy Disorders
- SPA 7833: Audiology Research Project
- SPA 7937: Seminar in Advanced Studies of Language and Literacy Development and Disabilities
- SPA 7945: Graduate Practicum in Audiology
- SPA 7946: Clinical I: Practicum in Medical Speech and Language Pathology
- SPA 7947: Clinical II: Practicum in Advanced Medical Speech-Language Pathology
- SPA 7958: Clinical Externship
- HSC 5938: Special Topics
- HSC 6905: Independent Study
- HSC 6939: Special Topics
- HSC 6940: Supervised Teaching
- PHC 6000: Epidemiology Methods I
- PHC 6001: Principles of Epidemiology in Public Health
- PHC 6002: Epidemiology of Infectious Diseases
- PHC 6003: Epidemiology of Chronic Diseases and Disability
- PHC 6009: Biology and Epidemiology of HIV/AIDS
- PHC 6011: Epidemiology Methods II
- PHC 6016: Social Epidemiology in Public Health
- PHC 6036: Environmental Infectious Diseases: A Molecular Approach
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- PHC 6103: Systems Thinking for Public Health
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- PHC 6146: Public Health Program Planning and Evaluation
- PHC 6153: Public Policy and Aging
- PHC 6183: Disaster Preparedness and Emergency Response
- PHC 6194: Spatial Epidemiology
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- PHC 6251: Assessment and Surveillance in Public Health
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- PHC 6309: Environmental Justice Issues in Public Health
- PHC 6312: Water Quality and Human Health
- PHC 6313: Environmental Health Concepts in Public Health
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- PHC 6317: Risk Communication for Public Health Practice
- PHC 6346: Occupational and Environmental Health Among Agriculture Workers
- PHC 6370: Public Health Biology
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- PHC 6404: Gender, Sexuality, and Health
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PHC 6418: Foundations in Aging and Public Health Policy and Epidemiology
PHC 6419: Biomedical and Psychological Aspects of Very Late Life
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PHC 6447: Ecology of HIV/Aids in the Rural South
PHC 6512: Environmental Management of Vector-Borne Diseases
PHC 6515: Introduction to Entomology Zoonotic Diseases and Food Safety
PHC 6519: Zoonotic Diseases in Humans and Animals
PHC 6520: Foodborne Diseases
PHC 6530: Public Health Issues of Mothers and Children
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PHC 6544: Health Behavior Interventions in Practice
PHC 6561: Public Health Laboratory Techniques
PHC 6585: Health Promotion and Disease Prevention
PHC 6586: Interventions for Public Health
PHC 6607: Critical Issues in Public Health
PHC 6700: Social and Behavioral Research Methods
PHC 6702: Exposure Measurement and Assessment
PHC 6706: Health-Medical Outcomes Research and Measurement: A Policy Applications Perspective
PHC 6762: International Public Health
PHC 6905: Independent Study
PHC 6917: Supervised Research Project
PHC 6931: Seminar in Contemporary Public Health Issues
PHC 6937: Special Topics in Public Health
PHC 6945: Public Health Practicum
PHC 6946: Public Health Internship
PHC 7000: Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods
PHC 7038: Psychiatric Epidemiology
PHC 7587: Theory Development and Testing in Behavioral & Community Public Health
PHC 7727: Grant Writing for Population Health Research
PHC 7752: Seminar in Instrument Development for Public Health
PHC 7901: Epidemiology Literature Review and Critique (Journal Club)
PHC 7907: Social and Behavioral Science Journal Club
PHC 7979: Advanced Research
PHC 7980: Research for Doctoral Dissertation
PHT 5156: Exercise Physiology
PHT 6125C: Concepts in Clinical Biomechanics
PHT 6127C: Control of Gait and Posture
PHT 6167C: Applied Neurophysiology for Physical Therapy
PHT 6236C: Neurological Dysfunction as Applied to Physical Therapy
PHT 6316: Neurological Aspects of Orthopedic Rehabilitation
PHT 6615L: Research Instrumentation in Physical Therapy
PHT 6718: Neuroplasticity: A Foundation for Neurorhabilitation
RSD 6110: Rehabilitation Science Theory and Application I
RSD 6112: Rehabilitation Science Theory and Application II
RSD 6114: Rehabilitation in the United Kingdom
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RSD 6700: Rasch Measurement: Introduction and Application
RSD 6705: Research Methods in Rehabilitation
RSD 6706: Scientific Writing for the Rehabilitation Professional
RSD 6900: College Classroom: Teaching Process and Practice
RSD 6905: Individual Work
RSD 6910: Supervised Research
RSD 6930: Special Topics in Rehabilitation Science
RSD 6940: Supervised Teaching
RSD 7979: Advanced Research
RSD 7980: Research for Doctoral Dissertation
RCS 5245: Psychosocial and Cultural Foundations of Rehabilitation Counseling
RCS 6066: Rehabilitation Issues in Human Growth and Development
RCS 6080: Medical and Psychosocial Aspects of Rehabilitation Counseling
RCS 6242C: Vocational and Lifestyle Assessment in Rehabilitation Counseling
RCS 6255C: Individual Evaluation and Assessment in Rehabilitation Counseling
RCS 6412: Rehabilitation Counseling Theory and Practice
RCS 6470: Human Sexuality and Disability
RCS 6601: Forensic Rehabilitation Consultation I
RCS 6602: Forensic Rehabilitation Consultation II
RCS 6625: Community Counseling and Case Management
RCS 6641: Applied Case Management and Consultation in Rehabilitation Counseling
RCS 6740: Rehabilitation Research
RCS 6780: Ethical, Legal, and Professional Issues in Rehabilitation
RCS 6801: Rehabilitation Counseling Practicum
RCS 6825: Internship in Rehabilitation Counseling
RCS 6905: Individual Work
RCS 6910: Supervised Research
RCS 6931: Special Topics
RCS 6940: Supervised Teaching
RCS 6945: Advanced Rehabilitation Counseling Practicum
RCS 6971: Research for Master's Degree

College of Veterinary Medicine
Dean: G. F. Hoffsis

Complete faculty listings: Follow this link.

The UF College of Veterinary Medicine is the state's only veterinary college. UF's College of Veterinary Medicine offers comprehensive services to the public through teaching, research, extension and state-of-the-art patient care.

For more information, please see our website: http://www.vetmed.ufl.edu

Departments and Programs within the College of Veterinary Medicine

College of Veterinary Medicine Courses

Other

Animal Molecular and Cellular Biology

College

- College of Agricultural and Life Sciences
- College of Liberal Arts and Sciences
- College of Veterinary Medicine

Department/School

Animal Molecular and Cellular Biology Department

Animal Molecular and Cellular Biology Program

The animal molecular and cell biology (AMCB) graduate program offers Master of Science and Doctor of Philosophy degrees. Faculty are drawn from these disciplines:

- Animal Sciences
- Biochemistry and Molecular Biology
- Large Animal Clinical Sciences
- Obstetrics and Gynecology
- Zoology

Early in the program, students choose a faculty supervisor who will ensure the quality of their research experience. Students may also do optional rotations through the laboratories of one or more other faculty. The Annual Research Symposium features guest speakers and student research presentations. A weekly journal club and monthly seminars draw on the knowledge and diversity the campus offers in molecular and cell biology.

Core course requirements for the M.S. degree are BCH 5045 and registration in a 1-credit graduate seminar course. Core course requirements for the Ph.D. include BCH 5413 and GMS 6421 and registration in two graduate seminar courses.

Contact P.J. Hansen at pjhansen@ufl.edu or visit the program's website at http://www.animal.ufl.edu/amcb.

Degrees Offered with a Major in Animal Molecular and Cellular Biology

Doctor of Philosophy

Master of Science

Animal Molecular and Cellular Biology Courses

- ALS 5905: Individual Study
- ALS 6046: Grant Writing
- ANS 5312C: Applied Ruminant Reproductive Management
- ANS 5446: Animal Nutrition
- ANS 5935: Reproductive Biology Seminar and Research Studies
- ANS 6288: Experimental Techniques and Analytical Procedures in Meat Research
- ANS 6314: Experimental Embryology
- ANS 6313: Current Concepts in Reproductive Biology
- ANS 6449: Vitamins
- ANS 6452: Principles of Forage Quality Evaluation
- ANS 6458: Advanced Methods in Nutrition Technology
- ANS 6636: Meat Technology
- ANS 6666L: Molecular and Cellular Research Methods
- ANS 6702: Lactation Physiology of Farm Animals
- ANS 6704: Mammalian Endocrinology
Veterinary Medical Sciences

College

College of Veterinary Medicine

Veterinary Medical Sciences Program

Chair: C. Basco
Graduate Coordinator (Large Animals): I. Larkin
Graduate Coordinator (Small Animals): D. Lewis

Complete faculty listing by department: Follow this link.

The College of Veterinary Medicine offers graduate study leading to the Master of Science and Doctor of Philosophy degrees in veterinary medical sciences. The College also offers certification and a nonthesis concentration in forensic toxicology via web-based distance education. Minimum requirements for the Master of Science and Doctor of Philosophy degrees are described in the Graduate Degrees section of this catalog.
The program provides extensive training in basic and applied research for qualified students with a baccalaureate degree or a D.V.M. or equivalent degree. Applicants are expected to have a background in the biological sciences, mathematics, chemistry, and physics. Particular attention is paid to the advanced education of veterinarians, those interested solely in research, and those interested in combining their graduate study with residency training in a clinical specialty. The College offers three areas of specialization within the veterinary medical sciences program:

**Large and Small Animal Clinical Sciences:** Physiology, endocrinology, aquatic animal health, fish diseases, gastroenterology, immunology, vision sciences, perinatology, reproductive biology, pharmacokinetics, veterinary sports medicine, and wildlife and zoological medicine (I. Larkin and D. Lewis Graduate Coordinators).

**Physiological Sciences:** Comparative anatomy, physiology, pharmacology, biochemistry, neurobiology, nutrition, reproductive biology, and toxicology (R. Johnson, Graduate Coordinator).

**Infectious Diseases and Experimental Pathology:** Bacteriology, parasitology, virology, immunopathology, molecular mechanisms of disease and host defense, epidemiology, and veterinary public health (M.T. Long, Graduate Coordinator).

The College participates in the interdisciplinary specialization in toxicology, in cooperation with other departments and colleges in both the Health Science Center and the Institute of Food and Agricultural Sciences and with the Center for Environmental and Human Toxicology (see the Toxicology description under Interdisciplinary Graduate Studies).

The following courses in related areas are acceptable for graduate major credit in veterinary medical sciences:

- **Physiological Sciences:** ANS 6704, ANS 6751, BCH 5413, BCH 6206, BCH 6415, BCH 6740, BMS 603, GMS 5304C, GMS 6140, GMS 6152, GMS 6330, GMS 6332, GMS 6333, GMS 6381, GMS 6382, GMS 6421, STA 6166, STA 6176.

- **Infectious Diseases and Experimental Pathology:** BCH 5413, BCH 6415, BMS 603, GMS 5304C, GMS 6140, GMS 6152, GMS 6330, GMS 6332, GMS 6333, GMS 6381, GMS 6382, GMS 6421, STA 6208, STA 6166, STA 6176.

- **Large and Small Animal Clinical Sciences:** all of the above.

**Degrees Offered with a Major in Veterinary Medical Sciences**

**Doctor of Philosophy**

- without a concentration

- concentration in Animal Molecular and Cellular Biology

- concentration in Clinical and Translational Science

- concentration in Toxicology

**Master of Science**

- without a concentration

- concentration in Forensic Toxicology

- concentration in Shelter Medicine

- concentration in Veterinary Forensic Sciences

**Courses**
- **GMS 6070**: Sensory and Motor Systems
- **GMS 6074**: Comparative and Evolutionary Neurobiology
- **GMS 6077**: Neural Degeneration and Regeneration
- **GMS 6312**: Clinical Chemistry and Toxicology
- **GMS 6313**: Clinical Chemistry and Toxicology: A Rotation
- **GMS 6393**: Seminar in Clinical Chemistry
- **PHA 5270**: Health Care and Patient Safety
- **PHA 5271**: Health Care Risk Management
- **PHA 5272**: Risk Management, Liability and Compliance
- **PHA 6115**: Equilibria, Complexations, and Interactions of Drugs
- **PHA 6116**: In Vivo and In Vitro Stability of Drugs
- **PHA 6118**: Molecular Diversity
- **PHA 6125**: Pharmacokinetics and Biopharmaceutics
- **PHA 6170C**: Pharmaceutical Product Formulation
- **PHA 6183**: Pharmaceutical Gene Delivery
- **PHA 6185**: Pharmaceutical Drug Development
- **PHA 6227**: Institutional Pharmacy Leadership I
- **PHA 6228**: Institutional Pharmacy Leadership II
- **PHA 6235**: Advanced Pharmaceutical Law
- **PHA 6236**: Health Sciences Liability Law
- **PHA 6250**: Patient Responsibility in Health Care
- **PHA 6264**: Pharmacoeconomics and Health Technology Assessment
- **PHA 6265**: Introduction to Pharmaceutical Outcomes and Policy I
- **PHA 6266**: Introduction to Pharmaceutical Outcomes and Policy II
- **PHA 6268**: Pharmacoepidemiology and Patient Safety
- **PHA 6269**: Pharmaceutical Products and Public Policy
- **PHA 6273**: Structure, Process, and Outcomes of Regulation
- **PHA 6274**: Federal Regulations of Drugs and Pharmacy
- **PHA 6275**: Federal Regulations of Controlled Substances
- **PHA 6276**: Regulating Pharmaceutical Access and Costs
- **PHA 6277**: Ethics in Drug Development Production and Use
- **PHA 6278**: State Regulation of Drugs and Pharmacy
- **PHA 6279**: Pharmaceutical Outcomes and Policy Seminar
- **PHA 6286**: Pharmaceutical Microeconomics
- **PHA 6287**: Pharmaceutical Health Economics
- **PHA 6288**: Critical Review of Research Methods
- **PHA 6289**: Regulating Clinical Research
- **PHA 6291**: Pharmaceutical Health Care Systems
- **PHA 6416**: Pharmaceutical Analysis I
- **PHA 6417**: Pharmaceutical Analysis II
- **PHA 6427**: Pharmacogenetics of Drug Metabolism
- **PHA 6440**: Seminar in Drug Discovery
- **PHA 6717**: Measurement in Pharmacy Administration Research
- **PHA 6793**: Evidentiary Basis of Pharmaceutical Use
- **PHA 6796**: Study Design in Pharmaceutical Outcomes & Policy Research
- **PHA 6798**: The Use and Abuse of Statistics in Drug Regulation
- **PHA 6799**: Patient Safety Program Evaluation
- **PHA 6805**: Applied Data Interpretation and Reporting of Findings in Pharmacy
- **PHA 6891**: Introduction to Pharmacoepidemiology
- **PHA 6892**: Practices and Procedures of the IRB
- **PHA 6893**: Research Ethics
- **PHA 6894**: Introduction to Graduate Studies
- **PHA 6896**: Preclinical Drug Evaluation
- **PHA 6937**: Topics in Pharmaceutical Administration
- **PHC 6107**: Introduction to Veterinary Public Health
- **VME 5162C**: Avian Diseases
- **VME 5244**: Physiology, Organ Systems
- **VME 6008**: Care of Aquatic Megavertebrates
- **VME 6010**: Aquatic Animal Conservation Issues
- **VME 6011**: Introduction to Aquatic Wildlife Health Issues
- **VME 6017**: Manatee Health & Conservation
- **VME 6051**: Cruelty to Animals and Interpersonal Violence
- **VME 6052**: Animal Crime Scene Processing
- **VME 6054**: Scientific and Legal Principles of Forensic Evidence
- **VME 6056**: Animal Law
- **VME 6076C**: Andrology
- **VME 6135**: Diseases of Laboratory Animals I
- **VME 6136**: Diseases of Laboratory Animals II
- **VME 6186**: Advanced Topics in Disease Pathogenesis
- **VME 6421**: Biology and Molecular Biology of Avian Viruses
- **VME 6430C**: Contemporary Issues in Small Animal Surgery
- **VME 6464**: Molecular Pathogenesis
- **VME 6505**: Autoimmunity
- **VME 6570**: Wildlife Conservation and Forensic Science
- **VME 6571**: Forensic Applied Animal Behavior
- **VME 6572**: Forensic Aspects of Agricultural Animal Welfare
- **VME 6573**: Wildlife Forensic Genetics
- **VME 6575**: Veterinary Forensic Medicine
- **VME 6576**: Veterinary Forensic Pathology
- **VME 6577**: Veterinary Forensic Pathology in Practice
- **VME 6578**: Forensic Veterinary Osteology
- **VME 6579**: Veterinary Forensic Radiology and Imaging
- **VME 6602**: General Toxicology
- **VME 6603**: Advanced Toxicology
College of Veterinary Medicine Courses

College of Pharmacy Courses

Pharmacodynamics Courses

Pharmacology Courses

Veterinary Medicine Courses - filtered
GMS 6070: Sensory and Motor Systems
GMS 6074: Comparative and Evolutionary Neurobiology
GMS 6077: Neural Degeneration and Regeneration
GMS 6312: Clinical Chemistry and Toxicology
GMS 6313: Clinical Chemistry and Toxicology: A Rotation
GMS 6393: Seminar in Clinical Chemistry
PHC 6107: Introduction to Veterinary Public Health
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VME 6572: Forensic Aspects of Agricultural Animal Welfare
VME 6573: Wildlife Forensic Genetics
VME 6575: Veterinary Forensic Medicine
VME 6576: Veterinary Forensic Pathology
VME 6577: Veterinary Forensic Pathology in Practice
VME 6578: Forensic Veterinary Osteology
VME 6579: Veterinary Forensic Radiology and Imaging
VME 6602: General Toxicology
VME 6603: Advanced Toxicology
VME 6604: Literature Survey in Toxicology
VME 6605: Toxic Substances
VME 6606: Ecological Risk Assessment
VME 6607: Human Health Risk Assessment
VME 6613: Forensic Toxicology I
VME 6614: Forensic Toxicology II
VME 6615: Veterinary Forensic Toxicology
VME 6650: Principles of Mammalian Pharmacology
VME 6766: Laboratory Quality Assurance/Quality Control
VME 6767: Issues in the Responsible Conduct of Research
VME 6771: Veterinary Epidemiologic Research
VME 6810: Integrating Veterinary Medicine with Shelter Systems
VME 6811: Shelter Animal Physical Health
VME 6812: Shelter Animal Behavior and Welfare
VME 6905: Problems in Veterinary Medical Sciences
VME 6910: Supervised Research
VME 6931: Seminar in Veterinary Medical Sciences
VME 6932: Seminar in Physiological Sciences
VME 6933: Seminar in Infectious Diseases and Experimental Pathology
VME 6934: Topics in Veterinary Medical Sciences
VME 6936: Seminar in Pathophysiology
VME 6938: Topics in Aquatic Animal Health
VME 6940: Supervised Teaching
VME 6971: Research for Master's Thesis
VME 7979: Advanced Research
VME 7980: Research for Doctoral Dissertation
WS 5323C: Impact of Diseases on Wildlife Population