Graduate Curriculum Committee

Minutes

June 13, 2024
Meeting Materials

Voting Conducted
via Mail-Vote

I. Presentation and review of the Minutes from the May Meeting of the Graduate Curriculum Committee (GCC).

II. Update(s) to the Committee: The following was reviewed by the Graduate Curriculum Committee (GCC) previously. The GCC felt further follow-up and/or clarifications were necessary before the proposals could move forward to the University Curriculum Committee (UCC). Suggestions and/or follow-up required are noted below the proposals.

CBA – Management

1. ENT 6XXX   *Strategy and Disruption in Technology Industries*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19805

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved after further review by the Chair of the GCC.

III. Course Change Proposals: The following proposals are newly requested revisions to existing courses already within the current course catalog in the curriculum inventory. The changes requested are listed below each of the proposals.

   There are no course modifications to present.

IV. New 5XXX Course Proposal(s) (with attached syllabi): The following are newly requested course proposals. Proposed course titles and descriptions are listed below. Syllabi have been included with these new course requests, at the request of GCC Members.

DCP – Architecture

1. ARC 5XXX   *Graduate Architectural History 1*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20028

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

2. ARC 5XXX   *Graduate Architectural History 2*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20007

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

3. ARC 5XXXL   *Graduate Core Studio 1*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20005

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

4. ARC 5XXXL   *Graduate Core Studio 2*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20012

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

5. ARC 5XXX   *IPAL Seminar 1*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20025

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

6. ARC 5XXX   *IPAL Seminar 2*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20026

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

7. ARC 5XXX   *IPAL Seminar 3*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20027

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

v. New Course Proposal(s) (with attached syllabi): The following are newly requested course proposals. Proposed course titles and descriptions are listed below. Syllabi have been included with these new course requests, at the request of GCC Members.

MED – General Medicine

1. CAI 5XXX   *AI Design Studio I*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19998

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

2. CAI 5XXX   *AI Design Studio II*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19999

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

3. CAI 5XXX   *AI for Clinical Decision Support*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20020

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

4. CAI 5XXX   *AI in Medical Image Analysis*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20018

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

5. CAI 5XXX   *AI-Powered Drug Discovery*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20022

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved after further review by the Chair of the GCC.

6. CAI 5XXX   *Biostatistics for AI*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20019

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

7. CAI 5XXX   *Economic, Social, Legal, and Ethical Implications of AI in Medicine*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19995

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

8. CAI 5XXX   *Fundamentals of Artificial Intelligence in Medicine I*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19996

   The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

9. CAI 5XXX   *Fundamentals of Artificial Intelligence in Medicine II*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19997

The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

10. CAI 6XXX   *Applied Generative AI in Medicine*
    Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20023

    The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

11. CAI 6XXX   *Clinical AI Design Studio I*
    Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20000

    The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

12. CAI 6XXX   *Clinical AI Design Studio II*
    Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20017

    The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

13. CAI 6XXX   *Supervised Research in AI for Health*
    Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20021

    The proposal has been conditionally approved. Once revised, the proposal can be administratively approved after further review by the Chair of the GCC.

DCP – Design, Construction and Planning

14. DCP 6XXXC   *Green Building Strategies*
    Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19963

    The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

JOU – Mass Communication

15. MMC 6XXX   *Computational Methods for Media Research*
    Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20038

    The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

16. MMC 6XXX   *Human Machine Communication*
    Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20032

    The proposal has been conditionally approved. Once revised, the proposal can be administratively approved without further review by the GCC.

VI. Information Items:

1. LAS 6938 – 19923 – Change maximum repeatable credit from 9 to 18
2. PHC 6937 – 20016 – Change maximum repeatable credit from 6 to 12
3. URP 6979 – 19931 – Change credits from Non-repeatable to Repeatable (max 12)

Graduate Curriculum Committee

Agenda

September 12, 2024
Meeting Materials

Voting Conducted
via Zoom

I. Presentation and review of the Minutes from the June Meeting of the Graduate Curriculum Committee (GCC).

II. Update(s) to the Committee: The following was reviewed by the Graduate Curriculum Committee (GCC) previously. The GCC felt further follow-up and/or clarifications were necessary before the proposals could move forward to the University Curriculum Committee (UCC). Suggestions and/or follow-up required are noted below the proposals.

COP – Medicinal Chemistry

1. PHA 6XXX   *Advanced Applications in DNA*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19590

   The GCC asked the unit to correct or clarify the contact hours. They also requested revisions to the course description, objectives, schedule, and description of course assignments. The Committee requested to re-review this proposal once revised. The unit has since revised the attached submission materials, attached here.

2. PHA 6XXX   *Applied Statistics for Laboratory Data Analysis*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19609

   The GCC asked the unit to provide consultations or clarify how this course is unique. They also requested revisions to the course description as well as the inclusion of a reading list and assignment descriptions. The Committee requested to re-review this proposal once revised. The unit has since revised the attached submission materials, attached here.

HHP – Sport Management

3. SPM 5XXX   *Diversity, Equity, and Inclusion in Sport Organizations*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/18878

   The GCC requested corrections to comma usage in the course title, revisions to the course description, clarification of the prerequisites, and corrections to the schedule. The Committee requested to re-review this proposal once revised. The unit has since revised the attached submission materials, attached here.

III. Course Change Proposals: The following proposals are newly requested revisions to existing courses already within the current course catalog in curriculum inventory. The changes requested are listed below each of the proposals.

MED –Health Outcomes and Biomedical Informatics

1. GMS 6848   *Ensuring Rigor and Reproducibility in Clinical and Translational Research*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20224

   This is a request to change the credit hours from 1 to 2.

COP – Pharmacotherapy and Translational Research

2. PHA 6746   *Patient Education and Communication in the Era of Precision Medicine*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20102

   This is a request to change the credit hours from 1 to 3.

IV. New 5XXX Course Proposal(s) (with attached syllabi): The following are newly requested course proposals. Proposed course titles and descriptions are listed below. Syllabi have been included with these new course requests, at the request of GCC Members.

DCP – Architecture

1. ARC 5XXX   *Integrated Building Tech 1*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20297

   The first course in a multi-year integrated building technology sequence introduces students to the fundamental aspects of building material systems, construction methods and digital design tools, workflows, and representation.

2. ARC 5XXX   *Integrated Building Tech 2*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20298

   The second course in a multi-year integrated building technology sequence builds on earlier materials and methods and digital design knowledge, then introduces environmental design. Integrated knowledge and skills makes the impact of material and environmental design decisions apparent by introducing digital simulation.

3. ARC 5XXX   *Integrated Building Tech 3*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20299

   The third course in a multi-year integrated building technology will introduce students to the fundamental aspects and principles of structural systems in buildings, reinforce and advance the material and method systems that correspond to building structures, advance the understanding and relationships between design principles and environmental context,

and examine more advanced digital design tools, methodologies and means of representation. Students prepare to use increasingly integrated know

4. ARC 5XXX *Integrated Building Tech 4*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20300

   The fourth course in a multi-year integrated building technology sequence builds on earlier materials and methods, digital design, environmental design, building systems, and structural systems knowledge and skills. Students prepare to use integrated knowledge and skill to make design decisions in buildings of increasing complexity. Building systems complexity involves mechanical system integration/distribution, building code constraints, regulations, calculations, and interpretations.

5. ARC 5XXXL *Graduate Core Studio 3*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20030

   Continuation of core studio sequence with studio projects related to program development, structural integration, mechanical systems integration, and energy analysis. Students analyze urban context as dynamic evolving systems including commerce, public space, infrastructure, and morphology. Emphasis is on digital techniques of exploration, information, and representation. Projects scaffold application of program development, structure, energy analysis, and mechanical systems.

6. ARC 5XXXL *Graduate Core Studio 4*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20031

   Continuation of core studio sequence Graduate Core Studio 4 is the second in the sequence of urban studios that investigate the role of architecture in contemporary urban conditions evolving in the dense cities developed by the industrial revolution such as New York City. Students analyze context as dynamic evolving systems including commerce, public space, infrastructure, and morphology. Projects scaffold application of integrated building technology topics.

v. New Course Proposal(s) (with attached syllabi): The following are newly requested course proposals. Proposed course titles and descriptions are listed below. Syllabi have been included with these new course requests, at the request of GCC Members.

CALS – Entomology and Nematology

1. ENY 6XXX *Global Change and Insect Declines*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19841

This course will introduce students to the global impacts of anthropogenic change on insect diversity and abundance. Each week students will read pertinent papers on important topics such as pollution, pesticides, and climate change, followed by group discussions on how these factors are impacting insects in Florida and globally.

MED – Neuroscience

2. GMS 6XXX   *Aging and the Brain*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19869

   To address questions of the primary causes of aging and the history of research on aging. Theories of aging will be applied to the brain and cognitive decline and include biomarkers from biochemistry to physiology, through to structural changes. Differences in the rate of aging due to sex, resilience, compensation, and cognitive reserve, and the role of aging in disease will be discussed. Finally, therapeutic implications and related topics will be explored.

3. GMS 6XXX   *Neuroimaging*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19862

   Images are powerful tools that excel at conveying complex and often subtle ideas or concepts at speeds unrivaled by other forms of information-based media. The Online Master's Program's Neuroimaging course is designed to provide a historical perspective on the development of those research-based and clinical imaging techniques that were most foundational to the fields of neuroscience and neurology.

4. GMS 6XXX   *Neuroscience Professional Survival Skills*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/19861

   The ability to effectively communicate scientific ideas through written, poster, or oral presentations is critically important in professional settings. Persons who excel in these skills often have a tremendous advantage over their peers in terms of job opportunities and career advancement. Neuroscience Professional Survival Skills is designed to provide students with foundational knowledge that will enable them to effectively improve their communication skills.

COP – Medicinal Chemistry

5. PHA 6XXX   *Drug Development Strategies*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20131

   Provides a strong conceptual foundation of the diverse molecular and cellular processes involved in cancer development and the multiple strategies to fight the disease. The focus will be on colon cancer development. Students will learn to analyze data from high

throughput screenings of colon cancer patients, and acquire an understanding of how to use this information to plan and carry out a project in applied research and product development in the field of anti-cancer drug development.

COP – Pharmaceutics

6. PHA 6XXX   *Personal Genomics and Your Health*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20226

   Provide a comprehensive learning experience that mimics real-life situations involving the decision-making process of ordering pharmacogenetic testing, deciphering results, and applying them to inform pharmacotherapy choices. Students will incorporate their personal pharmacogenetic test outcomes into the diverse case studies provided.

PHHP – Environmental and Global Health

7. PHC 6XXX   *Artificial Intelligence in Environmental and Global Health*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20140

   This course will discuss fundamental principles, methodology and applications of machine learning and artificial intelligence approaches in environmental and global health, including physiologically based pharmacokinetic (PBPK) modeling, quantitative structure-activity relationship (QSAR) modeling for toxicity prediction, air pollution, water pollution, human biomonitoring, infectious disease, antimicrobial resistance, and big data.

CLAS – Sociology

8. SYA 7XXX   *Sociological Application of Network Science*
   Link to proposal: https://secure.aa.ufl.edu/Approval/reports/18946

   Sociological theories of emergence, growth, and decay of social networks; social network mechanisms in explaining various social phenomena and socioeconomic outcomes; methods to collect, construct, and analyze social networks.

VI. Information Items:

1. ABE 6933 – 20008 – Change maximum repeatable credit from 6 to 15
2. BME 6938 – 20116 – Change maximum repeatable credit from 6 to 18
3. CAP 5771 – 20079 – Share course ownership
4. CCJ 5934 – 19761 – Change maximum repeatable credit from 12 to 36
5. CGN 6905 – 20074 – Change maximum repeatable credit from 10 to 18
6. EAS 6939 – 20088 – Change course description and maximum repeatable credit from 12 to 15

7. [ECH 6937](#) – 20109 – Change maximum repeatable credit from 9 to 12
8. [EEC 6933](#) – 20097 – Change maximum repeatable credit from 12 to 18
9. [EEL 5934](#) – 20108 – Change maximum repeatable credit from 8 to 18
10. [EEX 6936](#) – 20092 – Change maximum repeatable credit from 12 to 18
11. [EGM 6934](#) – 20089 – Change maximum repeatable credit from 12 to 15
12. [EML 6934](#) – 20091 – Change maximum repeatable credit from 12 to 15
13. [ENV 6932](#) – 20072 – Change maximum repeatable credit from 8 to 18
14. [EOC 6934](#) – 20075 – Change maximum repeatable credit from 9 to 18
15. [GMS 6007](#) – 20107 – Change prerequisites
16. [GMS 6750](#) – 20084 – Change prerequisites
17. [GMS 6852](#) – 20221 – Change to course title
18. [GMS 6853](#) – 20222 – Change to course title
19. [PHA 6935](#) – 19849 – Change maximum repeatable credit from 12 to 18
20. [PHC 6905](#) – 20220 – Share course ownership
21. [SPS 6937](#) – 20094 – Change maximum repeatable credit from 12 to 18
22. [SPS 7979](#) – 20095 – Change maximum repeatable credit from 12 to 99
23. [SPS 7980](#) – 20096 – Change maximum repeatable credit from 15 to 99
24. [VME 6937L](#) – 19872 – Change maximum repeatable credit from 2 to 6

PHA 6XXX (19590) Advanced Applications in DNA

Please address the following concerns expressed by the Graduate Curriculum Committee after their complete review of this new course request ---once addressed, the GCC requests to review this proposal again.

The GCC recommends the following revisions to the submitted form (and syllabus where appropriate):

1) The credit and contact hours should be corrected or clarified. The submitted form lists 2 credits / 1 contact hour. Weekly contact hours should align with the course hours unless fully explained

2) The course description needs minor revisions. Delete preliminary words to reduce unneeded introduction to simply begin with "Explores advanced techniques…" Ensure that the course description on the submitted form and syllabus match.

3) Objectives in the syllabus don't make sense (grammatically). There are typos in 1st, 4th, and 7th objectives.

4) The course schedule lists: "Weeks 15-16: Module 9:" Spring and Fall semesters should be 15 weeks of instruction with the 16th week for final examinations.

5) Request that a description of written assignments be included in the syllabus. Since there is only one form of assessment, this seems especially critical.

6) Policy regarding late assignments comes across as arbitrary. More explanation is needed.

Course|New for request 19590

Info

Request: PHA 6XXX Advanced Applications in DNA
Description of request: Advanced Applications in DNA
Submitter: Emely McKitrick emely.mckitrick@ufl.edu
Created: 6/6/2024 2:16:03 PM
Form version: 5

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

> Response:
> PHA

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

> Response:
> 6

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

> Response:
> XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

> Response:
> None

Category of Instruction
*Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment. *

> Response:
> Intermediate

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

> Response:
> Advanced Applications in DNA

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

> Response:
> Advanced Applications in DNA

Degree Type
Select the type of degree program for which this course is intended.

> Response:
> Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

> Response:
> Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

> Response:
> No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the

department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
2

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or

headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

> Response:
> Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

> Response:
> Lecture

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

> Response:
> 1

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

> Response:
> Explores advanced techniques in DNA analysis such as: Advanced sampling techniques, Y-STR analysis, high throughput screening, Next Generation Sequencing (NGS), single nucleotide polymorphisms (SNPs) analysis, mitochondrial DNA, touch DNA, automation, and other new technologies relevant to forensic DNA analysis.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

> Response:
> NA

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in

the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
Forensic Analysis of DNA 1 required, Forensics Analysis of DNA 2 is preferred but not required.

Completing Prerequisites:

• *Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.*
• *Use parentheses to specify groupings in multiple requirements.*
• *Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.*
• *Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).*
• *"Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.*
• *If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)*

*Example: *
<ol>
• *Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.*
• *Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:

This course is required to complete the Advanced Forensic Tech Certificate.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
At the completion of this course, the learner will be able to:
Understand how advances in DNA technology are relative to relates to the field of forensic science, specifically in DNA analysis.
? Demonstrate understanding of advanced screening techniques as they apply to forensic examination of biological evidence.
? Be able to analyze the strategies for challenging short tandem repeat samples to include approaches for Low Copy Number analysis and degraded DNA.
? Demonstrate knowledge alternative pPCR-based technologies such as Y-STR, Mitochondrial, X-STR, and single nucleotide polymorphisms and their value to the field of forensic biology.
? Demonstrate knowledge of binary mixture deconvolution strategies to include Random Match Probability, Combined Probability of Inclusion, and Likelihood Ratio.
? Explain and evaluate how Probabilistic Genotyping differs from that of binary methods and understand how it is used in modern DNA laboratories.
? Recognize and be able to articulate the roles Genetic Genealogy and Phenotypic Profiling in the field of forensic DNA analysis.

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Required Textbook:
Advanced Topics in Forensic DNA Typing: Methodology
By John Butler
Published 2012
ISBN: 978-0-12-374513-2
?   For each lecture, students will have access to handouts and other resources that are made available on Canvas.
Journal articles, class notes developed by the instructor, or other required reading/resources will be provided to students through the course website.

For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - dess@ahc.ufl.edu

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
- Weeks 1-2: Module 1. Introduction to Advances in DNA Technologies – Sample collection, extraction, and quantification techniques
- Week 3: Module 2: STR Amplification Techniques
- Week 4: Module 3. STR Separation, and Detection Techniques
- Weeks 5-6: Module 4: Emerging Technologies and Automation Strategies
- Weeks 7-8: Module 5: Strategies for Analysis of Degraded and Low Copy Number (LCN) DNA
- Weeks 9-10: Module 6: Alternative PCR Technologies: Y and X Chromosome Analysis Techniques
- Weeks 11-12: Module 7: Alternative PCR Techniques: Mitochondrial and Single Nucleotide Polymorphism Analysis Techniques
- Weeks 13-14: Module 8: Binary and Probabilistic Methods for Mixture Deconvolution
- Weeks 15-16: Module 9: Genetic Genealogy and Phenotypic Profiling Applications

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
- 9 assignments, each worth 20 points (Total Points =180; 100% of final grade)

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
Course Coordinator(s):
Joseph Pasternak, MS

Instructional Assistant Professor
Department of Medicinal Chemistry
University of Florida College of Pharmacy
E-mail: jpasternak@ufl.edu

Nancy Toffolo, MS
Director, Instructional Associate Professor
Department of Medicinal Chemistry
University of Florida College of Pharmacy
E-mail: ntoffolo@ufl.edu

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

    Response:
    Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

    Response:
    Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

    Response:
    Yes

Course Evaluation Policy
Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.

A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

PHAXXXX Advanced Applications in DNA

PHA6XXX Advanced Applications in DNA (2 Cr Hr.)
Date TB
Location: Canvas

Course Coordinator(s):
Joseph Pasternak, MS
Instructional Assistant Professor
Department of Medicinal Chemistry
University of Florida College of Pharmacy
E-mail: jpasternak@ufl.edu

Nancy Toffolo, MS
Director, Instructional Associate Professor
Department of Medicinal Chemistry
University of Florida College of Pharmacy
E-mail: ntoffolo@ufl.edu

Office Hours: Vary by week and available upon request

Pre-Requisites:
Forensic Analysis of DNA 1 required, Forensics Analysis of DNA 2 is preferred but not required.

Co-Requisites:
   None

Course Objectives

Explores advanced techniques in DNA analysis such as: Advanced sampling techniques, Y-STR analysis, high throughput screening, Next Generation Sequencing (NGS), single nucleotide polymorphisms (SNPs) analysis, mitochondrial DNA, touch DNA, automation, and other new technologies relevant to forensic DNA analysis.

Upon completion of this course, the student will be able to:
- Understand how advances in DNA technology are relative and relate to the field of forensic science, specifically in DNA analysis.
- Demonstrate understanding of advanced screening techniques as they apply to forensic examination of biological evidence.
- Be able to analyze the strategies for challenging short tandem repeat samples to include approaches for Low Copy Number analysis and degraded DNA.
- Demonstrate knowledge of alternative pPCR-based technologies such as Y-STR, Mitochondrial, X-STR, and single nucleotide polymorphisms. Explain their value to the field of forensic biology.
- Demonstrate knowledge of binary mixture deconvolution strategies to include Random Match Probability, Combined Probability of Inclusion, and Likelihood Ratio.

● Explain and evaluate how Probabilistic Genotyping differs from that of binary methods and understand how it is used in modern DNA laboratories.
● Recognize and articulate the roles of Genetic Genealogy and Phenotypic Profiling in the field of forensic DNA analysis.

Instructional Method

Students will learn from viewing module notes, completing assignments and participating in discussion boards. The course duration is 16 weeks (see Course Schedule). Every other week, students will independently view module notes and complete required readings. Students will complete online assignments to assess understanding of and provide their insight to the reading and coursework materials. The instructors are available throughout the course to clarify information via discussion board postings.

Course Materials and Technology

Required Textbook:

Advanced Topics in Forensic DNA Typing: Methodology
By John Butler
Published 2012
ISBN: 978-0-12-374513-2

- For each lecture, students will have access to handouts and other resources that are made available on Canvas.
- Journal articles, class notes developed by the instructor, or other required reading/resources will be provided to students through the course website.

For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - dess@ahc.ufl.edu

Course Schedule

Week/Date	Activity/Assessment		Contact Hrs.
Weeks 1/2			
01/08/24 – 01/21/24	**Module**	Module 1. Introduction to Advances in DNA Technologies – Sample collection, extraction, and quantification techniques	0.5
	Readings	Chapter 1: Sample Collection, Storage, and Characterization Chapter 2: DNA Extraction Methods	2.0

		Chapter 3: DNA Quantification	
	Assignment	Written short essay(s) = 20 points	1.5
Week 3			
01/22/24 – 01/28/24	**Module**	Module 2: STR Amplification Techniques	0.25
	Readings	Chapter 4: PCR Amplification: Capabilities and Cautions	1.0
	Assignment	Written short essay(s) = 20 points	.75
Week 4			
01/29/24 – 02/04/24	**Module**	Module 3. STR Separation, and Detection Techniques	0.25
	Readings	Chapter 5: Short Tandem Repeat (STR) Loci and Kits Chapter 6: Capillary Electrophoresis: Principles and Instrumentation	1.0
	Assignment	Written short essay(s) = 20 points	.75
Weeks 5/6			
02/05/24 – 02/18/24	**Module**	Module 4: Emerging Technologies and Automation Strategies	0.5
	Readings	Chapter 17: New Technologies and Automation	2.0
	Assignment	Written short essay(s) = 20 points	1.5
Weeks 7/8			
02/19/24 – 03/03/24	**Module**	Module 5: Strategies for Analysis of Degraded and Low Copy Number (LCN) DNA	0.5
	Readings	Chapter 10: Degraded DNA	2.0

		Chapter 11: Low-level DNA Testing: Issues, Concerns, and Solutions	
	Assignment	Written short essay(s) = 20 points	1.5
Weeks 9/10			
04/01/24 – 04/14/24	**Module**	Module 6: Alternative PCR Technologies: Y and X Chromosome Analysis Techniques	0.5
	Readings	Chapter 13: Y-Chromosome DNA Testing Chapter 15: X-Chromosome Analysis	2.0
	Assignment	Written short essay(s) = 20 points	1.5
Weeks 11/12			
04/15/24 – 04/24/24	**Module**	Module 7: Alternative PCR Techniques: Mitochondrial and Single Nucleotide Polymorphism Analysis Techniques	0.5
	Readings	Chapter 14: Mitochondrial DNA Analysis Chapter 12: Single Nucleotide Polymorphisms and Applications	2.0
	Assignment	Written short essay(s) = 20 points	1.5
Weeks 13/14			
04/15/24 – 04/24/24	**Module**	Module 8: Binary and Probabilistic Methods for Mixture Deconvolution	0.5
	Readings	Module 8 notes and internet sources. SWGDAM documents for STR Mixture Analysis and SWGDAM document for Probabilistic Genotyping Analysis Techniques.	2.0
	Assignment	Written short essay(s) = 20 points	1.5
Weeks 15			
04/15/24 – 04/19/24	**Module**	Module 9: Genetic Genealogy and Phenotypic Profiling Applications	0.25
	Readings	Module 9 notes and internet sources. United States Department of Justice interim policy forensic genetic genealogical DNA analysis and searching, Case Studies.	1.0
	Assignment	Written short essay(s) = 20 points	.75

PHAXXXX Advanced Applications in DNA

Course Assignments:

The assignments in this course consist of 3-5 essay questions per module. Students answer the assigned questioned in short essay format by researching the scientific literature, the course module content, and their notes. References should be formatted consistently and listed at the end of the document as well as cited in-text.

All assignments must be written in the student's own words, and in accordance with the UF Student Honor Code.

Academic Requirements and Grading

Grading Policy
For greater detail on the meaning of letter grades and university policies related to them, see the University of Florida's Graduate School Grading Policy.

All written assignments must be completed in your own words. Cutting and pasting from the internet is not acceptable and may be plagiarism. Failure to complete an assignment in your own words may result in you receiving a score of zero for the written assignment. All assignments should be written in your own words and referenced appropriately. This class may have a Plagiarism module associated with it, and this module must be viewed prior to opening module 1.
Assignments should be submitted using the assignment submission tool. If you have difficulty submitting an assignment, message your instructor and teaching assistant - we will work with you to troubleshoot the problem. Assignment feedback will also be provided via the assignment tool, so students should check back to the appropriate module to receive feedback and the assignment grade.
Always keep a copy of your course assignments in case you need to resend it. Also, you may want it for revision purposes later.
For Assignment deadlines - see the course calendar.
Critical Dates for the UF Forensic Science program: https://forensicscience.ufl.edu/resources/critical-dates/
For other important dates, consult the UF Calendar of Critical Dates and http://www.registrar.ufl.edu

Students will be graded on written assignments. The final grade will be based on the student's cumulative number of points earned divided by the total number of available points. The resulting percentage will be converted to a letter grade based on the scale below. Students will receive individual feedback on points lost on the assignments. The comments of the TA or professor can be viewed on the assignment submission page for the corresponding module.

Assignment	Total Points	Percentage of Final Grade
9 assignments, each worth 20 points	180	100%
Total	180	100%

Students can check their progress in the course by viewing their grade records via the course interface. Internationally registered student grades will be assigned as per the policies and procedures within your university.

Grades will be assigned as follows:

Grade	Percent	Grade Points
A	90% or Above	4.0
A-	88-89%	3.76
B+	85-87%	3.33
B	80-84%	3.00
B-	78-79%	2.76
C+	75-77%	2.33
C	70-74%	2.00
C-	68-69%	1.67
D+	65-67%	1.33
D	60-64%	1.00
D-	58-59%	0.67
E	< 58%	0.00

Assignments: Each module includes an assignment that has a due date posted on the Course Calendar. While we understand that our students may have work and other personal commitments, we expect every effort to be made to meet these deadlines. If for some reason, because of extenuating circumstances beyond your control, you are unable to meet an assignment deadline, students should message the professor **PRIOR TO THE DATE THE ASSIGNMENT IS DUE** and explain the situation in advance; in accordance with UF's Graduate School grading policy and attendance policy, the instructor will determine whether an extension with no penalty marks added is warranted. If you have an emergency where you cannot email the instructor prior to the deadline, you must contact the instructor as soon as you are able to explain your situation.

If no extension was requested or if the extension request is not granted, the instructor will deduct points as follows:

Amount of time past the deadline	Amount to be deducted	Notes
12 am – 8 am (EST)	0.5 points	This deduction will incur if the assignment is past the posted deadline of 11:59 pm EST, regardless of the time zone in which you are located

1 day (from 8 am EST – 11:59 pm)	5% deduction	% deductions are a % of the total number of points for which the assignment is worth (for example, 5% of a 30-point assignment would be 1.5 points deducted.
2 days to 1 week late	10% deduction	
1 week to 2 weeks late	20% deduction	
2 weeks to 3 weeks late	30% deduction	
3 weeks to 4 weeks late	40% deduction	
4 weeks to 5 weeks late	50% deduction***	*** this is the maximum deduction regardless of when it is submitted

Being consistently late in submitting assignments disrupts the course. If you have outstanding assignments as we near the end of the semester, we will send you a follow up email as a reminder and to determine your plans for completion. If you do not respond to us before the final day of classes, you will be assigned a grade based on the completed assignments.

Makeup Policy: Make up assignments are not given but in rare circumstances may be given at the discretion of the course instructor after they have evaluated the circumstances leading to the request. Once the assignment has been graded and feedback has been given, the grade is final (unless there was a grading error). Extra credit is not given in our classes, except in extremely rare cases as indicated by your instructor.

Grade Changes: Grades will be changed only when a grading error has been made. If you think an error has been made, you should message the instructor or TA as soon as possible. Your entire assignment will then be re-graded if the instructor determines that an error has been made.

Instructional Policies
This course is part of the distance education program at the University of Florida. Instead of traditional lecture format, the medium for communication between course instructors, teaching assistants and students will be via Canvas, a user-friendly web-based classroom management tool, by utilizing the course functions. There are not times at which the entire class meets at a specific time or zoom sessions (unless indicated by your instructor). Due to the nature and size of our program, individual zoom sessions or phone calls are not routinely utilized by our teaching staff. Instructors and TAs are always available via the course messaging system and provide a quick turnaround time to messages.

Policy Related to Required Course Participation
Students are expected to constructively join in discussions, with appropriate preparation; to post interesting and relevant information on the class discussion board when indicated, and to interact professionally and respectfully with their classmates. Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar. Students must not assume they will be automatically dropped if they fail to participate in the course learning activities.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Attendance: Students must participate in the Discussions board discussions and are required to visit the course website **daily** for important updates and messages. Policy Related to Required Course Participation: This is an online course and therefore, attendance means you are expected to complete the course learning activities so that you meet the established deadlines. Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Class Participation: Students are expected to constructively join in discussions, with appropriate preparation; to post interesting and relevant information on the class discussion board when indicated, and to interact professionally and respectfully with their classmates.

Performance Expectations: Students are expected to produce quality work of a standard comparable to any graduate level didactic course. Discussion postings and discussions must be legible, constructive, and appropriate. Students will be expected to complete assignments that require the application of logic and reasoning skills and appropriate research when the answer may not be found in a book or the course notes. Students should expect to perform research outside of the material presented in the class (utilizing either e-journals or the internet) to assist them with completing assignments. If a text is required for this class, students are expected to have access to it for successful completion of assignments.

Dropping a Course: UF Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar (Consult the UF Calendar of Critical Dates at UF Calendar of Critical Dates). Students must not assume they will be automatically dropped if they fail to participate in the course learning activities. Deleting yourself from the course roster does not officially withdraw you from a course. Please email DESS at dess@ahc.ufl.edu if you wish to withdraw from your class.

Students from partner universities must contact their school to determine how/if they can drop a class.

Communication

Communication Guidelines: In all course communications including emails and treaded discussions, students are expected to follow Netiquette Guidelines. These guidelines promote an environment that encourages everyone to ask questions and learn from each other. Discussion board posts that are not respectful of other opinions discourage a positive learning environment. The following link provides these guidelines:
http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

Communication is a central part of all our courses. Please take advantage of the in-course email messaging system (Inbox) and Discussion board. You should message us with private questions and concerns as well as assignment questions and information; additionally, be sure to check the discussion board daily for class-wide updates and topic discussions. We want to provide all our students with the best opportunity to learn and are always available to answer your questions.

EMAIL

The course Inbox feature (found on the left-hand side of your screen when you log in), not the discussion board, should always be used to contact the faculty or teaching assistant if you have a problem of a personal nature. It is your responsibility to know who the instructor and/or teaching assistant(s) are for your class. **Do not choose the option of sending your email within the class to "all" instructors**, as there are staff members from our administrative team listed that cannot assist you with course questions (and are only listed there for administrative purposes).

If you are having technical problems with the course content (downloads, etc.) or you are unable to access your course interface, please contact us directly via the "Inbox" email, and do not spend hours trying to get something to work as this will only lead to frustration. We do not want any of you to be offline for any length of time. Contact us as soon as you can so we can check it out and help you. If you are having trouble with your access to your course and cannot access the inbox course messaging system, please email your course instructor directly via regular email. In that email, make sure you give your name and the name of your course. External instructor email addresses are listed for each course separately on the homepage of the course.

*For technical assistance do not contact the UF HELP Desk. Please contact Lisa Cox (listed under "teachers" in your course messaging system), for IT support for this course and copy the course instructor.

Please respond to all messages from your instructor or TA. We are usually contacting you because we want to help you.

DISCUSSION FORUM

The course Discussion board can be used to post content related questions and assignment materials when requested. Please do not use the discussion forum to ask specific questions about your current course assignments.

It is VERY important that you read all the discussion bulletins that have been posted. We will use this site to post important information relating to content or quiz changes, deadlines etc. Since postings can accumulate quickly, please login each day to stay on top of these postings or you may miss important information. Some instructors may also use the announcement feature, so be sure to read all announcements as well.

If, as part of an assignment you are asked to make a discussion posting, you do not need to submit the same assignment via the assignment submission tool.

Please be aware that as you read the discussions for this course that there may be sensitive topics covered that could be emotionally triggering. Please remember that our students are a diverse population and that your responses should be crafted with respect and consideration for all audiences. We are aware that some of these topics can be considered controversial and ask that your respond to the subject matter in a thoughtful manner. If you have any questions or concerns, please reach out to your course instructor or advisor.

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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**." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."** It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/, http://gradschool.ufl.edu/students/introduction.html. Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Plagiarism: Plagiarism includes any attempt to take credit for another person's work. This includes quoting directly from a book or web site without crediting the source. Sources should always be referenced or a link to the website added and, where direct quotes have been used, quotation marks must be placed around the quoted material. However, we expect more than simply cutting and pasting in a graduate level course. Students are expected to review, evaluate, and comment on material they research, rather than simply copying relevant material. Your work will be graded accordingly. Extensive quoting of literature, even if references are provided, is not considered your own work, and will hence incur point deductions up to assigning zero points.

Use of Chatbots and Artificial Intelligence (ChatGPT)
Please note that students are not permitted to submit work that has been written using chatbots unless specifically indicated by the course instructor.
"Submission of Academic Work Purchased or Obtained from an Outside Source. A student must not submit as their own work any academic work in any form that the student purchased or otherwise obtained from an outside source, including but not limited to: academic materials in any form prepared by a commercial or individual vendor of academic materials; a collection of research papers, tests, or academic materials maintained by a Student Organization or other entity or person, or any other sources of academic work." Students who submit work, be it an entire paper or even parts of an assignment using Artificial Intelligence technology to formulate their answers will be considered as an honor code violation unless the course instructor specifically allows such uses. If an instructor determines that you have violated the honor code, an official student conduct report may be filed.

Online Faculty Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of

the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

SUPPORT SERVICES

Accommodations for Students with Disabilities
If you require classroom accommodation because of a disability, you must register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please make sure you provide this letter to me by the end of the second week of the course. The College is committed to providing reasonable accommodations to assist students in their coursework. Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center.

Counseling and Student Health
Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.
- You Matter We Care website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/
- Crisis intervention is always available 24/7 from:
  Alachua County Crisis Center:
  (352) 264-6789
  http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:
http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

<u>Academic Resources</u>

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.

Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.

Student Complaints Campus: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.

On-Line Students Complaints: http://www.distance.ufl.edu/student-complaint-process.

PHA 6XXX (19609) Applied Statistics for Data Analysis

Please address the following concerns expressed by the Graduate Curriculum Committee after their complete review of this new course request ---once addressed, the GCC requests to review this proposal again.

The GCC recommends the following revisions to the submitted form (and syllabus where appropriate):

1) There are many similar courses, including some offered fully online. We typically ask for consults and an explanation of how a unique course is needed for a specific audience.

2) Suggest reframing the course title and design/SLOs to include discipline focus ("Applied Statistics in…")

3) The course description needs minor revisions.

    a) Edit or explain 'WWW' in the course description.

    b) Ensure that the course description on the submitted form and syllabus match.

4) Request the inclusion of the reading list in alignment with a schedule on the syllabus.

5) Assignments should be described on the syllabus.

Course|New for request 19609

Info

Request: PHA 6XXX Applied Statistics for Laboratory Data Analysis
Description of request: New Coures Request PHAXXXX Applied Statistics for Data Analysis
Submitter: Emely McKitrick emely.mckitrick@ufl.edu
Created: 6/20/2024 9:39:01 AM
Form version: 2

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

> Response:
> PHA

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

> Response:
> 6

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

> Response:
> XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

> Response:
> None

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.
* *

> Response:
> Intermediate

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Applied Statistics for Laboratory Data Analysis

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Applied Stats Lab Data Analysi

Degree Type
Select the type of degree program for which this course is intended.

Response:
Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the

department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or

headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
3

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
Familiarize students with the procedures for using online resources for communication and educational purposes and to introduce students to the basic principles, concepts and terminology utilized in statistics.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
There are no co-requisites.

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to

target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
There are no prerequisites

Completing Prerequisites:

• *Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.*
• *Use parentheses to specify groupings in multiple requirements.*
• *Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.*
• *Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).*
• *"Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.*
• *If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)*

*Example: *
<ol>
• *Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.*
• *Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
This is a 3-credit elective course offered in the Forensic Science Online Graduate Program.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
At the completion of this course students should:

• understand the different descriptive statistics commonly used
• be able to describe the mean, standard deviation, and variance of a sample population
• understand probability and how it relates to the various applications within a laboratory
• be able to identify which statistical test is best suitable for a one sample, two sample, and multiple sample comparison
• understand the principles of the null and alternative hypotheses
• be able to perform the correct student t-test for comparison of two sample populations
understand the differences between parametric and non-parametric tests and when the chi-square test should be used
• be able to perform an ANOVA comparing three or more sample populations
• be able to conduct a post-hoc test for an ANOVA analysis, and
• understand how simple linear regression is utilized to determine regression coefficients and perform linearity checks in an analytical laboratory

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Recommended Textbooks and Software
Introductory Statistics
Author: Prem S. Mann
Publisher: Wiley; 10th edition (2020)
ISBN-13: 978-1119679639
ISBN-10: 111967963X

Any of the earlier editions (6th, 7th or 8th) will also be acceptable. Some editions are accompanied by a Student Solutions Manual, which is useful for practicing the exercises in the book, but it is not necessary. The textbook should be used to support the theoretical understanding and provision of examples beyond those provided in the modules of this course.

In addition, some editions have an accompanying Student Study Guide, but purchase is not necessary.

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
This course is composed of 9 modules:
• Module 1: Introduction to Scientific Evidence and Statistics
• Module 2: Measures of central tendency and the normal distribution
• Module 3: Probability
• Module 4: Discrete random variables and probability distributions
• Module 5: Estimation of mean and standard deviation and the normal distribution
• Module 6: Hypothesis testing for one or two population means, Student t-test
• Module 7: Hypothesis testing for small sample sizes and multinomial experiments
• Module 8: Analysis of Variance and multiple comparison tests
• Module 9: Simple linear regression

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
- 8 assignments, each worth 30 point (240 points, 57.2%)
- 8 quizzes, each worth 10 points (80 points, 19%)
- 1 final exam, worth 100 points (100 poiubtsm 23.8%)

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:

Nancy Toffolo
Director, Distance Education Programs In Forensic Science; Instructional Associate Professor
(352)273-8691
Department of Clinical Toxicology
University of Florida College of Pharmacy
E-mail: ntoffolo@ufl.edu

Jennifer Giangrande
Department of Clinical Toxicology
University of Florida College of Pharmacy
E-mail: jgiangrande@ufl.edu

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:
Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Response:
Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Response:
Yes

Course Evaluation Policy

Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

PHAXXXX Applied Statistics for Laboratory Data Analysis

PHAXXXX Applied Statistics for Laboratory Data Analysis (3 Cr Hr.)
Fall 2024
Location: Canvas, Asynchronous

Course Coordinator(s):
Nancy Toffolo
Director, Distance Education Programs In Forensic
Science; Instructional Associate Professor
(352)273-8691
Department of Clinical Toxicology
University of Florida College of Pharmacy
E-mail: ntoffolo@ufl.edu

Jennifer Giangrande
Department of Clinical Toxicology
University of Florida College of Pharmacy
E-mail: jgiangrande@ufl.edu

Office Hours: on request

Pre-Requisites:
None

Co-Requisites:
None

Course Objectives

Familiarize students with the procedures for using online resources for communication and educational purposes and to introduce students to the basic principles, concepts and terminology utilized in statistics.

At the completion of this course students should:

- understand the different descriptive statistics commonly used
- be able to describe the mean, standard deviation, and variance of a sample population
- understand probability and how it relates to the various applications within a laboratory
- be able to identify which statistical test is best suitable for a one sample, two sample, and multiple sample comparison
- understand the principles of the null and alternative hypotheses
- be able to perform the correct student t-test for comparison of two sample populations understand the differences between parametric and non-parametric tests and when the chi- square test should be used
- be able to perform an ANOVA comparing three or more sample populations

- be able to conduct a post-hoc test for an ANOVA analysis, and
- understand how simple linear regression is utilized to determine regression coefficients and perform linearity checks in an analytical laboratory

Instructional Method

This course is part of the distance education program at the University of Florida. Instead of a traditional lecture format, the medium for communication between course instructors, teaching assistants and students will be via Canvas, a user-friendly web-based classroom management tool, that utilizes required readings, quizzes (in most courses), completion of written assignments, and participation in a discussion board. Students will independently complete assigned readings and complete online assignments and/or quizzes/projects to assess understanding of and provide their insight to the reading and coursework material. Throughout these learning activities, the instructor and teaching assistant(s) are available via email to assist with questions. There are not times at which the entire class meets at a specific time or zoom sessions (unless indicated by your instructor). Due to the nature and size of our program, individual zoom sessions or phone calls are not routinely utilized by our teaching staff.

Instructors and TAs are always available via the course messaging system and provide a quick turnaround time to messages.

Materials and Supply Fees

Please review the syllabus specific to this class for any required, recommended, or suggested reading materials.

Use UF VPN to access UF Libraries Resources when off-campus. **Please note that students enrolled in our partner universities will not have access to the UF library resources and you need to utilize the library through your home institution.**

The UF HSC library staff can assist you with questions or issues related to accessing online library materials. For assistance contact your College of Pharmacy librarian or visit the HSC Library Website at this URL:http://www.library.health.ufl.edu/

For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - dess@ahc.ufl.edu

Required Materials: Students must comply with the UF Computer and Software Requirement. Please see the website of your respective program for further information.

Course Materials and Technology

Recommended Textbooks and Software
Introductory Statistics
Introductory Statistics
Author: Prem S. Mann
Publisher: Wiley; 10th edition (2020)
ISBN-13: 978-1119679639
ISBN-10: 111967963X

Any of the earlier editions (6th, 7th or 8th) will also be acceptable. Some editions are accompanied by a Student Solutions Manual, which is useful for practicing the exercises in the book, but it is not necessary. The text book should be used to support the theoretical understanding and provision of examples beyond those provided in the modules of this course.

In addition, some editions have an accompanying Student Study Guide, but purchase is not necessary.

For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - dess@ahc.ufl.edu

Course Schedule

Module Topics

This course is composed of 9 modules:
- Module 1: Introduction to Scientific Evidence and Statistics
- Module 2: Measures of central tendency and the normal distribution
- Module 3: Probability
- Module 4: Discrete random variables and probability distributions
- Module 5: Estimation of mean and standard deviation and the normal distribution
- Module 6: Hypothesis testing for one or two population means, Student t-test
- Module 7: Hypothesis testing for small sample sizes and multinomial experiments
- Module 8: Analysis of Variance and multiple comparison tests
- Module 9: Simple linear regression

Course Assignments

Assignments: Each module includes an assignment that has a due date posted on the Course Calendar. While we understand that our students have other work and personal commitments, we expect every effort to be made to meet these deadlines. If for some reason, because of extenuating circumstances beyond your control, you are unable to meet an assignment deadline, students should message the professor **PRIOR TO THE DATE THE ASSIGNMENT IS DUE** and explain the situation in advance. If no prior communication occurred, the instructor may deduct points for late submission at their discretion or as stated in the course

overview and/or communicated via the discussion board. Being consistently late in submitting assignments disrupts the discussion of topics on the bulletin board and will therefore result in loss of marks for that assignment up to a full letter grade. If you message us, we will work with you around the deadline.

If you have outstanding assignments as we near the end of the semester, we will send you a follow up email as a reminder and to determine your plans for completion. If you do not respond to us before the final day of classes, you will be assigned a grade based on the completed assignments.

Description of Course Content - Course Schedule

Dates	Activity	Topic	Contact Time [hr.]
Week 1	**Module 1**	**Introduction to Scientific Evidence and Statistics**	
	Readings	Introductory Statistics Text: Chapter 1, Introduction Readings in Canvas, pages 1 - 7	2.0
	Assignment	Module 1 Assignment, 25 points – short answer essays	1.0
Week 2	**Module 2**	**Measures of Central Tendency and the Normal Distribution**	
	Readings	Introductory Statistics Text: Chapter 2, Organizing and Graphing Data and Chapter 3: Numerical Descriptive Measures Readings in Canvas, pages 1 - 6	2.0
	Assignment	Module 2 Assignment, 25 points – short answer and calculations	1.0
Week 3	**Module 3**	**Probability**	
	Readings	Introductory Statistics Text: Chapter 4, Probability Readings in Canvas, pages 1 - 7	2.0
	Assignment	Module 3 Assignment, 25 points – short answer and calculations	1.0
Week 4	**Module 4**	**Discrete Random Variables and Probability Distributions**	
	Readings	Introductory Statistics Text: Chapter 5, Discrete Random Variables and Their Probability Distributions Readings in Canvas, pages 1 - 8	2.0
	Assignment	Module 4 Assignment, 25 points – short answer essays and calculations	1.0
Week 5	**Module 5**	**Estimation of Mean and Standard Deviation and the Normal Distribution**	
	Readings	Introductory Statistics Text: Chapter 6, Continuous Random Variables and the Normal Distribution Readings in Canvas, pages 1 - 6	2.0
	Assignment	Module 5 Assignment, 25 points – short answer and calculations	1.0
Week 6 – 7	**Module 6**	**Hypothesis Testing for One or Two Population Means, Student t-Test**	
	Readings	Introductory Statistics Text: Chapter 9, Hypothesis Tests about the Mean and Proportion and Chapter 10, Estimation and Hypothesis Testing: Two Populations Readings in Canvas, pages 1 - 11	2.0
	Assignment	Module 6 Assignment, 25 points – data set calculations and essay questions	1.0
Week 8	**Module 7**	**Hypothesis Testing for Small Sample Sizes and Multinomial Experiments**	

	Assignment Reading	Introductory Statistics Text: Chapter 11, Chi-Square Tests Readings in Canvas, pages 1 - 8	2.0
	Assignment	Module 7 Assignment, 25 points – short answer and calculations	1.0
Week 9	**Module 8**	**Analysis of Variance and Multiple Comparison Tests**	
	Readings	Introductory Statistics Text: Chapter 12, Analysis of Variance Readings in Canvas, pages 1 - 6	2.0
	Assignment	Module 8 Assignment, 25 points – calculations and written essay conclusions on results	1.0
Week 10	**Module 9**	**Simple Linear Regression**	
	Readings	Introductory Statistics Text: Chapter 13, Simple Linear Regression Readings in Canvas, pages 1 - 9	2.0
	Assignment	Module 9 Assignment, 25 points - calculations and written essay conclusions on results	1.0

Retaining Course Materials

As you go through the semester, keep copies of important emails, discussion bulletins and assignments you may use for revision as these will be purged from the course at the end of the semester. We recommend you make a copy of the course modules since this will be the only access you will get to these materials. We will not be able to provide you with copies of course content once the course is removed from your account. If this class is a core-class for your MS program (one that you will be tested on in the cumulative final exam given in special topics) it is especially important that you keep the notes for review later.

Academic Requirements and Grading

Grading Policy
For greater detail on the meaning of letter grades and university policies related to them, see the University of Florida's Graduate School Grading Policy.

All written assignments must be completed in your own words. Cutting and pasting from the internet is not acceptable and may be plagiarism. Failure to complete an assignment in your own words may result in you receiving a score of zero for the written assignment. All assignments should be written in your own words and referenced appropriately. This class may have a Plagiarism module associated with it, and this module must be viewed prior to opening module 1.

Assignments should be submitted using the assignment submission tool. If you have difficulty submitting an assignment, message your instructor and teaching assistant - we will work with you to troubleshoot the problem. Assignment feedback will also be provided via the assignment tool, so students should check back to the appropriate module to receive feedback and the assignment grade.

Always keep a copy of your course assignments in case you need to resend it. Also, you may want it for revision purposes later.

For Assignment deadlines - see the course calendar.

Critical Dates for the UF Forensic Science program: https://forensicscience.ufl.edu/resources/critical-dates/
For other important dates, consult the UF Calendar of Critical Dates and http://www.registrar.ufl.edu
For courses that have timed quizzes: if you lose your internet connection during your quiz and scores are not recorded simply email us and we can help you.

Students will be graded on written assignments and module quizzes (when included in the course). The final grade will be based on the student's cumulative number of points earned divided by the total number of available points. The resulting percentage will be converted to a letter grade based on the grading scale below this section. If a final exam is included for the class, that score will also be incorporated into your final grade.

Below is an example of a class that shows how your final grade would be calculated (this is for all classes where the final grade will be based on the student's cumulative number of points earned divided by the total number of available points):

Assignment	Total Points	Percentage of Final Grade
8 assignments, each worth 30 points	240	57.2%
8 quizzes, each worth 10 points	80	19%
1 final exam, worth 100 points	100	23.8%
Total	**420**	**100%**

Students will receive individual feedback on points lost on the assignments. The comments of the TA or professor can be viewed on the assignment submission page for the corresponding module. Assignments are not able to be resubmitted for a re-grade after receiving feedback; the feedback is given for learning purposes and not so that students can re-do and re-submit assignments.
Students can check their progress in the course by viewing their grade records via the course interface. Internationally registered student grades will be assigned as per the policies and procedures within your university.
Note: For students enrolled through WSU, the overall percentage mark for the unit will be converted to a WSU grade in accordance with the information provided on the course WSU site

Grades will be assigned as follows:

Grade	Percent	Grade Points
A	90% or Above	4.0
A-	88-89%	3.76
B+	85-87%	3.33
B	80-84%	3.00
B-	78-79%	2.76
C+	75-77%	2.33

C	70-74%	2.00
C-	68-69%	1.67
D+	65-67%	1.33
D	60-64%	1.00
D-	58-59%	0.67
E	< 58%	0.00

Assignments: Each module includes an assignment that has a due date posted on the Course Calendar. While we understand that our students may have work and other personal commitments, we expect every effort to be made to meet these deadlines. If for some reason, because of extenuating circumstances beyond your control, you are unable to meet an assignment deadline, students should message the professor **PRIOR TO THE DATE THE ASSIGNMENT IS DUE** and explain the situation in advance; in accordance with UF's Graduate School grading policy and attendance policy, the instructor will determine whether an extension with no penalty marks added is warranted. If you have an emergency where you cannot email the instructor prior to the deadline, you must contact the instructor as soon as you are able to explain your situation.

If no extension was requested or if the extension request is not granted, the instructor will deduct points as follows:

Amount of time past the deadline	Amount to be deducted for late submissions (in addition to grading point deductions)	Notes
12 am – 8 am (EST)	0.5 points	This deduction will incur if the assignment is past the posted deadline of 11:59 pm EST, regardless of the time zone in which you are located
1 day (from 8 am EST – 11:59 pm)	5% deduction	% deductions are a % of the total number of points for which the assignment is worth (for example, 5% of a 30-point assignment would be 1.5 points deducted.
2 days to 1 week late	10% deduction	
1 week to 2 weeks late	20% deduction	
2 weeks to 3 weeks late	30% deduction	
3 weeks to 4 weeks late	40% deduction	
4 weeks to 5 weeks late	50% deduction***	*** this is the maximum deduction regardless of when it is submitted, from 4 weeks past the due date to the last day for submissions in the semester.

Being consistently late in submitting assignments disrupts the course. If you have outstanding assignments as we near the end of the semester, we will send you a follow up email as a reminder and to determine your plans for completion. If you do not respond to us before the final day of classes, you will be assigned a grade based on the completed assignments.

Makeup Policy: Assignments submitted late may be accepted depending on circumstances (see UF official attendance policy above). Note that some assignments are time limited because there is release of an answer to all after the deadline. In this case, no late assignment can be accepted unless the absence is excused. Points may be deducted for consistently late submissions but we would be very keen to ensure we have a discussion with you to explore why the problem has arisen. Make up assignments are not usually given, but may be at the discretion of the course instructor after evaluation of the circumstances leading to the request.

Grade Changes: Grades will be changed only when a grading error has been made. If you think an error has been made, you should message the instructor or TA as soon as possible. Your entire assignment will then be re-graded if the instructor determines that an error has been made.

Incomplete grades: Under special circumstances, if a student is unable to finish a course before the end of the semester, we may be able to assign an incomplete grade. An incomplete grade is a non-punitive grade assigned at the discretion of the course instructor. In this course an incomplete grade may be assigned if a third or more of the course assignments have been completed and if the student has remained in communication with TA's and instructors throughout the course and has made an effort to request an incomplete grade. If an incomplete grade is assigned, outstanding assignments and quizzes must be completed by the end of the next semester that the course is offered. If the assignments are not completed in the next term that the course runs, you will be assigned a grade based on the completed assignments. If you are scheduled to graduate the term after this semester, you are not eligible for an incomplete. Please email your instructor for more information. Students in our partner universities are not eligible for an incomplete and should contact their home institution to see the options available to them.

Instructional Policies
This course is part of the distance education program at the University of Florida. Instead of traditional lecture format, the medium for communication between course instructors, teaching assistants and students will be via Canvas, a user-friendly web-based classroom management tool, by utilizing the course functions. There are not times at which the entire class meets at a specific time or zoom sessions (unless indicated by your instructor). Due to the nature and size of our program, individual zoom sessions or phone calls are not routinely utilized by our teaching staff. Instructors and TAs are always available via the course messaging system and provide a quick turnaround time to messages.

Policy Related to Required Course Participation
Students are expected to constructively join in discussions, with appropriate preparation; to post interesting and relevant information on the class discussion board when indicated, and to interact professionally and respectfully with their classmates. Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar. Students must not assume they will be automatically dropped if they fail to participate in the course learning activities.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Attendance: There is no formal process for taking attendance in this online course. This course is 100% asynchronous and there are no live meeting times. Once a topic module is released students can login and work on their course assignments, readings and quizzes as they require to meet the required assignment and quiz deadlines. However, students are expected to check the discussion boards and messaging system daily to make sure they keep up to date with any course or deadline changes, or instructor/TA direct messages.

Students are responsible for meeting all academic assignment due dates and objectives as defined by the instructor.   In general, acceptable reasons for not meeting objectives from class include illness, serious family emergencies, special curricular requirements, military obligation, severe weather conditions, religious holidays, and participation in official University activities.   Excused absences must be consistent with university policies in the Graduate Catalog and require appropriate documentation. Additional information can be found in Attendance Policies.

Class Participation: Students are expected to constructively join in discussions, with appropriate preparation; to post interesting and relevant information on the class discussion board when indicated, and to interact professionally and respectfully with their classmates.

Performance Expectations: Students are expected to produce quality work of a standard comparable to any graduate level didactic course. Discussion postings and discussions must be legible, constructive, and appropriate. Students will be expected to complete assignments that require the application of logic and reasoning skills and appropriate research when the answer may not be found in a book or the course notes. Students should expect to perform research outside of the material presented in the class (utilizing either e-journals or the internet) to assist them with completing assignments. If a text is required for this class, students are expected to have access to it for successful completion of assignments.

Dropping a Course: UF Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar (Consult the UF Calendar of Critical Dates at UF Calendar of Critical Dates). Students must not assume they will be automatically dropped if they fail to participate in the course learning activities. Deleting yourself from the course roster does not officially withdraw you from a course. Please email DESS at dess@ahc.ufl.edu if you wish to withdraw from your class.

Students from partner universities must contact their school to determine how/if they can drop a class.

Communication

Communication Guidelines: In all course communications including emails and treaded discussions, students are expected to follow Netiquette Guidelines. These guidelines promote an environment that

encourages everyone to ask questions and learn from each other. Discussion board posts that are not respectful of other opinions discourage a positive learning environment. The following link provides these guidelines:
http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

Communication is a central part of all our courses. Please take advantage of the in-course email messaging system (Inbox) and Discussion board. You should message us with private questions and concerns as well as assignment questions and information; additionally, be sure to check the discussion board daily for class-wide updates and topic discussions. We want to provide all our students with the best opportunity to learn and are always available to answer your questions.

EMAIL

The course Inbox feature (found on the left-hand side of your screen when you log in), not the discussion board, should always be used to contact the faculty or teaching assistant if you have a problem of a personal nature. It is your responsibility to know who the instructor and/or teaching assistant(s) are for your class. **Do not choose the option of sending your email within the class to "all" instructors**, as there are staff members from our administrative team listed that cannot assist you with course questions (and are only listed there for administrative purposes).

If you are having technical problems with the course content (downloads, etc.) or you are unable to access your course interface, please contact us directly via the "Inbox" email, and do not spend hours trying to get something to work as this will only lead to frustration. We do not want any of you to be offline for any length of time. Contact us as soon as you can so we can check it out and help you. If you are having trouble with your access to your course and cannot access the inbox course messaging system, please email your course instructor directly via regular email. In that email, make sure you give your name and the name of your course. External instructor email addresses are listed for each course separately on the homepage of the course.

*For technical assistance do not contact the UF HELP Desk. Please contact Lisa Cox (listed under "teachers" in your course messaging system), for IT support for this course and copy the course instructor.

Please respond to all messages from your instructor or TA. We are usually contacting you because we want to help you.

DISCUSSION FORUM

The course Discussion board can be used to post content related questions and assignment materials when requested. Please do not use the discussion forum to ask specific questions about your current course assignments.

It is VERY important that you read all the discussion bulletins that have been posted. We will use this site to post important information relating to content or quiz changes, deadlines etc. Since postings can accumulate

quickly, please login each day to stay on top of these postings or you may miss important information. Some instructors may also use the announcement feature, so be sure to read all announcements as well.

If, as part of an assignment you are asked to make a discussion posting, you do not need to submit the same assignment via the assignment submission tool.

Please be aware that as you read the discussions for this course that there may be sensitive topics covered that could be emotionally triggering. Please remember that our students are a diverse population and that your responses should be crafted with respect and consideration for all audiences. We are aware that some of these topics can be considered controversial and ask that your respond to the subject matter in a thoughtful manner. If you have any questions or concerns, please reach out to your course instructor or advisor.

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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**." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."** It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/, http://gradschool.ufl.edu/students/introduction.html. Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Plagiarism: Plagiarism includes any attempt to take credit for another person's work. This includes quoting directly from a book or web site without crediting the source. Sources should always be referenced or a link to the website added and, where direct quotes have been used, quotation marks must be placed around the quoted material. However, we expect more than simply cutting and pasting in a graduate level course. Students are expected to review, evaluate, and comment on material they research, rather than simply copying relevant material. Your work will be graded accordingly. Extensive quoting of literature, even if references are provided, is not considered your own work, and will hence incur point deductions up to assigning zero points.

Use of Chatbots and Artificial Intelligence (ChatGPT)
Please note that students are not permitted to submit work that has been written using chatbots unless specifically indicated by the course instructor.
"Submission of Academic Work Purchased or Obtained from an Outside Source. A student must not submit as their own work any academic work in any form that the student purchased or otherwise obtained from an outside source, including but not limited to: academic materials in any form prepared by a commercial or individual vendor of academic materials; a collection of research papers, tests, or academic materials maintained by a Student Organization or other entity or person, or any other sources of academic work."

Students who submit work, be it an entire paper or even parts of an assignment using Artificial Intelligence technology to formulate their answers will be considered as an honor code violation unless the course instructor specifically allows such uses. If an instructor determines that you have violated the honor code, an official student conduct report may be filed.

Online Faculty Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

SUPPORT SERVICES

Accommodations for Students with Disabilities
If you require classroom accommodation because of a disability, you must register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please make sure you provide this letter to me by the end of the second week of the course. The College is committed to providing reasonable accommodations to assist students in their coursework. Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center.

Counseling and Student Health
Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.
- You Matter We Care website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/
- Crisis intervention is always available 24/7 from:
  Alachua County Crisis Center:
  (352) 264-6789
  http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:
http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Academic Resources

> **E-learning technical support**, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.
>
> **Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.
>
> **Library Support**, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
>
> **Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.
>
> **Writing Studio, 302 Tigert Hall**, 846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.
>
> **Student Complaints Campus**: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.
>
> **On-Line Students Complaints**: http://www.distance.ufl.edu/student-complaint-process.

SPM 5XXX Diversity, Equity, and Inclusion in Sport Organizations (18878)

Please address the following concerns expressed by the Graduate Curriculum Committee after their complete review of this new course request ---once addressed, the GCC requests to review this proposal again.

The GCC recommends the following revisions to the submitted form (and syllabus where appropriate):

1) Correct the course title on the submitted form. An Oxford comma is used in the title of proposal request and on the syllabus, but it is not used in the submitted form in the "course title" field. (There is room in the character count to use it.)

2) Course description needs minor revisions.

    a) Recommend editing course description - first sentence has "learn about foundational information about key terms…" (too wordy); does not really summarize content.

    b) Ensure that the course description on the submitted form and syllabus match. The course description on the syllabus does not match the course description on the submitted form.

3) The Pre-requisites should be clarified or corrected. The submitted form lists "7HH or 8HH" while the syllabus lists "Graduate classification". This can be simplified to read, *Permission of Instructor* if you wish to monitor enrollment.

4) In the syllabus, it looks like the course schedule was meant to be included in table format. There are several pages of "Course Schedule" that are blank following the word-based course schedule presented in earlier pages.

Course|New for request 18878

Info

Request: SPM 5XXX Diversity, Equity, and Inclusion in Sport Organizations
Description of request: SPM 5XXX Diversity, Equity, and Inclusion in Sport Organizations
Submitter: Cyntrice Thomas cthomas10@ufl.edu
Created: 2/19/2024 2:45:45 PM
Form version: 4

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
SPM

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

Response:
5

Undergraduate students in 5000 level courses
Is this course intended for an audience including undergraduate students?

Response:
No

Rationale for 5000 level course request
Please provide the rationale for submitting this course as a 5000 level course in the space provided below. (i.e. target student audience, program, school). 5000 level courses require joint review and approval by the University Curriculum Committee and Graduate Curriculum Committee or Professional Curriculum Committee.

Response:
This course is intended to be offered as an elective int he Graduate Sport Management program for graduate students. It is an introductory course for students to understand the role of diversity, equity, and inclusion in sport management.

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

> Response:
> None

Category of Instruction
*Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment. *

> Response:
> Introductory

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

> Response:
> Diversity, Equity, and Inclusion in Sport Organizations

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

> Response:
> Diversity in Sport Orgs.

Degree Type
Select the type of degree program for which this course is intended.

> Response:
> Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that

credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?

Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type

Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type

*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours

Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
3

Course Description

Provide a brief narrative description of the course content. This description will be published in the Academic

Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
Provides an overview of diversity and inclusion in sport organizations. Students will learn about key terms, relevant theories, and research in diversity and inclusion. They will summarize the intersection of different diversity forms and sport and learn strategies for sport managers to create and sustain diverse and inclusive sport organizations.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
N/A

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
7HH or 8HH (Graduate students in the College of Health and Human Performance)

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
This course is offered as an elective in the Graduate Sport Management Program. It will complement the courses that are required in the degree program and give students additional knowledge and understanding for working in diverse organizations and creating inclusive

environments in sport.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
After completing this course, students should be able to:
1. Summarize the reasons for an emphasis on diversity, equity, and inclusion in sport organizations.
2. Overview the three major theory classes used to study diversity, equity, and inclusion in sport organizations: managerial, sociological, and social psychological.
3. Paraphrase how people engage in scholarship focusing on diversity, equity, and inclusion in sport organizations.
4. Summarize the basic tenets of bias and how they inform discussions of diversity, equity, and inclusion in sport organizations;
5. Synthesize the categorical effects of diversity, including how people differ based on race, sex, gender, ability, appearance, age, sexual orientation, gender identity, religious beliefs, and social class;
6. Compare and contrast the different approaches for reducing bias in sport organizations.
7. Overview the strategies sport managers can take to facilitate a diverse, equitable, and inclusive sport organization.
8. Apply strategies sport managers can use sport to create community change.

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
All readings will be available on the Canvas course page and available through the library course reserves.

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
COURSE ORIENTATION & OVERVIEW
Videos:
• Course Overview and Syllabus Review
Readings:
• No readings this week.

MODULE 1 (January 15 – January 28)
Foundations of Diversity, Equity, and Inclusion in Sport Organizations
Background Videos:
• Overview of diversity, equity, and inclusion in sport organizations.
• Researching diversity, equity, and inclusion in sport organizations.
• Theories used to understand diversity, equity, and inclusion in sport organizations.
Weekly Readings for the Readings Review Assignment:
• Cunningham, G. B. (2023). Diversity, equity, and inclusion in sport organizations: A multilevel perspective. Routledge. (Chapter 1, pp. 3-24)
• Delia, E. B., Melton, E. N., Sveinson, K., Cunningham, G. B., & Lock, D. (2022). Understanding the lack of diversity in sport consumer behavior research. Journal of Sport Management, 36(3), 265-276.
• Burton, L. J., & Leberman, S. (2015). Diversity in sport leadership. In I O'Boyle, D. Murray, &

Paul Cummins (Eds.), Leadership in sport (pp. 139-152). Routledge.

MODULE 2 (January 29 - February 11)
Bias in Sport Organizations
Background Video:
• Bias in sport organizations
Weekly Readings for the Readings Review Assignment:
• Dovidio J. F., Hewstone M., Glick P., Esses V. M. (2010). Prejudice, stereotyping, and discrimination: Theoretical and empirical overview. In The SAGE handbook of prejudice, stereotyping, and discrimination (pp. 3–29). London, England: Sage.
• Stone, J., Lynch, C. I., Sjomeling, M., & Darley, J. M. (1999). Stereotype Threat Effects on Black and White Athletic Performance. Journal of Personality and Social Psychology, 77(6), 1213-1227.
• Wells, J. E., Sartore-Baldwin, M., Walker, N. A., & Gray, C. E. (2020). Stigma consciousness and work outcomes of Senior Woman Administrators: The role of workplace incivility. Journal of Sport Management, 35(1), 69-80.

MODULE 3 (February 12 - February 25)
Race, Gender, and Age Diversity in Sport Organizations
Background Videos:
• Race in sport organizations
• Gender in sport organizations
• Age in sport organizations
Weekly Readings for the Readings Review Assignment:
• Singer, J. N., Agyemang, K. J., Chen, C., Walker, N. A., & Melton, E. N. (2022). What is blackness to sport management? Manifestations of anti-blackness in the field. Journal of Sport Management, 36(3), 215-227.
• Fink, J. S. (2016). Hiding in plain sight: The embedded nature of sexism in sport. Journal of Sport Management, 30(1), 1-7.
• Cunningham, G. B., Wicker, P., & Kutsko, K. (2021). Gendered racial stereotypes and coaching intercollegiate athletic teams: The representation of Black and Asian women coaches on US women's and men's teams. Sex Roles, 84, 574-583.
• Kleissner, V., & Jahn, G. (2020). Implicit and explicit measurement of work-related age attitudes and age stereotypes. Frontiers in Psychology, 11, 579155.

MODULE 4 (February 26 – March 8)
Disability and Appearance in Sport Organizations
Background Videos:
• Disability in sport organizations
• Appearance in sport organizations
Weekly Readings for the Readings Review Assignment:
• Darcy, S., Lock, D., & Taylor, T. (2017). Enabling inclusive sport participation: Effects of disability and support needs on constraints to sport participation. Leisure Sciences, 39(1), 20-41.
• Hanlon, C., & Taylor, T. (2022). Workplace experiences of women with disability in sport organizations. Frontiers in Sports and Active Living, 4, 792703.
• Cunningham, G. B., Fink, J. S., & Kenix, L. J. (2008). Choosing an endorser for a women's sporting event: The interaction of attractiveness and expertise. Sex Roles, 58, 371-378.
Pickett, A. C., & Cunningham, G. B. (2017). Physical activity for every body: A model for managing weight stigma and creating body-inclusive spaces. Quest, 69(1), 19-36.

MODULE 5 (March 18 – March 31)
Deep-Level Diversity in Sport Organizations
Background Videos:
• Religion in sport organizations
• Sexual orientation and gender identity in sport organizations
• Social class in sport organizations
Weekly Readings for the Readings Review Assignment:
• Hussain, U., & Cunningham, G. B. (2022). The Muslim community and sport scholarship: a scoping review to advance sport management research. European Sport Management Quarterly.
• Denison, E., Bevan, N., & Jeanes, R. (2021). Reviewing evidence of LGBTQ+ discrimination and exclusion in sport. Sport Management Review, 24(3), 389-409.
• Lott, B. (2012). The Social Psychology of Class and Classism. American Psychologist, 67(8), 650-658.

MODULE 6 (April 1 – April 14)
Creating Diverse, Equitable, and Inclusive Sport Organizations and Communities
Background Video:
• Reducing bias in sport organizations
• Creating inclusive and just sport organizations
• Fostering diverse, equitable, and inclusive communities
Weekly Readings for the Readings Review Assignment:
• Paluck, E. L., Porat, R., Clark, C. S., & Green, D. P. (2021). Prejudice reduction: Progress and challenges. Annual Review of Psychology, 72, 533-560.
• Shaw, S. (2019). The chaos of inclusion? Examining anti-homophobia policy development in New Zealand sport. Sport Management Review, 22(2), 247-262.
• McCullough, B. P., & Trail, G. T. (2023). Assessing key performance indicators of corporate social responsibility initiatives in sport. European Sport Management Quarterly, 23(1), 82-103.

Presentation Due on April 28, 11:59 pm

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Readings Reviews (6). 10 pts each = 60 pts (23.2%)

Discussion Leader (1). 50 pts each = 50 pts (19.2%)

Discussion Boards (6). 15 pts each = 90 pts (34.6%)

Reflection Papers (3). 10 pts each = 30 pts (11.5%)

Diversity, Equity, and Inclusion in Sport Organizations Presentation (1)
30 pts each = 30 pts (11.5%)

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
Dr. George Cunningham

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:

Yes

Accomodations

Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• *Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.*

Response:
Yes

UF Grading Policies for assigning Grade Points

Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• *https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx*

Response:
Yes

Course Evaluation Policy

Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• *Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.*

* *

Response:
Yes

Diversity, Equity, and Inclusion
in Sport Organizations

SPM#### | Class # XXXXX | 3 Credits | Spring 2024

Course Info

INSTRUCTOR	**George Cunningham** Office: FLG 300B Office Phone: 352-294-1764 Email: g.cunningham@ufl.edu Preferred Method of Contact: email
OFFICE HOURS	Office hours are TR 10:00-11:00 or by appointment
MEETING TIME/LOCATION	Access course through Canvas on UF e-Learning (https://elearning.ufl.edu/) & the Canvas mobile app by Instructure.

COURSE DESCRIPTION

Provides an overview of diversity and inclusion in sport organizations. Students will learn about key terms, relevant theories, and research in diversity and inclusion. They will summarize the intersection of different diversity forms and sport and learn strategies for sport managers to create and sustain diverse and inclusive sport organizations.

PREREQUISITE KNOWLEDGE AND SKILLS

7HH or 8HH (Graduate students in the College of Health and Human Performance)

REQUIRED AND RECOMMENDED MATERIALS

All readings will be available on the Canvas course page.

COURSE FORMAT

The course is delivered online. Students will read the assigned articles and complete formative assessments. They will be expected to lead one online discussion a semester and participate in the other online discussions each week. Students will complete a final project at the end of the term.

COURSE LEARNING OBJECTIVES:

After completing this course, students should be able to:

1. Summarize the reasons for an emphasis on diversity, equity, and inclusion in sport organizations.
2. Overview the three major theory classes used to study diversity, equity, and inclusion in sport organizations: managerial, sociological, and social psychological.
3. Paraphrase how people engage in scholarship focusing on diversity, equity, and inclusion in sport organizations.
4. Summarize the basic tenets of bias and how they inform discussions of diversity, equity, and inclusion in sport organizations;
5. Synthesize the categorical effects of diversity, including how people differ based on race, sex, gender, ability, appearance, age, sexual orientation, gender identity, religious beliefs, and social class;
6. Compare and contrast the different approaches for reducing bias in sport organizations.
7. Overview the strategies sport managers can take to facilitate a diverse, equitable, and inclusive sport organization.
8. Apply strategies sport managers can use sport to create community change.

Course & University Policies

ATTENDANCE POLICY

The course is delivered completely online so attendance is not a part of the final grade. As noted in the following sections, your preparation for the course and participation in the course activities, including assignments and discussions, will impact your grade.

PERSONAL CONDUCT POLICY

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions.

Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult the instructor or TA in this class.

EXAM MAKE-UP POLICY

A student experiencing an illness should visit the UF Student Health Care Center or their preferred healthcare provider to seek medical advice and obtain documentation. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx."

ACCOMMODATING STUDENTS WITH DISABILITIES

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting their Get Started page at https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

COURSE EVALUATIONS

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Getting Help

HEALTH & WELLNESS

- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575
- Counseling and Wellness Center: https://counseling.ufl.edu/, 352-392-1575
- Sexual Assault Recovery Services (SARS) - Student Health Care Center, 392-1161
- University Police Department, 392-1111 (or 9-1-1 for emergencies) http://www.police.ufl.edu/

ACADEMIC RESOURCES

- E-learning technical support, 352-392-4357 (select opti on 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. https://career.ufl.edu/
- Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. http://writing.ufl.edu/writing-studio/

- Student Complaints On-Campus: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/ On-Line Students Complaints: http://distance.ufl.edu/student-complaint-process/

CIVILITY, ACCESSIBILITY AND COMMUNITY RESOURCES

Inclusion is a UF core value, as we "celebrate differences in identities, thoughts, and abilities, and seek to provide equitable access to opportunity." Freedom and Civility are also core values, as we "embrace the freedom to inquire and express ideas without condemnation, and to show respect for the right of others to do the same."

We should all (instructor and students, alike) seek to uphold these core values in the course. Some of the topics we discuss will be challenging, and students will be asked to reflect on why they hold their particular views or positions. Part of the learning process involves growth and encountering new ideas and concepts. Thoughtful, critical thinkers use evidence to support their positions – not endorsing a view because they have always done so. Through the learning process, let us sustain the UF Core Values and embrace our differences while ensuring we have an equitable, inclusive learning environment.

For suggestions or concerns related to IDEA, please reach out to Dr. Christine Wegner, christinewegner@ufl.edu.

University of Florida Core Values

Inclusion: Celebrate differences in identities, thoughts, and abilities, and seek to provide equitable access to opportunity.

- Excellence is only possible by including people who bring diverse backgrounds and perspectives. Our growing diversity enhances discovery and innovation. It is reliant on freedom and civility. It enriches the UF community. It is rooted in stewardship. It is the connective tissue for all of our Core Values.

Freedom and Civility: Embrace the freedom to inquire and express ideas without condemnation, and to show respect for the right of others to do the same.

- We are a community that affirms and embraces openness to an inclusive range of viewpoints. An open-minded culture is the foundation of freedom of expression and affirms our commitment to academic freedom, which is rooted in mutual respect of others. We encourage curiosity in research, scholarship and exploration, and we create the conditions where inquiry can flourish. We should guard others' right to express themselves as unequivocally as we expect that right for ourselves.

GRADING

Student grades will be based on a combination of quizzes, leading a discussion on a topic, participation in online discussions, a comprehensive presentation, and peer feedback on two presentations.

Evaluation Components (Number of each)	Points Per Component	Approximate % of Total Grade
Readings Reviews (6)	10 pts each = 60 pts	60 / 260 = 23.2%
Discussion Leader (1)	50 pts each = 50 pts	50 / 260 = 19.2%
Discussion Boards (6)	15 pts each = 90 pts	90 / 260 = 34.6%
Reflection Papers (3)	10 pts each = 30	30 / 260 = 11.5%
Diversity, Equity, and Inclusion in Sport Organizations Presentation (1)	30 pts each = 30 pts	30 / 260 = 11.5%

Readings Reviews: Readings Reviews are designed to prepare you for the discussion, ensure you are completing the readings, and encourage your critical reflection on the topic. They focus on the "Weekly Readings" assigned for each module. Each readings review should contain (1) a summary of the readings, and (2) your key takeaways from the content, with equal attention devoted to each. The Readings Review should be no more than 1000 words and must be submitted by 11:59 pm on the date assigned in the Course Schedule.

Discussion Boards: Students will participate in six (6) discussion boards during the semester. Each module discussion board will include sub-boards (e.g., for Module 1: 1A, 1B, and so on), and the number of students in the class will determine the number of sub-boards. Students can choose any three (3) sub-boards in which to participate. The discussion will center around the Discussion Leader Presentation posted by the leader that week. In responding to the posts, students should adhere to the UF Core Values of Inclusion and Freedom & Civility, as previously outlined. All discussion boards will follow this protocol:

Task 1
   o   Choose any three (3) sub-boards to respond to, each of which will contact questions or prompts to respond to.
   o   Post an initial response to the question or prompt in each of the three (3) sub-boards.
   o   Initial responses should be posted by 11:59 pm on the data identified in the Course Schedule.

Task 2
   o   Post a response to any three (3) of your peers' initial posts in the sub-boards.
   o   Please attempt to post your first response no later than Friday at 11:59 pm.
   o   All posts are due by 11:59 pm of the due date in the syllabus.
      ▪   The early response will facilitate the discussion and prevent everyone from logging on Sunday to make both posts.

Students will receive full credit for posts that are (1) thoughtful and articulate, (2) completed on time, and (3) represent a critical evaluation of your classmates' posts.

Discussion Leader: Students will be assigned to lead the discussion for one of the modules in the class. I will serve as the discussion leader for Module 1. Students will be graded on their presentation and their ability to facilitate a critical analysis of the topic. The responsibility includes:

Task 1
   o   Submit a five-minute presentation where you present on a social issue relevant to the module topic. The presentation should include (1) background information on the issue, (2) an argument for or against the current benefits and/or drawbacks of the issue, and (3) discussion of how to improve the outcomes. Discussion Leaders should record their presentation using Voice Thread and then submit the embed code (not the shared link) of the presentation in Canvas by 11:59

pm on the due date in the syllabus. I will then post the presentation to your module discussion sub-board.

Task 2
- o   Facilitate an online discussion around your presentation – an activity that takes place during the second half of your respective module. Discussion Leaders should visit their sub-boards daily, make multiple postings to facilitate discussion, respond to classmates' postings, and encourage critical analysis.

   Note. Discussion board leaders should still provide three (3) original responses and three (3) replies to other discussion boards, even on the week when they are the leader.

Reflection Papers: Some of the material covered in the class is controversial, and students might not feel comfortable sharing a particular perspective on the Discussion Board. Thus, students will complete three (3) reflection papers that afford them the opportunity to share their thoughts, reactions, and perspectives on any topic of the class. The focus may include a classmate's posting, readings, or personal experiences with the topic. The paper should not exceed 500 words, and I will be the only one who reads it. The Reflection Papers be submitted by 11:59 pm on the dates assigned in the Course Schedule.

Diversity, Equity, and Inclusion in Sport Organizations Presentation – The purpose of this assignment is to apply what is learned through the class to the management of sport. The management of sport is considered broadly, and includes issues related to management, marketing, and governance. To complete the assignment, students should first choose one of the broad themes covered in the course (i.e., one of the six modules) and identify how the diversity, equity, and inclusion issues covered in that theme will influence the management of sport. Students should (1) review the topic, including the readings covered in the module; (2) identify the specific area of sport management that is impacted; (3) review additional scholarship in that area of sport management, noting what researchers have found; and (4) based on that information, note how these issues will influence how they, as sport managers, will deliver sport. Thus, the assignment gives students the opportunity to reflect on what they have learned in the class and how it will impact their work in sport. Based on this information, students should record a presentation that is 7-10 minutes in duration using Voice Thread. The assignment should be submitted in Canvas by 11:59 pm on the due date in the Course Schedule.

RUBRICS

Reading Review (10)

	Description and Point Value		
Element	Poor	Acceptable	Very Good
Summary of the Additional Readings	0 points	2 points	4 points
Key Take-Aways from the Additional Readings	0 points	2 points	4 points
Grammar and Punctuation	0 points	1 point	2 points

Discussion Boards (15)

	On Time		Thoughtful / Articulate		Critical Evaluation	
Element	No	Yes	No	Yes	No	Yes
Sub-Board Post #1	0 points	1 point	0 points	1 point	0 points	1 point
Sub-Board Post #2	0 points	1 point	0 points	1 point	0 points	1 point
Sub-Board Post #3	0 points	1 point	0 points	1 point	0 points	1 point
Response #1	0 points	1 point	0 points	1 point	0 points	1 point
Response #2	0 points	1 point	0 points	1 point	0 points	1 point

Discussion Leader (50)

Element	Description and Point Value		
	Poor	Acceptable	Very Good
Presentation: Background Information	2 points	6 points	10 points
Presentation: Arguments for and Against	2 points	6 points	10 points
Presentation: Improve the Outcomes	2 points	6 points	10 points
Discussion Board: Facilitate Conversation	2 points	6 points	10 points
Discussion Board: Responses	2 points	6 points	10 points

Reflection Papers (10)

Element	Description and Point Value		
	Poor	Acceptable	Very Good
Summary of the Topic	0 points	2 points	4 points
Thoughts, Reactions, and Perspectives	0 points	2 points	4 points
Grammar and Punctuation	0 points	1 point	2 points

Sociology and the Management of Sport (30)

Element	Description and Point Value		
	Poor	Acceptable	Very Good
Topic Review	2 points	4 points	6 points
Area of Sport Management Impacted	0 points	2 points	4 points
Review of Scholarship	2 points	6 points	10 points
Impact on Sport Delivery	2 points	4 points	6 points
Presentation Quality	0 points	2 points	4 points

GRADING SCALE

Grades will be posted in Canvas. Under normal circumstances, each assignment will be graded within one week. More detailed information regarding current UF grading policies can be found here: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/. Any requests for additional extra credit or special exceptions to these grading policies will be interpreted as an honor code violation (i.e., asking for preferential treatment) and will be handled accordingly.

Letter Grade	Percent of Total Points Associated with Each Letter Grade	GPA Impact of Each Letter Grade
A	93.00-100.00%	4.0
A-	90.00-92.99%	3.67
B+	87.00-89.99%	3.33
B	83.00-86.99%	3.0
B-	80.00-82.99%	2.67
C+	77.00-79.99%	2.33
C	73.00-76.99%	2.0
C-	70.00-72.99%	1.67
D+	67.00-69.99%	1.33
D	63.00-66.99%	1.0
D-	60.00-62.99%	0.67
E	0.00-59.99%	0

(January 8-14)
COURSE ORIENTATION & OVERVIEW

Videos:
- Course Overview and Syllabus Review

Readings:
- No readings this week.

Assignments:

January 14, 11:59 pm EST   Course and Syllabus Quiz & Student Intro Assignment

MODULE 1 (January 15 – January 28)
Foundations of Diversity, Equity, and Inclusion in Sport Organizations

Background Videos:
- Overview of diversity, equity, and inclusion in sport organizations.
- Researching diversity, equity, and inclusion in sport organizations.
- Theories used to understand diversity, equity, and inclusion in sport organizations.

Weekly Readings for the Readings Review Assignment:
- Cunningham, G. B. (2023). *Diversity, equity, and inclusion in sport organizations: A multilevel perspective*. Routledge. (Chapter 1, pp. 3-24)
- Delia, E. B., Melton, E. N., Sveinson, K., Cunningham, G. B., & Lock, D. (2022). Understanding the lack of diversity in sport consumer behavior research. *Journal of Sport Management, 36*(3), 265-276.
- Burton, L. J., & Leberman, S. (2015). Diversity in sport leadership. In I O'Boyle, D. Murray, & Paul Cummins (Eds.), *Leadership in sport* (pp. 139-152). Routledge.

Assignments:

January 21, 11:59 pm EST   Module 1 Readings Review
January 21, 11:59 pm EST   Discussion Leader Presentations
January 24, 11:59 pm EST   Opening Statements to selected Discussion Sub-boards
January 28, 11:59 pm EST   Responses to classmates in Discussion Sub-boards
January 28, 11:59 pm EST   Reflection Paper #1

MODULE 2 (January 29 - February 11)
Bias in Sport Organizations

Background Video:
- Bias in sport organizations

Weekly Readings for the Readings Review Assignment:
- Dovidio J. F., Hewstone M., Glick P., Esses V. M. (2010). Prejudice, stereotyping, and discrimination: Theoretical and empirical overview. In *The SAGE handbook of prejudice, stereotyping, and discrimination* (pp. 3–29). London, England: Sage.
- Stone, J., Lynch, C. I., Sjomeling, M., & Darley, J. M. (1999). Stereotype Threat Effects on Black and White Athletic Performance. *Journal of Personality and Social Psychology, 77*(6), 1213-1227.
- Wells, J. E., Sartore-Baldwin, M., Walker, N. A., & Gray, C. E. (2020). Stigma consciousness and work outcomes of Senior Woman Administrators: The role of workplace incivility. *Journal of Sport Management, 35*(1), 69-80.

Assignments:

February 4, 11:59 pm EST	Module 2 Readings Reviews
February 4, 11:59 pm EST	Discussion Leader Presentations
February 11, 11:59 pm EST	Opening Statements to selected Discussion Sub-boards
February 11, 11:59 pm EST	Responses to classmates in Discussion Sub-board

MODULE 3 (February 12 - February 25)
Race, Gender, and Age Diversity in Sport Organizations

Background Videos:
- Race in sport organizations
- Gender in sport organizations
- Age in sport organizations

Weekly Readings for the Readings Review Assignment:
- Singer, J. N., Agyemang, K. J., Chen, C., Walker, N. A., & Melton, E. N. (2022). What is blackness to sport management? Manifestations of anti-blackness in the field. *Journal of Sport Management, 36(*3), 215-227.
- Fink, J. S. (2016). Hiding in plain sight: The embedded nature of sexism in sport. *Journal of Sport Management, 30*(1), 1-7.
- Cunningham, G. B., Wicker, P., & Kutsko, K. (2021). Gendered racial stereotypes and coaching intercollegiate athletic teams: The representation of Black and Asian women coaches on US women's and men's teams. *Sex Roles, 84*, 574-583.
- Kleissner, V., & Jahn, G. (2020). Implicit and explicit measurement of work-related age attitudes and age stereotypes. *Frontiers in Psychology, 11*, 579155.

Assignments:

February 18, 11:59 pm EST	Module 3 Readings Reviews
February 18, 11:59 pm EST	Discussion Leader Presentations
February 21, 11:59 pm EST	Opening Statements to selected Discussion Sub-boards
February 25, 11:59 pm EST	Responses to classmates in Discussion Sub-boards
February 25, 11:59 pm EST	Reaction Paper #2
February 25, 11:59 pm EST	Mid-Course Survey (Not graded)

MODULE 4 (February 26 – March 8)
Disability and Appearance in Sport Organizations

Background Videos:
- Disability in sport organizations
- Appearance in sport organizations

Weekly Readings for the Readings Review Assignment:
- Darcy, S., Lock, D., & Taylor, T. (2017). Enabling inclusive sport participation: Effects of disability and support needs on constraints to sport participation. *Leisure Sciences, 39*(1), 20-41.
- Hanlon, C., & Taylor, T. (2022). Workplace experiences of women with disability in sport organizations. Frontiers in Sports and Active Living, 4, 792703.
- Cunningham, G. B., Fink, J. S., & Kenix, L. J. (2008). Choosing an endorser for a women's sporting event: The interaction of attractiveness and expertise. *Sex Roles, 58*, 371-378.
  Pickett, A. C., & Cunningham, G. B. (2017). Physical activity for every body: A model for managing weight stigma and creating body-inclusive spaces. *Quest, 69*(1), 19-36.

Assignments:

March 3, 11:59 pm EST	Module 4 Readings Reviews
March 3, 11:59 pm EST	Discussion Leader Presentations
March 6, 11:59 pm EST	Opening Statements to selected Discussion Sub-boards
March 8, 11:59 pm EST	Responses to classmates in Discussion Sub-boards

MODULE 5 (March 18 – March 31)
Deep-Level Diversity in Sport Organizations

Background Videos:
- Religion in sport organizations
- Sexual orientation and gender identity in sport organizations
- Social class in sport organizations

Weekly Readings for the Readings Review Assignment:
- Hussain, U., & Cunningham, G. B. (2022). The Muslim community and sport scholarship: a scoping review to advance sport management research. *European Sport Management Quarterly*.
- Denison, E., Bevan, N., & Jeanes, R. (2021). Reviewing evidence of LGBTQ+ discrimination and exclusion in sport. *Sport Management Review, 24*(3), 389-409.
- Lott, B. (2012). The Social Psychology of Class and Classism. *American Psychologist, 67*(8), 650-658.

Assignments:

March 24, 11:59 pm EST	Module 5 Readings Reviews
March 24, 11:59 pm EST	Discussion Leader Presentations
March 27, 11:59 pm EST	Opening Statements to selected Discussion Sub-boards
March 31, 11:59 pm EST	Responses to classmates in Discussion Sub-boards
March 31, 11:59 pm EST	Reaction Paper #3

MODULE 6 (April 1 – April 14)
Creating Diverse, Equitable, and Inclusive Sport Organizations and Communities

Background Video:
- Reducing bias in sport organizations
- Creating inclusive and just sport organizations
- Fostering diverse, equitable, and inclusive communities

Weekly Readings for the Readings Review Assignment:
- Paluck, E. L., Porat, R., Clark, C. S., & Green, D. P. (2021). Prejudice reduction: Progress and challenges. *Annual Review of Psychology, 72*, 533-560.
- Shaw, S. (2019). The chaos of inclusion? Examining anti-homophobia policy development in New Zealand sport. *Sport Management Review, 22*(2), 247-262.
- McCullough, B. P., & Trail, G. T. (2023). Assessing key performance indicators of corporate social responsibility initiatives in sport. *European Sport Management Quarterly, 23*(1), 82-103.

Assignments:

April 7, 11:59 pm EST	Module 6 Readings Reviews
April 7, 11:59 pm EST	Discussion Leader Presentations
April 10, 11:59 pm EST	Opening Statements to selected Discussion Sub-boards
April 14, 11:59 pm EST	Responses to classmates in Discussion Sub-boards

SOCIOLOGY AND THE MANAGEMENT OF SPORT

Presentation Due on April 28, 11:59 pm

Course|Modify for request 20224

Info

Request: GMS 6848 - Revise credit count to 2 credits
Description of request: In previous semesters, GMS 6848 had been offered as a 1 credit course over a 6 week summer term. Since 2023, the course has been taught by a new instructor, who added content to cover the 16 week Spring term. Based on instructor and student feedback, we would like the credit count increased to 2, to accurately reflect the material covered, work completed, and knowledge gained, by completing GMS 6848.
Submitter: Matthew Mitterko mmitterko@aa.ufl.edu
Created: 8/1/2024 4:24:33 PM
Form version: 1

Responses

Current Prefix
Enter the current three letter code (e.g., POS, ATR, ENC).

> Response:
> GMS

Course Level
Select the current one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.).
* *

> Response:
> 6

Lab Code
Enter the current lab code. This code indicates whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

> Response:
> None

Number
Enter the current three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles.

> Response:
> 848

Course Title
*Enter the current title of the course as it appears in the Academic Catalog.There is a 100 character limit for course titles. *

> Response:
> Ensuring Rigor and Reproducibility in Clinical and Translational Research

Effective Term

Select the requested term that the course change(s) will first be implemented. Selecting "Earliest" will allow the change to be effective in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's expectations. Courses cannot be changed retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires at least 6 weeks after approval of the course change at UF.

Response:
Earliest Available

Effective Year

Select the requested year that the course change will first be implemented. See preceding item for further information.

Response:
Earliest Available

Requested Action

Indicate whether the change is for termination of the course or any other change. If the latter is selected, all of the following items must be completed for any requested change.

Response:
Other (selecting this option opens additional form fields below)

Change Course Prefix?

Response:
No

Change Course Level?

Response:
No

Change Course Number?

Response:
No

Change Lab Code?

Response:

No

Change Course Title?

Response:
No

Change Transcript Title?
*If changing the course title a new transcript title is also required. *

Response:
No

Change Credit Hours?

Response:
Yes

Current Credit Hours

Response:
1

Proposed Credit Hours

Response:
2

Change Variable Credit?

Response:
No

Change S/U Only?

Response:
No

Change Contact Type?

Response:
No

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Change Rotating Topic Designation?

Response:
No

Change Repeatable Credit?

Response:
No

Multiple Offerings in a Single Semester
Can this course be taken by a student multiple times in the same semester?

Response:
No

Change Course Description?

Response:
No

Change Course Objectives

Response:
No

Change Prerequisites?

Response:
No

Change Co-requisites?

Response:
No

Rationale
Please explain the rationale for the requested change.

Response:
GMS 6848 has previously been offered as a 1 credit course. Based on both instructor feedback (from 2 different instructors, from 2022 and 2023), as well as student feedback, we would like to increase the credit count to 2.

2 credits would be a more accurate reflection of the work being accomplished, and time being spent by students, within GMS 6848. As of 2022, the course had been historically been taught in Summer B over 6 weeks. Since 2023, the course has been taught by a new instructor in the Spring semester, and new content and work has been added to the syllabus to cover 16 weeks.

Course Syllabus

> ✎ Edit

GMS 6848: Ensuring Rigor and Reproducibility in Clinical and Translational Research

SEMESTER: Spring 2024

Classes Begin: January 8th, 2024

Classes End: April 24th, 2024

Final project: due before May 2nd, 2024

FORMAT: Online: asynchronous (through Canvas)

CREDITS: 1

COURSE WEBSITE: CANVAS GMS 6848

INSTRUCTOR: **Todd Manini, PhD**

Professor
College of Medicine
Department Health Outcomes & Biomedical Informatics
Institute on Aging
2004 Mowry Rd.
Gainesville, FL 32611
Office Phone: 352-273-5914
Email: tmanini@ufl.edu

COURSE PREREQUISITES: None

COURSE OVERVIEW:

This course introduces the principles and practices required to conduct rigorous and reproducible research across the translational spectrum. Rigor and reproducibility are quite appropriately receiving greater emphasis across all levels of research, and are receiving greater attention from scientific journals and funders of research alike. At the National Institutes for Health (NIH), rigor and reproducibility are being promoted in their guidance to grant applicants as well as grant reviewers (**https://grants.nih.gov/reproducibility/index.htm** ⤏ **(https://grants.nih.gov/reproducibility/index.htm)**). The NIH is in fact implementing policies "requiring formal instruction in scientific rigor and transparency to enhance reproducibility for all individuals supported by institutional training grants, institutional career development awards, or individual fellowships." (**https://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-034.html** ⤏ **(https://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-034.html)**). Thus, it is essential that researchers understand best practices in research to ensure rigor and reproducibility of their research. In this course, students learn these best practices, including sound study planning and design, consideration of all relevant biomedical variables, sound data management practices, statistical considerations and techniques, and transparency in reporting research results.

COURSE OBJECTIVES:

Teaching methods include readings, recorded lecture (including audio and slides), online forum discussion, and assessment.

Upon successful completion of this course, students should be able to:

- Understand the importance of rigor and reproducibility in research across the translational spectrum
- Identify key characteristics, strengths, and weaknesses of various study designs necessary to ensure scientific rigor
- Recognize key biomedical variables necessary for a given research question
- Implement best practices in data collection and management
- Understand the importance of selecting appropriate data analysis techniques to ensure reproducible results
- Report and present results from a research study in a fully transparent manner

COURSE SCHEDULE:

Week/ Module	Start date	Topic
1	1/8	Introduction and overview: The foundational premise of this course
2	1/15	The scientific method and reasoning
3	1/22	Why all the fuss – a history of scientific misconduct
4	1/29	Rigor, reproducibility, replicability, and transparency
5	2/5	Reproducibility vs replicability
6	2/12	Improving reproducibility and replicability
7	2/19	Study design considerations
8	2/26	Study design considerations: A case for pilot (early phase) studies
9	3/4	Bias and confounding
10	3/11	Spring break 3/9 – 3/16
11	3/18	Data collection and management: best practices I
12	3/25	Data collection and management: best practices II
13	4/1	Analyzing data to ensure reproducibility
14	4/8	Transparency in research reporting

15	4/15	Transparency in research reporting: The FAIR Guiding Principles
16	4/22	Final project: Data Management and sharing plan
		Classes officially end on 4/24
Reading days & final exams	4/22-5/3	Final project

COURSE LOGISTICS:

Weekly module materials will be available to you on the Canvas site. Students are able to access the next module on Sunday at 10 PM.

Weekly assignments are due on Sunday at 11:59pm. **Note: The Final project will have a different schedule to allow sufficient time to complete the work.**

COURSE REQUIREMENTS:

Students are expected to actively engage in weekly discussions, complete readings posted to Canvas, view videos, complete weekly assessments and do a final project. A computer with high-speed Internet connectivity, ability to read/review/edit Microsoft files, ability to read/review pdf files, and a working webcam and microphone are required to effectively complete all course components.

READING and VIDEO MATERIALS:

Each module has different requirements. In general, a selected publication(s) or video that highlights the content of that particular module will be used to generate assignments. Students are responsible for any content from the assigned readings posted in the weekly module folder. Assignments may cover any course content covered in assigned readings and virtual lectures.

COURSE COMMUNICATIONS:

Most course communications will occur through the discussion boards in Canvas. Private or grade related questions should be sent to me via the email function in Canvas. The e-learning canvas site follows the rules and regulations of FERPA. Using the email function in Canvas, select the instructors as recipients, and include the course pneumonic, GMS6848, in the subject line (to facilitate a more timely response).

USE OF AI TOOLS

New AI tools like ChatGPT, DALL-E, Stable Diffusion, and Midjourney, to name a few, are powerful tools that we will all use for the foreseeable future. You are permitted to use these tools, but like any tool you should be in control of its function. I would like students to have an open dialogue about their use of ChatGPT. Reveal to the instructor and class when you use an AI tool to facilitate your learning. Pre-approved uses include idea generation, rephrasing text, grammar checking, conversating to build general knowledge about a topic, and computer code generation. Although the instructor is unable to "prove" plagiarism, cutting and pasting exact text will be frowned upon and ridiculed.

ATTENDANCE:

This course is being held online in an asynchronous manner that doesn't require attendance to specific day and time. However, success in this course is dependent on your active participation and engagement throughout the course. As such, students are required to complete all assignments by the due date, and to actively participate in class discussions posts.

INSTRUCTOR AVAILABILITY:

This is an asynchronous class that is not amenable to a set day and time as with traditional office hours. Depending on the student pool, hybrid (in-person+virtual) "Ask me" meetings may occur. I will make myself available for individual meetings when requested. Please email me through Canvas to schedule an individual time to meet.

GRADE COMPOSITION:

Students' final grades will be determined via a variety of assessments, specifically: weekly assignments and the final project.

Assessment Description	% of Grade

Weekly assignments

Assignments include discussions, quizzes, presentations etc. Assignments are worth 20 pts unless otherwise specified.

80%

Final project

20%

Total

100%

WEEKLY assignments:

Each week, students will be asked to read or view material that highlights the content for that particular module/week. Assignments could be discussions, quizzes, giving presentations, creating timelines, writing short focus papers etc.

Discussions: Some modules have a discussion forum which draws on lecture content and course reading material for that week's module. Students are expected to provide a meaningful contribution to the discussion (in the form of providing at least one meaningful comment on various aspects of the articles, asking a is highly encouraged to engage every week if you are able! Discussions will 'close' at the end of the week, Sunday 11:59pm EST. You may not go back and contribute to a previous discussion in subsequent weeks to receive credit.

Quizzes: Quizzes will be posted to the module on Mondays; students will need to complete the quiz by the following Sunday (**the quiz must be <u>completed</u> by Sunday at 11:59pm EST**). Quizzes will consist of focus on the course content covered in that particular module. Quizzes are administered via Canvas and students should take the quiz in an environment with a dependable internet connection. **Quizzes cannot be retaken** and unanswered questions will receive a score of zero points.

FINAL project: Details of the final project are found in the module material.

ATTENDANCE POLICY:

This course is being held online in an asynchronous manner. Anytime that attendance is required, all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy, see the Registrar website for additional details: **https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx**.

GMS 6848 GRADING SCALE:

Total Points Earned	% of Total Points Earned	Letter Grade	Grade Point Equivalent
186 +	> 93	A	4.0
180-185	90-92	A-	3.67
174-179	87-89	B+	3.33
164-173	83-86	B	3.00
160-163	80-82	B-	2.67
154-159	77-79	C+	2.33
146-153	73-76	C	2.00
140-145	70-72	C-	1.67
134-139	67-69	D+	1.33

126-133	63-66	D	1.00
120-125	60-62	D-	0.67
< 120	< 60	E	0.00

For more detail on letter grades and related University of Florida policies, please see the Grades and Grading Policies at https://gradcatalog.ufl.edu/graduate/regulations/#text.

MAKE-UP POLICY:

Students are allowed to make up work only as the result of substantial illness or other unanticipated circumstances. In the event of such emergency, documentation will be required in conformance with University policy. Work missed for any other reason will earn a grade of zero.

UNIVERSITY OF FLORIDA POLICIES

STUDENTS REQUIRING ACCOMODATIONS: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the **Disability Resource Center** ⤳ **(https://disability.ufl.edu/get-started/)** . It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

COURSE EVALUATION: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. **Click here for guidance on how to give feedback in a professional and respectful manner.** ⤳ **(https://gatorevals.aa.ufl.edu/students/)** Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. **Summaries of course evaluation results are available to students here** ⤳ **(https://gatorevals.aa.ufl.edu/public-results/)** .

UNIVERSITY HONESTY POLICY: UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." **The Honor Code** ⇨ **(https://sccr.dso.ufl.edu/process/student-conduct-code/)** specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

SOFTWARE USE: All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

STUDENT PRIVACY: There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the **FERPA Rights** ⇨ **(https://registrar.ufl.edu/ferpa/)** .

NETIQUETTE – Communication Courtesy: Be kind, Be considerate, Be respectful. All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions, and chats. The first instance of clearly rude and/or inappropriate behavior will result in a warning. The second instance will result in a deduction of five percentage points from your overall grade. The third instance will result in a drop of a letter grade (A to B, A- to B-, and so on). Learn more about netiquette **here** ⇨ **(https://www.cise.ufl.edu/wp-content/uploads/2019/08/CISE_Netiquette_Guide.pdf)** .

GETTING HELP: For issues with technical difficulties for E-learning in Canvas, please contact the UF Help Desk at:

learning-support@ufl.edu (mailto:learning-support@ufl.edu)

(352) 392-HELP

https://lss.at.ufl.edu/help.shtml

Any requests for make-ups due to technical issues must be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You must e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up/extension.

Other resources are available at **http://www.distance.ufl.edu/getting-help** ⤷ **(http://www.distance.ufl.edu/getting-help)** for:

Counseling and Wellness resources

Disability resources

Resources for handling student concerns and complaints

Library Help Desk support

Should you have any complaints with your experience in this course please visit the **Distance Learning website** ⤷ **(https://distance.ufl.edu/)** to submit a complaint.

GMS 6848: Ensuring Rigor and Reproducibility in Clinical and Translational Research

<u>**SEMESTER:**</u>	Summer B, 2022 Classes Begin: Monday, June 27, 2022 Classes End: Friday, August 5, 2022
<u>**FORMAT:**</u>	Online: asynchronous (through Canvas) **Online office hours (through Zoom in Canvas): Thursdays 10-11am or by appointment**
<u>**CREDITS:**</u>	1
<u>**COURSE WEBSITE:**</u>	CANVAS GMS 6848
<u>**INSTRUCTOR:**</u>	**Erin M. Mobley, PhD, MPH** Assistant Professor Division of General Surgery & Surgical Oncology Department of Surgery College of Medicine Jacksonville Phone: 904-244-7418 Email: erin.mobley@jax.ufl.edu
<u>**COURSE PREREQUISITES:**</u>	GMS 6861 (Applied Biostatistics I), or equivalent

COURSE OVERVIEW:

This course introduces the principles and practices required to conduct rigorous and reproducible research across the translational spectrum. Rigor and reproducibility are quite appropriately receiving greater emphasis across all levels of research, and are receiving greater attention from scientific journals and funders of research alike. At the National Institutes for Health (NIH), rigor and reproducibility are being promoted in their guidance to grant applicants as well as grant reviewers (https://grants.nih.gov/reproducibility/index.htm). The NIH is in fact implementing policies "requiring formal instruction in scientific rigor and transparency to enhance reproducibility for all individuals supported by institutional training grants, institutional career development awards, or individual fellowships." (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-034.html). Thus, it is essential that researchers understand best practices in research to ensure rigor and reproducibility of their research. In this course, students learn these best practices, including sound study planning and design, consideration of all relevant biomedical variables, sound data management practices, statistical considerations and techniques, and transparency in reporting research results.

COURSE OBJECTIVES:

Teaching methods include readings, recorded lecture (including audio and slides), online forum discussion, and assessment. Upon successful completion of this course, students should be able to:

- Understand the importance of rigor and reproducibility in research across the translational spectrum
- Identify key characteristics, strengths, and weaknesses of various study designs necessary to ensure scientific rigor
- Recognize key biomedical variables necessary for a given research question
- Implement best practices in data collection and management
- Understand the importance of selecting appropriate data analysis techniques to ensure reproducible results
- Report and present results from a research study in a fully transparent manner

COURSE SCHEDULE:

Week	Dates	Topic	Quiz/Exam	Due Date (11:59 EST)
1	6/27-7/1	Introduction; General overview/motivation on rigor and reproducibility	Quiz 1	7/3
2	7/4-7/8	Study design considerations across the translational spectrum	Quiz 2	7/10
3	7/11-7/15	Selecting all relevant biomedical variables	Quiz 3	7/17
4	7/18-7/22	Data collection and management: best practices	Quiz 4	7/24
5	7/25-7/29	Analyzing data to ensure reproducibility	Quiz 5	7/31
6	8/1-8/5	Transparency in research reporting	Final Exam	8/4

COURSE LOGISTICS:
- Weekly module materials along with recorded lectures will be posted to the course Canvas site at 6am on Friday at 6am the week prior to the discussion board and quiz due dates.
- Weekly quizzes will also become available on Canvas on Mondays at 6am, and are due the following Sunday at 11:59pm. **Note: The Final Exam has a different schedule to ensure timeliness of final grades.**
- Regular office hours are noted in this syllabus for Dr. Mobley (Thursdays 10-11am).
    - These office hours will be held via Zoom within the Canvas site.
    - Office hours will be recorded and uploaded to the Canvas site.
    - Dr. Mobley's initial office hour (Tuesday, June 28th from 9-10am) will provide an overview of the course.
- The final exam will be available on Canvas on Monday, August 1st at 6am and is due via Canvas Thursday, August, 4th at 11:59pm EST.

COURSE REQUIREMENTS:
Students are expected to actively engage in weekly discussions, complete readings posted to Canvas, view recorded lecture slide decks with paired audio, and complete weekly quizzes and a final exam. A computer with high-speed Internet connectivity, ability to read/review/edit Microsoft files, ability to read/review pdf files, and a working webcam and microphone are required to effectively complete all course components.

TEXTBOOKS/READING MATERIALS:
A selection of scientific publication(s) and article(s) will be assigned to read each week; each publication will be chosen to highlight the content of that particular module and will be discussed in the weekly discussion forum. Students are responsible for any content from the assigned readings posted in the weekly module folder. Quizzes may cover any course content covered in assigned readings, and lectures.

The following are suggested *general reference materials*; however, they are not required. Those available in a digital format are posted on Canvas in the course resources folder.
- Williams M., Curtis M., Mullane K. *Research in the Biomedical Sciences*: *Transparent and Reproducible* (1st edition). Elsevier, 2017.
- Popper K. *The Logic of Scientific Discovery* (available online).
- Guidelines for Transparency and Openness Promotion (TOP) in Journal Policies and Practices. https://osf.io/ud578/?_ga=1.211230620.829898984.1435325845
- *Nature* Editorial. Journals Unite for Reproducibility. http://www.nature.com/news/journals-unite-for-reproducibility-1.16259
- *Nature* Special Article Collection. Challenges in Irreproducible Research.
- Collins, FS, Tabak, LA. Policy: NIH plans to enhance reproducibility. Nature. 505, 612–613. (30 January 2014)
- McNutt M. Reproducibility. Science. 343, 229 (17 January 2014)
- Clayton JA. Studying both sexes: a guiding principle for biomedicine. *FASEB J*. Vol.30, No.2, pp: 519-524. (February 2016).

COURSE COMMUNICATIONS:

General course questions should be posted to the discussion board on Canvas. We will respond to <u>discussion posts</u> within 24 hours during the workweek (48 hours over the weekend). Private or grade related questions should be sent to us via the email function in Canvas. The e-learning canvas site follows the rules and regulations of FERPA. Using the email function in Canvas, select both instructors and any teaching assistants as recipients, and include the course pneumonic, <u>GMS6848</u>, in the subject line (to facilitate a more timely response).

ATTENDANCE:

Success in this course is dependent on your active participation and engagement throughout the course. As such, students are required to complete all quizzes by the due date, and to actively participate in class discussions posts.

OFFICE HOURS:

Online "office hours" will be held on a weekly basis throughout the term via Zoom within Canvas. I am also available via email to schedule a separate time to meet. For those who wish to meet individually via phone/web conference, please email the instructor to arrange a time.

GRADE COMPOSITION:

Students' final grades will be determined via a variety of assessments, specifically: weekly discussions, quizzes, and a final exam.

Assessment Description	Points Possible	% of Grade
Weekly Discussion Participation • Contribution to discussion of assigned weekly publication(s) via Canvas online forum • Students are required to actively engage in <u>four separate discussion sessions</u>	**40 pts** (i.e. 10 pts each)	20%
Weekly Quizzes • There will be weekly quizzes administered online via Canvas; 5 in total	**100 pts** (i.e. 20 pts each)	50%
Final Exam • Evaluation of course content and critique of a Scientific Publication • Due August 4th at 11:59pm EST	**60 pts**	30%
Total Points Possible:	**200 pts**	100 %

WEEKLY DISCUSSIONS:

Each week, students will be asked to read one or more articles that highlights the content for that particular module/week. On Mondays, a prompt will be posted to the weekly discussion forum which draws on lecture content and course reading material for that week's module. Students will be assigned discussion groups; these discussion groups will be assigned at the beginning of the course. Students are expected to provide a meaningful contribution within their discussion group (in the form of providing at least one meaningful comment on various aspects of the articles, asking a provocative question to the group, and/or responding to others' questions) **in four of the six weeks of the course.** It is highly encouraged to engage every week if you are able! Discussions will 'close' at the end of the week, Sunday 11:59pm EST (**except for Week 6, which will close on Thursday, August 4, 2022 at 11:59pm**). You may not go back and contribute to a previous discussion in subsequent weeks to receive credit.

QUIZZES:

There is an online quiz associated with the first 5 modules of the course. Quizzes will be posted to the module on Mondays; students will need to complete the quiz by the following Sunday (**the quiz must be <u>completed</u> by Sunday at 11:59pm EST**). Each module's quiz will consist of focus on the course content covered in that particular module. Each

quiz will consist of 10 questions intended to assess depth of understanding of the material. **Students will have 30 minutes once they begin the quiz to complete it**. Students are strongly encouraged to find a time when they complete the quiz without interruption, as there will not be an opportunity to pause the quiz once the student begins taking it.

Quizzes are administered via Canvas and students should take the quiz in an environment with a dependable internet connection. **Quizzes cannot be retaken** and unanswered questions will receive a score of zero points.

FINAL EXAM:

The final exam will be a combination of short-answer style and multiple-choice questions, and will utilize a scientific publication (or excerpts) to evaluate the depth of understanding of course concepts presented throughout the course. In general, students will be asked to critically review the provided manuscript or excerpts and consider the quality, rigor, and transparency of the research. Further, they will identify whether or not it is possible to replicate the study, based solely on the methods described in the publication, and address the appropriateness of the chosen study design. They will be asked to identify the strengths and weaknesses of each section of the manuscript and where the researchers did or did not provide sufficient detail to ensure their work was rigorous, transparent, and reproducible. This exam will evaluate the students' ability to draw on major course topics and apply them to published research.

DUE: Thursday, August 4, 2022 at 11:59pm EST

WEEK 6 ADJUSTMENTS: To facilitate timely grading, week 6 will have expedited submission deadlines which apply to the discussion forum and final exam. All week 6 materials will be due on Thursday August 4th at 11:59pm.

ATTENDANCE POLICY:

Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy, see the Registrar website for additional details:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

GMS 6848 GRADING SCALE:

Total Points Earned	% of Total Points Earned	Letter Grade	Grade Point Equivalent
186 +	> 93	A	4.0
180-185	90-92	A-	3.67
174-179	87-89	B+	3.33
164-173	83-86	B	3.00
160-163	80-82	B-	2.67
154-159	77-79	C+	2.33
146-153	73-76	C	2.00
140-145	70-72	C-	1.67
134-139	67-69	D+	1.33
126-133	63-66	D	1.00
120-125	60-62	D-	0.67
< 120	< 60	E	0.00

For more detail on letter grades and related University of Florida policies, please see the Grades and Grading Policies at https://gradcatalog.ufl.edu/graduate/regulations/#text.

MAKE-UP POLICY:

Students are allowed to make up work only as the result of substantial illness or other unanticipated circumstances. In the event of such emergency, documentation will be required in conformance with University policy. Work missed for any other reason will earn a grade of zero.

UNIVERSITY OF FLORIDA POLICIES

STUDENTS REQUIRING ACCOMODATIONS: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

COURSE EVALUATION: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

UNIVERSITY HONESTY POLICY: UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

SOFTWARE USE: All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

STUDENT PRIVACY: There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

NETIQUETTE – Communication Courtesy: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions, and chats. The first instance of clearly rude and/or inappropriate behavior will result in a warning. The second instance will result in a deduction of five percentage points from your overall grade. The third instance will result in a drop of a letter grade (A to B, A- to B-, and so on). Learn more about netiquette here.

GETTING HELP: For issues with technical difficulties for E-learning in Canvas, please contact the UF Help Desk at:
- learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

Any requests for make-ups due to technical issues must be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You must e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up/extension.

Other resources are available at http://www.distance.ufl.edu/getting-help for:
- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Should you have any complaints with your experience in this course please visit the Distance Learning website to submit a complaint.

Course|Modify for request 20102

Info

Request: PHA 6746 Patient Education and Communication in the Era of Precision Medicine - credits update
Description of request: Request to modify PHA6746 from 1 credit course to 3 credit course.
Submitter: Meghan Lopez meghanlopez@ufl.edu
Created: 6/28/2024 4:29:14 PM
Form version: 1

Responses

Current Prefix
Enter the current three letter code (e.g., POS, ATR, ENC).

> Response:
> PHA

Course Level
Select the current one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.).
* *

> Response:
> 6

Lab Code
Enter the current lab code. This code indicates whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

> Response:
> None

Number
Enter the current three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles.

> Response:
> XXX

Course Title
*Enter the current title of the course as it appears in the Academic Catalog.There is a 100 character limit for course titles. *

> Response:
> Patient Education and Communication in the Era of Precision Medicine

Effective Term

Select the requested term that the course change(s) will first be implemented. Selecting "Earliest" will allow the change to be effective in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's expectations. Courses cannot be changed retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires at least 6 weeks after approval of the course change at UF.

Response:
Earliest Available

Effective Year

Select the requested year that the course change will first be implemented. See preceding item for further information.

Response:
2025

Requested Action

Indicate whether the change is for termination of the course or any other change. If the latter is selected, all of the following items must be completed for any requested change.

Response:
Other (selecting this option opens additional form fields below)

Change Course Prefix?

Response:
No

Change Course Level?

Response:
No

Change Course Number?

Response:
No

Change Lab Code?

Response:
No

Change Course Title?

Response:
No

Change Transcript Title?
*If changing the course title a new transcript title is also required. *

Response:
No

Change Credit Hours?

Response:
Yes

Current Credit Hours

Response:
1

Proposed Credit Hours

Response:
3

Change Variable Credit?

Response:
No

Change S/U Only?

Response:
No

Change Contact Type?

Response:
No

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Change Rotating Topic Designation?

Response:
No

Change Repeatable Credit?

Response:
No

Multiple Offerings in a Single Semester
Can this course be taken by a student multiple times in the same semester?

Response:
No

Change Course Description?

Response:
No

Change Course Objectives

Response:
No

Change Prerequisites?

Response:
No

Change Co-requisites?

Response:
No

Rationale
Please explain the rationale for the requested change.

Response:
Requesting to change "Patient Education and Communication in the Era of Precision Medicine Course" from 1 credit to 3 credits, as a 3 credit course is more useful for students to complete their program with the required number of credits, and the course was able to be made more robust, educational, and useful to students with the addition of new lectures, materials, and assignments.

PHA6746 Patient Education and Communication in the Era of Precision Medicine

PHA6746 Patient Education and Communication in the Era of Precision Medicine (3 Cr Hr.)
Location: Canvas, Asynchronous

Course Coordinator(s):
Rachel Shaddock, PharmD
Department of Clinical Toxicology
University of Florida College of Pharmacy
E-mail: rshaddock@cop.ufl.edu

Office Hours: on request

Pre-Requisites:
GMS 6224 – Foundations in Precision Medicine: Medical Molecular Genetics
PHA 6935 – Foundations in Precision Medicine: Principles of Pharmacogenomics and Genomic Technologies
PHC 6598 – Foundations in Precision Medicine: Genetic Epidemiology

Co-Requisites:
None

Relation to Program Outcomes:
This 3-credit course is an elective course for the Precision Medicine Graduate Certificate Program, and covers information pertaining to the following overarching program competency:
- Develop and communicate specific, cost-effective solutions for a problem/case that incorporates precision medicine data, available genomic technologies, and patient-specific information across a broad range of conditions.
- Apply current and emerging developments in genomics, informatics, and value-based medicine to integrate genomic medicine into participant practice.

Course Objectives

Requirements and strategies for patient education in precision medicine are rapidly changing due to emerging technologies, new types of testing, and increasing availability to generalist providers. The course content will focus on emerging issues in patient education and communication in precision medicine. Topics include review of traditional and emerging models of patient education in genetic testing, workforce educational needs and strategies, implications and communication strategies for areas of uncertainty (e.g., variants of unknown significance, test reimbursement), essential topics and strategies to consider for patient diversity and health disparities, and legal and ethical issues in patient education and communication in precision medicine.

Upon completion of this course, the student will be able to:
1. Summarize the role of patient education in genetic and genomic testing.
2. Describe traditional and emerging models of patient communication regarding genetic test results.

3. Identify workforce educational needs and strategies to support awareness and use of best practices in patient education for clinical genomics.
4. Identify patient educational needs with varying types of genetic and genomic tests.
5. Describe needs and strategies when communicating with patients about areas of uncertainty in genetic and genomic testing.
6. Discuss the impact of racial and ethnic diversity and the role of health disparities in precision medicine.
7. Identify legal and ethical issues relevant to patient education and communication in precision medicine.
8. Practice identifying and prioritizing key patient discussion topics in variable genomic testing circumstances.

Instructional Method

This is an online course that includes viewing of recorded lectures, quizzes, completion of written assignments, and participation in an asynchronous discussion board. Students will independently view recorded lectures and complete assigned readings. Then, the student will complete an online quiz to assess understanding of the material and also complete an assignment. Following the deadline for submitting the assignments, the instructor will grade the assignments and then post additional information on a discussion board thread to assist students in further understanding the course materials. Students are then expected to contribute to the discussion/questions posed by the instructor. Throughout all of these learning activities, the instructor is available to clarify information via discussion board postings.

Materials and Supply Fees

Please review the syllabus specific to this class for any required, recommended, or suggested reading materials.

Use UF VPN to access UF Libraries Resources when off-campus. **Please note that students enrolled in our partner universities will not have access to the UF library resources and you need to utilize the library through your home institution.**

The UF HSC library staff can assist you with questions or issues related to accessing online library materials. For assistance contact your College of Pharmacy librarian or visit the HSC Library Website at this URL:http://www.library.health.ufl.edu/

For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - ahc-dess@ufl.edu

Required Materials: Students must comply with the UF Computer and Software Requirement. Please see the website of your respective program for further information.

PHA6746 Patient Education and Communication in the Era of Precision Medicine

Course Materials and Technology

Recommended Textbooks and Software
There is no required textbook or software for this course. Journal articles, class notes developed by the instructor, or other required reading/resources will be provided to students through the course website.

For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - ahc-dess@ufl.edu

Course Schedule

Module Topics

Date	Activity/Assessment		Contact Hour
	Week 1 Introduction to Patient Education and Counseling in Precision Medicine		
	Lecture	**Introduction to Patient Education and Counseling in Precision Medicine** Rachel Shaddock, PharmD	**1 hr**
	Required Readings	- Denny JC, Collins FS. Precision medicine in 2030-seven ways to transform healthcare. Cell. 2021 Mar 18;184(6):1415-1419. doi: 10.1016/j.cell.2021.01.015. PMID: 33740447; PMCID: PMC9616629. *Supplemental:* Ginsburg GS, Phillips KA. Precision Medicine: From Science To Value. Health Aff (Millwood). 2018 May;37(5):694-701. doi: 10.1377/hlthaff.2017.1624. PMID: 29733705; PMCID: PMC5989714.	**1 hr**
	Discussion Board Intro	**Personal Introduction Discussion Board Activity** due XXXX at 11:59pm EST	
	Discussion Board	**Week 1 Discussion Board Activity** due XXXX at 11:59pm EST	**0.5 hr**
	Week 2 The Role of Patient Education in Precision Medicine		
	Lecture	**Genetics in Clinical Medicine: The Role of Patient Education** Rachel Shaddock, PharmD	**0.75 hr**

	Video	**Making Sense of Genetic Test Results**	**(included in 0.75 above)**
	Required Readings	● [Domchek S.M., & Jameson J, & Miesfeldt S (2022). The practice of genetics in clinical medicine. Loscalzo J, & Fauci A, & Kasper D, & Hauser S, & Longo D, & Jameson J(Eds.), *Harrison's Principles of Internal Medicine, 21e*. McGraw-Hill Education. https://accessmedicine.mhmedical.com/content.aspx?bookid=3095&sectionid=264099158](#) ● ["Selecting and Ordering a Lab Test." *Precision Medicine: A Guide to Genomics in Clinical Practice* Eds. Jeanette J. McCarthy, and Bryce A. Mendelsohn. McGraw-Hill Education, 2016, https://accessmedicine.mhmedical.com/content.aspx?bookid=1930&sectionid=140197377.](#)	**1.0 hr**
	Assignment	**Week 2 Assignment** due XXXX at 11:59pm EST	**1.0 hr**
	Quiz	**Week 2 Quiz** due XXXX at 11:59pm EST	**0.25 hr**
Week 3 Inclusive Patient Communication		
	Lecture	**Strategies for Inclusive Patient Communication** TBD	**1 hr**
	Required Readings	● [Marjadi B, Flavel J, Baker K, Glenister K, Morns M, Triantafyllou M, Strauss P, Wolff B, Procter AM, Mengesha Z, Walsberger S, Qiao X, Gardiner PA. Twelve Tips for Inclusive Practice in Healthcare Settings. Int J Environ Res Public Health. 2023 Mar 6;20(5):4657. doi: 10.3390/ijerph20054657. PMID: 36901666; PMCID: PMC10002390.](#) ● ["Inclusive Communication Key Principles." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 2 Aug. 2022. Available at: www.cdc.gov/healthcommunication/Key_Principles.html.](#)	**1 hr**
	Assignment	**Week 3 Assignment** due XXXX at 11:59pm EST	**1 hr**
Week 4 Motivational Interviewing Part 1		
	Lecture	**An Introduction to Motivational Interviewing Part 1**	**0.75 hr**

		Teresa Roane, PharmD, MBA, BCACP	
	Required Readings	● J. Sherman, Justin. "Chapter 3. Counseling and Motivational Interviewing." *Community and Clinical Pharmacy Services: A Step-by-Step Approach* Eds. Ashley W. Ellis, and Justin J. Sherman. The McGraw-Hill Companies, 2013, https://accesspharmacy.mhmedical.com/content.aspx?bookid=684&sectionid=45145838. ● Hermansen-Kobulnicky, Carol J. "Oral and Nonverbal Communication in Medication Therapy Management." *Medication Therapy Management: A Comprehensive Approach* Eds. David M. Angaran, and Karen Whalen. McGraw-Hill Education, 2015, https://accesspharmacy.mhmedical.com/content.aspx?bookid=1079&sectionid=61424028.	**1.75 hr**
	Quiz	**Week 4 Quiz** due XXXX at 11:59pm EST	**0.5 hr**
Week 5 Motivational Interviewing Part 2		
	Lecture	**An Introduction to Motivational Interviewing Part 2**	**1 hr**
	Required Reading	● Spector, A., Ash, E., Garland, B., McLaughlin, R., Ritenour, A., Gonynor, C., & Riconda, D. (2022). Perceptions of motivational interviewing in genetic counseling practice and training. *Journal of Genetic Counseling*, 31, 1173–1182. https://doi.org/10.1002/jgc4.1588	**1 hr**
	Assignment	**Week 5 Assignment** due XXXX at 11:59pm EST	**1 hr**
Week 6 The Patient's Perspective Part 1		
	Lecture	**Precision Medicine Education:The Patient's Perspective** Kristin Wiisanen, PharmD, FAPhA	**0.75 hr**
	Required Readings	● Haga SB, Mills R, Bosworth H. Striking a balance in communicating pharmacogenetic test results: promoting comprehension and minimizing adverse psychological and behavioral response. Patient Educ Couns. 2014 Oct;97(1):10-5. doi: 10.1016/j.pec.2014.06.007. Epub 2014 Jun 21. PMID: 24985359; PMCID: PMC4162835. ● *Supplemental:* Veilleux S, Bouffard M, Bourque Bouliane M. Patient and Health Care	**1 hr**

		[Provider Needs and Preferences in Understanding Pharmacogenomic and Genomic Testing: A Meta-Data Analysis. Qual Health Res. 2020 Jan;30(1):43-59. doi: 10.1177/1049732319858325. Epub 2019 Jul 19. PMID: 31322055.](#)	
	Assignment	**Week 6 Assignment** due XXXX at 11:59pm EST	**1 hr**
Week 7- The Patient's Perspective Part 2		
	Lecture	**Patient Facing Education Materials** TBD	**0.5 hr**
	Required Readings	• [Wynn RM, Adams KT, Kowalski RL, Shivega WG, Ratwani RM, Miller KE. The Patient in Precision Medicine: A Systematic Review Examining Evaluations of Patient-Facing Materials. J Healthc Eng. 2018 Sep 3;2018:9541621. doi: 10.1155/2018/9541621. PMID: 30250657; PMCID: PMC6140003.](#) • [Asiedu GB, Finney Rutten LJ, Agunwamba A, Bielinski SJ, St Sauver JL, Olson JE, Rohrer Vitek CR. An assessment of patient perspectives on pharmacogenomics educational materials. Pharmacogenomics. 2020 Apr;21(5):347-358. doi: 10.2217/pgs-2019-0175. Epub 2020 Apr 15. PMID: 32292118; PMCID: PMC7197106.](#) • ***Supplemental:*** [Hernan R, Cho MT, Wilson AL, Ahimaz P, Au C, Berger SM, Guzman E, Primiano M, Shaw JE, Ross M, Tabanfar L, Chilton I, Griffin E, Ratner C, Anyane-Yeboa K, Iglesias A, Pisani L, Roohi J, Duong J, Martinez J, Appelbaum P, Klitzman R, Ottman R, Chung WK, Wynn J. Impact of patient education videos on genetic counseling outcomes after exome sequencing. Patient Educ Couns. 2020 Jan;103(1):127-135. doi: 10.1016/j.pec.2019.08.018. Epub 2019 Aug 24. PMID: 31521424; PMCID: PMC9667716.](#)	**2 hr**
	Discussion Board	**Week 7 Discussion Board Activity** due XXXX at 11:59pm EST	**0.5 hr**
Week 8 Identifying Patient Educational Needs for Various Genetic and Genomic Tests Part 1		
	Lecture	**Genomic Medicine: The Ethics of Incidental and Secondary Findings**	**0.5 hr**

		Pamela Trapane, MD	
	Required Readings	- Lee SS. The Ethics of Consent in a Shifting Genomic Ecosystem. Annu Rev Biomed Data Sci. 2021 Jul 20;4:145-164. doi: 10.1146/annurev-biodatasci-030221-125715. PMID: 34465167; PMCID: PMC8683157. - Miller DT, Lee K, Chung WK, Gordon AS, Herman GE, Klein TE, Stewart DR, Amendola LM, Adelman K, Bale SJ, Gollob MH, Harrison SM, Hershberger RE, McKelvey K, Richards CS, Vlangos CN, Watson MS, Martin CL; ACMG Secondary Findings Working Group. ACMG SF v3.0 list for reporting of secondary findings in clinical exome and genome sequencing: a policy statement of the American College of Medical Genetics and Genomics (ACMG). Genet Med. 2021 Aug;23(8):1381-1390. doi: 10.1038/s41436-021-01172-3. Epub 2021 May 20. Erratum in: Genet Med. 2021 Aug;23(8):1582-1584. doi: 10.1038/s41436-021-01278-8. PMID: 34012068. *Supplemental:* Saelaert M, Mertes H, Moerenhout T, De Baere E, Devisch I. Ethical values supporting the disclosure of incidental and secondary findings in clinical genomic testing: a qualitative study. BMC Med Ethics. 2020 Jan 30;21(1):9. doi: 10.1186/s12910-020-0452-0. PMID: 32000764; PMCID: PMC6990492.	**2.0 hr**
	Quiz	**Week 8 Quiz** due XXXX at 11:59pm EST	**0.5 hr**
Week 9 Identifying Patient Educational Needs for Various Genetic and Genomic Tests Part 2		
	Lecture	**Discussion of Emerging ELSI Issues in Precision Medicine** Lauren Solberg, JD,MTS	**0.25 hr**
	Required Readings	"Crosscutting Ethical Issues." *Precision Medicine: A Guide to Genomics in Clinical Practice* Eds. Jeanette J. McCarthy, and Bryce A. Mendelsohn. McGraw-Hill Education, 2016, https://accessmedicine.mhmedical.com/content.aspx?bookid=1930&sectionid=140197845. - Pullman D, Etchegary H. Ethical, Legal, and Social Issues (ELSI) in Clinical Genetics	**2.0 hr**

		Research. Methods Mol Biol. 2021;2249:65-82. doi: 10.1007/978-1-0716-1138-8_5. PMID: 33871839. ● Majumder MA, Guerrini CJ, McGuire AL. Direct-to-Consumer Genetic Testing: Value and Risk. Annu Rev Med. 2021 Jan 27;72:151-166. doi: 10.1146/annurev-med-070119-114727. Epub 2020 Jul 31. PMID: 32735764.	
	Discussion Board	**Week 9 Discussion Board Activity** due XXXX at 11:59pm EST	**0.5 hr**
		Week 10 Digital Patient Communication and Education	
	Lecture	**Digital Patient Communication and Education** TBD	**1 hr**
	Required Readings	● Kathy L. Rush, Linda Hatt, Robert Janke, Lindsay Burton, Matthew Ferrier, Meghan Tetrault. The efficacy of telehealth delivered educational approaches for patients with chronic diseases: A systematic review, Patient Education and Counseling, Volume 101, Issue 8, 2018, Pages 1310-1321, ISSN 0738-3991, https://doi.org/10.1016/j.pec.2018.02.006. ● Budd G, Griffiths D, Howick J, Vennik J, Bishop FL, Durieux N, Everitt HA. Empathy in patient-clinician interactions when using telecommunication: A rapid review of the evidence. PEC Innov. 2022 Dec;1:100065. doi: 10.1016/j.pecinn.2022.100065. Epub 2022 Jul 16. PMID: 35996734; PMCID: PMC9385203.	**1.5 hr**
	Discussion Board	**Week 10 Discussion Board** due XXXX at 11:59pm EST	**0.5 hr**
		Week 11-NEW Health Literacy	
	Lecture	**Precision Medicine Health Literacy** TBD	**1 hr**
	Required Readings	● Roundtable on Health Literacy; Board on Population Health and Public Health Practice; Health and Medicine Division; National Academies of Sciences, Engineering, and Medicine. Relevance of Health Literacy to Precision Medicine: Proceedings of a Workshop. Washington (DC): National Academies Press (US); 2016 Apr 11. 2, Genetic Literacy. Available from:	**1 hr**

		https://www.ncbi.nlm.nih.gov/books/NBK396118/ ● Roundtable on Health Literacy; Board on Population Health and Public Health Practice; Health and Medicine Division; National Academies of Sciences, Engineering, and Medicine. Relevance of Health Literacy to Precision Medicine: Proceedings of a Workshop. Washington (DC): National Academies Press (US); 2016 Apr 11. 3, The Intersection of Health Literacy and Precision Medicine. Available from: https://www.ncbi.nlm.nih.gov/books/NBK396120/	
	Quiz	**Week 11 Quiz** due XXXX at 11:59pm EST	**0.5 hr**
Week 12 Bridging the Gap of the Educational Needs of the Genetic Workforce Part 1		
	Lecture	**Educational Needs of Clinicians, Researchers, and the Genetics Workforce** Rachel Shaddock, PharmD	**0.5 hr**
	Required Readings	● "The People in Your Neighborhood." *Precision Medicine: A Guide to Genomics in Clinical Practice* Eds. Jeanette J. McCarthy, and Bryce A. Mendelsohn. McGraw-Hill Education, 2016, https://accessmedicine.mhmedical.com/content.aspx?bookid=1930&sectionid=140197765. ● Houwink, E.J., van Luijk, S.J., Henneman, L. *et al.* Genetic educational needs and the role of genetics in primary care: a focus group study with multiple perspectives. *BMC Fam Pract* 12, 5 (2011). https://doi.org/10.1186/1471-2296-12-5	**1.25 hr**
	Discussion Board	**Week 12 Discussion Board** due XXXX at 11:59pm EST	**0.5 hr**
	Quiz	**Week 12 Quiz** due XXXX at 11:59pm EST	**0.25 hr**
Week 13 Bridging the Gap of the Educational Needs of the Genetic Workforce Part 2		
	Lecture	**Workforce Educational Strategies for the Era of Precision Medicine: Bridging the Gap** Kristin Wiisanen, PharmD, FAPhA	**0.5 hr**
	Required Readings	● Paneque, M., Turchetti, D., Jackson, L. *et al.* A systematic review of interventions to provide genetics education for primary care. *BMC Fam*	**1.0 hr**

		Pract 17, 89 (2016). https://doi.org/10.1186/s12875-016-0483-2 ● ***Supplemental:***Bowdin S, Gilbert A, Bedoukian E, Carew C, Adam MP, Belmont J, Bernhardt B, Biesecker L, Bjornsson HT, Blitzer M, D'Alessandro LC, Deardorff MA, Demmer L, Elliott A, Feldman GL, Glass IA, Herman G, Hindorff L, Hisama F, Hudgins L, Innes AM, Jackson L, Jarvik G, Kim R, Korf B, Ledbetter DH, Li M, Liston E, Marshall C, Medne L, Meyn MS, Monfared N, Morton C, Mulvihill JJ, Plon SE, Rehm H, Roberts A, Shuman C, Spinner NB, Stavropoulos DJ, Valverde K, Waggoner DJ, Wilkens A, Cohn RD, Krantz ID. Recommendations for the integration of genomics into clinical practice. Genet Med. 2016 Nov;18(11):1075-1084. doi: 10.1038/gim.2016.17. Epub 2016 May 12. PMID: 27171546; PMCID: PMC5557020.	
	Assignment	**Week 13 Assignment** due XXXX at 11:59pm EST	**2.0 hr**
Week 14-NEW Bridging the Gap of the Educational Needs of the Next Generation of Health Care Providers		
	Lecture	**Educational Strategies to Prepare Future Health Care Providers for Precision Medicine** TBD	**1.0 hr**
	Required Readings	● Shatnawi A, Khanfar NM, Latif DA, Shear M. A comparative study of the depth, breadth, and perception of pharmacogenomics instruction in a subgroup of US pharmacy curricula. Curr Pharm Teach Learn. 2019 May;11(5):476-484. doi: 10.1016/j.cptl.2019.02.010. Epub 2019 May 3. PMID: 31171249. ● Wu JQ, Wang MZ, Bates J, Shaddock RE, Wiisanen K. Pharmacogenomics education strategies in the United States pharmacy school curricula. Curr Pharm Teach Learn. 2024 Mar;16(3):221-230. doi: 10.1016/j.cptl.2023.12.029. Epub 2024 Jan 27. PMID: 38281827.	**1.5 hr**
	Discussion Board	**Week 14 Discussion Board Activity** due XXXX at 11:59pm EST	**0.5 hr**
Week 15 Capstone Project		
	Required Readings	● US Preventive Services Task Force; Owens	**2.0 hr**

		DK, Davidson KW, Krist AH, Barry MJ, Cabana M, Caughey AB, Doubeni CA, Epling JW Jr, Kubik M, Landefeld CS, Mangione CM, Pbert L, Silverstein M, Simon MA, Tseng CW, Wong JB. Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA-Related Cancer: US Preventive Services Task Force Recommendation Statement. JAMA. 2019 Aug 20;322(7):652-665. doi: 10.1001/jama.2019.10987. Erratum in: JAMA. 2019 Nov 12;322(18):1830. doi: 10.1001/jama.2019.17850. PMID: 31429903. ● Domchek S, Robson M. Broadening Criteria for BRCA1/2 Evaluation: Placing the USPSTF Recommendation in Context. JAMA. 2019 Aug 20;322(7):619-621. doi: 10.1001/jama.2019.9688. PMID: 31429878.	
Capstone Assignment	**Week 15 Capstone Assignment** due XXXX at 11:59pm EST	**2 hr**
Discussion Board	**Week 15 Discussion Board Activity** due XXXX at 11:59pm EST	**0.5 hr**

Course Assignments

Assignments: Each module includes an assignment that has a due date posted on the Course Calendar. While we understand that our students have other work and personal commitments, we expect every effort to be made to meet these deadlines. If for some reason, because of extenuating circumstances beyond your control, you are unable to meet an assignment deadline, students should message the professor **PRIOR TO THE DATE THE ASSIGNMENT IS DUE** and explain the situation in advance. If no prior communication occurred, the instructor may deduct points for late submission at their discretion or as stated in the course overview and/or communicated via the discussion board. Being consistently late in submitting assignments disrupts the discussion of topics on the bulletin board and will therefore result in loss of marks for that assignment up to a full letter grade. If you message us, we will work with you around the deadline.
If you have outstanding assignments as we near the end of the semester, we will send you a follow up email as a reminder and to determine your plans for completion. If you do not respond to us before the final day of classes, you will be assigned a grade based on the completed assignments.

Discussion Board:
Throughout the course, students will be required to complete Discussion Board Activities. Students will be asked to answer a question based on the topics covered in that week's lecture and readings. Students should use primary literature to support their arguments and should interpret the information available to synthesize an opinion prior to posting their answer. Students are encouraged to interact with each other's posts and provide thoughtful questions and re-interpretation of their classmates' opinions and analysis. A grading rubric is provided in **Appendix A**.

Quizzes:
Throughout the course, students will be required to complete brief quizzes. Any content covered in lectures or readings may be included on the quiz. All quizzes will be open-material with no time limit to be completed prior to the due date.

Assignments:
Throughout the course, students will be required to complete assignments with a focus on patient education in precision medicine, including the final Capstone assignment (Week 15). Students will be asked to complete an assignment based on the topics covered in that week's lecture and readings. Assignment details and requirements will vary by week, however, students should use primary literature to support their work. Students are expected to provide full citations for works referenced. A grading rubric is provided in **Appendix B**.

Retaining Course Materials

As you go through the semester, keep copies of important emails, discussion bulletins and assignments you may use for revision as these will be purged from the course at the end of the semester. We recommend you make a copy of the course modules since this will be the only access you will get to these materials. We will not be able to provide you with copies of course content once the course is removed from your account. If this class is a core-class for your MS program (one that you will be tested on in the cumulative final exam given in special topics) it is especially important that you keep the notes for review later.

Academic Requirements and Grading

Grading Policy
For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at:https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Most courses do not have a midterm or final exam, although this course may incorporate one, so be sure to review the specific requirements for this class. Students are evaluated continuously throughout the semester and graded according to their performance in the assignments and quizzes/exam (if quizzes/exam are present). All modules have a written assignment, and some classes have timed quizzes that must be completed by the assignment deadline for the corresponding module. **Please review the portion of this**

syllabus specific to this class (found on the homepage of your class within Canvas) to review the requirements of your class, as it may differ from the above.

All written assignments must be completed in your own words. Cutting and pasting from the internet is not acceptable and may be plagiarism. Failure to complete an assignment in your own words may result in you receiving a score of zero for the written assignment. All assignments should be written in your own words and referenced appropriately. This class may have a Plagiarism module associated with it, and this module must be viewed prior to opening module 1.

For courses that have timed quizzes: if you lose your internet connection during your quiz and scores are not recorded simply email us and we can help you.
Assignments should be submitted using the assignment submission tool. If you have difficulty submitting an assignment, message your instructor and teaching assistant - we will work with you to troubleshoot the problem. Assignment feedback will also be provided via the assignment tool, so students should check back to the appropriate module to receive feedback and the assignment grade.

Always keep a copy of your course assignments in case you need to resend it. Also, you may want it for revision purposes later.

For Assignment deadlines - see the course calendar.
For other important dates, consult the UF Calendar of Critical Dates and http://www.registrar.ufl.edu

Evaluation of Grades
Students will be graded on written assignments and module quizzes (when included in the course). The final grade will be based on the student's cumulative number of points earned divided by the total number of available points. The resulting percentage will be converted to a letter grade based on the grading scale below this section. If a final exam is included for the class, that score will also be incorporated into your final grade.

Below is an example of a class that shows how your final grade would be calculated (this is for all classes where the final grade will be based on the student's cumulative number of points earned divided by the total number of available points):

Requirement	Points Each	Total Points	Percent Weighting
Quizzes (N=5)	100	500	30%
Discussion Board Assignments (N=7) (Rubric is in **Appendix A**)	6	42	40%
Assignments (N=6) (Rubric is in **Appendix B**)	100	600	30%
		1142	100%

Students will receive individual feedback on points lost on the assignments. The comments of the TA or professor can be viewed on the assignment submission page for the corresponding module. Assignments are

not able to be resubmitted for a re-grade after receiving feedback; the feedback is given for learning purposes and not so that students can re-do and re-submit assignments.

Students can check their progress in the course by viewing their grade records via the course interface. Internationally registered student grades will be assigned as per the policies and procedures within your university.

<u>Note</u>: **For students enrolled through WSU, the overall percentage mark for the unit will be converted to a WSU grade in accordance with the information provided on the course WSU site**

Grades will be assigned as follows:

Grade	Percent	Grade Points
A	90% or Above	4.0
A-	88-89%	3.76
B+	85-87%	3.33
B	80-84%	3.00
B-	78-79%	2.76
C+	75-77%	2.33
C	70-74%	2.00
C-	68-69%	1.67
D+	65-67%	1.33
D	60-64%	1.00
D-	58-59%	0.67
E	< 58%	0.00

Assignments: Each module includes an assignment that has a due date posted on the Course Calendar. While we understand that our students may have work and other personal commitments, we expect every effort to be made to meet these deadlines. If for some reason, because of extenuating circumstances beyond your control, you are unable to meet an assignment deadline, students should message the professor **PRIOR TO THE DATE THE ASSIGNMENT IS DUE** and explain the situation in advance; it is then at the discretion of the instructor as to if they will grant the extension with no penalty marks added. If you have an emergency where you cannot email the instructor prior to the deadline, you must contact the instructor as soon as you are able to explain your situation.

If no extension was requested or if the extension request is not granted, the instructor will deduct points as follows:

Amount of time past the deadline	Amount to be deducted for late submissions (in addition to grading point deductions)	Notes
12 am – 8 am (EST)	0.5 points	This deduction will incur if the assignment is past the posted deadline of 11:59 pm EST, regardless of the time zone in which you are located

1 day (from 8 am EST – 11:59 pm)	5% deduction	% deductions are a % of the total number of points for which the assignment is worth (for example, 5% of a 30-point assignment would be 1.5 points deducted.
2 days to 1 week late	10% deduction	
1 week to 2 weeks late	20% deduction	
2 weeks to 3 weeks late	30% deduction	
3 weeks to 4 weeks late	40% deduction	
4 weeks to 5 weeks late	50% deduction***	*** this is the maximum deduction regardless of when it is submitted, from 4 weeks past the due date to the last day for submissions in the semester.

Being consistently late in submitting assignments disrupts the course. If you have outstanding assignments as we near the end of the semester, we will send you a follow up email as a reminder and to determine your plans for completion. If you do not respond to us before the final day of classes, you will be assigned a grade based on the completed assignments.

Makeup Policy: Assignments submitted late may be accepted depending on circumstances (see UF official attendance policy above). Note that some assignments are time limited because there is release of an answer to all after the deadline. In this case, no late assignment can be accepted unless the absence is excused. Points may be deducted for consistently late submissions but we would be very keen to ensure we have a discussion with you to explore why the problem has arisen. Make up assignments are not usually given, but may be at the discretion of the course instructor after evaluation of the circumstances leading to the request.

Grade Changes: Grades will be changed only when a grading error has been made. If you think an error has been made, you should message the instructor or TA as soon as possible. Your entire assignment will then be re-graded if the instructor determines that an error has been made.

Incomplete grades: Under special circumstances, if a student is unable to finish a course before the end of the semester, we may be able to assign an incomplete grade. An incomplete grade is a non-punitive grade assigned at the discretion of the course instructor. In this course an incomplete grade may be assigned if a third or more of the course assignments have been completed and if the student has remained in communication with TA's and instructors throughout the course and has made an effort to request an incomplete grade. If an incomplete grade is assigned, outstanding assignments and quizzes must be completed by the end of the next semester that the course is offered. If the assignments are not completed in the next term that the course runs, you will be assigned a grade based on the completed assignments. If you are scheduled to graduate the term after this semester, you are not eligible for an incomplete. Please email your instructor for more information. Students in our partner universities are not eligible for an incomplete and should contact their home institution to see the options available to them.

Instructional Policies

This course is part of the distance education program at the University of Florida. Instead of traditional lecture format, the medium for communication between course instructors, teaching assistants and students will be via Canvas, a user-friendly web-based classroom management tool, by utilizing the course functions. There are not times at which the entire class meets at a specific time or zoom sessions (unless indicated by your instructor). Due to the nature and size of our program, individual zoom sessions or phone calls are not routinely utilized by our teaching staff. Instructors and TAs are always available via the course messaging system and provide a quick turnaround time to messages.

Policy Related to Required Course Participation
Students are expected to constructively join in discussions, with appropriate preparation; to post interesting and relevant information on the class discussion board when indicated, and to interact professionally and respectfully with their classmates. Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar. Students must not assume they will be automatically dropped if they fail to participate in the course learning activities.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Attendance: There is no formal process for taking attendance in this online course. This course is 100% asynchronous and there are no live meeting times. Once a topic module is released students can login and work on their course assignments, readings and quizzes as they require to meet the required assignment and quiz deadlines. However, students are expected to check the discussion boards and messaging system daily to make sure they keep up to date with any course or deadline changes, or instructor/TA direct messages.

Students are responsible for meeting all academic assignment due dates and objectives as defined by the instructor. In general, acceptable reasons for not meeting objectives from class include illness, serious family emergencies, special curricular requirements, military obligation, severe weather conditions, religious holidays, and participation in official University activities. Excused absences must be consistent with university policies in the Graduate Catalog and require appropriate documentation. Additional information can be found in Attendance Policies.

Class Participation: Students are expected to constructively join in discussions, with appropriate preparation; to post interesting and relevant information on the class discussion board when indicated, and to interact professionally and respectfully with their classmates.

Performance Expectations: Students are expected to produce quality work of a standard comparable to any graduate level didactic course. Discussion postings and discussions must be legible, constructive, and appropriate. Students will be expected to complete assignments that require the application of logic and

reasoning skills and appropriate research when the answer may not be found in a book or the course notes. Students should expect to perform research outside of the material presented in the class (utilizing either e-journals or the internet) to assist them with completing assignments. If a text is required for this class, students are expected to have access to it for successful completion of assignments.

Dropping a Course: UF Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar (Consult the UF Calendar of Critical Dates at UF Calendar of Critical Dates). Students must not assume they will be automatically dropped if they fail to participate in the course learning activities. Deleting yourself from the course roster does not officially withdraw you from a course. Please email DESS at ahc-dess@ufl.edu if you wish to withdraw from your class.

Students from partner universities must contact their school to determine how/if they can drop a class.

Communication

Communication Guidelines: In all course communications including emails and treaded discussions, students are expected to follow Netiquette Guidelines. These guidelines promote an environment that encourages everyone to ask questions and learn from each other. Discussion board posts that are not respectful of other opinions discourage a positive learning environment. The following link provides these guidelines:
https://teach.ufl.edu/wp-content/uploads/2020/04/NetiquetteGuideforOnlineCourses.docx

Communication is a central part of all our courses. Please take advantage of the in-course email messaging system (Inbox) and Discussion board. You should message us with private questions and concerns as well as assignment questions and information; additionally, be sure to check the discussion board daily for class-wide updates and topic discussions. We want to provide all our students with the best opportunity to learn and are always available to answer your questions.

EMAIL

The course Inbox feature (found on the left-hand side of your screen when you log in), not the discussion board, should always be used to contact the faculty or teaching assistant if you have a problem of a personal nature. It is your responsibility to know who the instructor and/or teaching assistant(s) are for your class. **Do not choose the option of sending your email within the class to "all" instructors**, as there are staff members from our administrative team listed that cannot assist you with course questions (and are only listed there for administrative purposes).

If you are having technical problems with the course content (downloads, etc.) or you are unable to access your course interface, please contact us directly via the "Inbox" email, and do not spend hours trying to get something to work as this will only lead to frustration. We do not want any of you to be offline for any length of time. Contact us as soon as you can so we can check it out and help you. If you are having trouble with your access to your course and cannot access the inbox course messaging system, please email your course instructor directly via regular email. In that email, make sure you give your name and the name of your course. External instructor email addresses are listed for each course separately on the homepage of the course.

Please respond to all messages from your instructor or TA. We are usually contacting you because we want to help you.

DISCUSSION FORUM

The course Discussion board can be used to post content related questions and assignment materials when requested. Please do not use the discussion forum to ask specific questions about your current course assignments.

It is VERY important that you read all the discussion bulletins that have been posted. We will use this site to post important information relating to content or quiz changes, deadlines etc. Since postings can accumulate quickly, please login each day to stay on top of these postings or you may miss important information. Some instructors may also use the announcement feature, so be sure to read all announcements as well.

If, as part of an assignment you are asked to make a discussion posting, you do not need to submit the same assignment via the assignment submission tool.

Please be aware that as you read the discussions for this course that there may be sensitive topics covered that could be emotionally triggering. Please remember that our students are a diverse population and that your responses should be crafted with respect and consideration for all audiences. We are aware that some of these topics can be considered controversial and ask that your respond to the subject matter in a thoughtful manner. If you have any questions or concerns, please reach out to your course instructor or advisor.

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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**." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."** It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/, https://graduateschool.ufl.edu/. Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Plagiarism: Plagiarism includes any attempt to take credit for another person's work. This includes quoting directly from a book or web site without crediting the source. Sources should always be referenced or a link to the website added and, where direct quotes have been used, quotation marks must be placed around the quoted material. However, we expect more than simply cutting and pasting in a graduate level course. Students are expected to review, evaluate, and comment on material they research, rather than simply copying relevant material. Your work will be graded accordingly. Extensive quoting of literature, even if references are provided, is not considered your own work, and will hence incur point deductions up to assigning zero points.

Use of Chatbots and Artificial Intelligence (ChatGPT)

Please note that students are not permitted to submit work that has been written using chatbots unless specifically indicated by the course instructor.

"Submission of Academic Work Purchased or Obtained from an Outside Source. A student must not submit as their own work any academic work in any form that the student purchased or otherwise obtained from an outside source, including but not limited to: academic materials in any form prepared by a commercial or individual vendor of academic materials; a collection of research papers, tests, or academic materials maintained by a Student Organization or other entity or person, or any other sources of academic work." Students who submit work, be it an entire paper or even parts of an assignment using Artificial Intelligence technology to formulate their answers will be considered as an honor code violation unless the course instructor specifically allows such uses. If an instructor determines that you have violated the honor code, an official student conduct report may be filed.

Online Faculty Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

In-Class Recoding Policy

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field

trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

SUPPORT SERVICES

Accommodations for Students with Disabilities
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Counseling and Student Health
Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.
- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.
- University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).
- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/

- Crisis intervention is always available 24/7 from:
  Alachua County Crisis Center: (352) 264-6789
  http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:

http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints: View the Distance Learning Student Complaint Process.

Course|New for request 20297

Info

Request: ARC 5XXX Integrated Building Tech 1
Description of request: This is the first integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence.
Submitter: Stephen Bender sbender@ufl.edu
Created: 8/20/2024 8:20:54 AM
Form version: 3

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
ARC

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

Response:
5

Undergraduate students in 5000 level courses
Is this course intended for an audience including undergraduate students?

Response:
No

Rationale for 5000 level course request
Please provide the rationale for submitting this course as a 5000 level course in the space provided below. (i.e. target student audience, program, school). 5000 level courses require joint review and approval by the University Curriculum Committee and Graduate Curriculum Committee or Professional Curriculum Committee.

Response:
This is the first integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Number

Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
None

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.
* *

Response:
Introductory

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Integrated Building Technology 1

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Integrated Building Tech 1

Degree Type
Select the type of degree program for which this course is intended.

Response:

Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Off-Campus, Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit

Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?

Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type

Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type

*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours

Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
3

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
The first course in a multi-year integrated building technology sequence introduces students to the fundamental aspects of building material systems, construction methods and digital design tools, workflows, and representation.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
ARC 5XXX-Graduate Core Studio 1, or department approval

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
None

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
This is the first integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
Course Objectives
•   Understand the fundamental aspects of building material systems
•   Understand the role of digital design tools
•   Develop skills in digital representation methods and output
•   Explore the spatial and tectonic properties of architecture by conducting case study
•   Use digital tools to explore, analyze, and document design ideas present in architecture
•   Demonstrate knowledge and skills by creating a case study report with written and visual content

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Allen, Edward, and Joseph Iano. Fundamentals of Building Construction: Materials and Methods. Sixth edition, Wiley, 2014. ISBN 978-1-118-13891-5
Ching, Francis D. K. Building Construction Illustrated. Fourth or fifth edition, 2014. Print.

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
This course will cover a range of topics and will be delivered in focused, topical modules.

Materials and Methods (Module 1, 5-weeks)
Students are introduced to conceptual frameworks for material investigation, selection, and communication for architecture. Students explore the implications of material decisions in architecture, including embodied carbon. Students evaluate architecture by classification of material configurations: frame and lattice assemblies, solid mass, and groundworks.

Digital (Module 2-3, 10-weeks)
Students are introduced to digital workflows for architecture. Students learn fundamental techniques of architectural representation using digital methods, including image making and editing, 3D surface modeling, 3D solid modeling, digital drafting in 2D and 3D, perspective renderings, layout design and publishing. A case study project carried over from the Materials and Methods Module provides content to learn and apply techniques of digital architectural representation - drawings in plan and section, architectural diagrams and collage renderings. The module culminates in a project presentation layout with title, labels and annotation.

Content Delivery: The modules will be composed of three different methods of content delivery.
• Lectures: present content and issues. Led by module instructors.
• Labs: provide hands-on opportunity to examine, discuss and understand content.
• Workshops: brief intense hands-on sessions to study specific topics within a module.
Workshops occur during lab sessions and include group work.

Materials and Methods Module
Week Class Topic

Assignment/Activity
1   Introduction: Architectural Practice + Materiality, Buildings Contain Knowledge

2   Material Properties and Decisions, Embodied Carbon

assignment due
3   Visual/Compositional analysis, case study method of architecture inquiry
     Cases assigned, Workshop
4   Frame/Lattice Assemblies   assignment due
5   Solid Construction   assignment due

Digital Module
Week   Class Topic   Assignment/Activity
6   Intro to workflow, digital photography   Lab
7   Photoshop: non-destructive editing, layers, collage   Lab, assignment due
8   InDesign: Portfolio Layouts   Workshop, assignment due
9   SketchUp   Lab
10   SketchUp & case study check in   assignment due, workshop
11   Photoshop 3D: Perspective Vignettes   Lab, assignment due
12   Rhino   Lab
13   Rhino & case study check in   assignment due, workshop
14   Illustrator Linework, Diagrams   Lab, assignment due
15   InDesign: sheet layout composition and annotation   Lab, assignment due
16   Summative review   Portfolio due, Workshop

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Methodology
Learning objectives are reinforced through periodic assignments, scaffolded using case study projects.
• Periodic Assignments - Assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. Students are expected to engage IBT topics through prototyping and testing. Final assessment is by the instructor.
• Labs (individual) and Workshops (group): Conducted during class time, labs and workshops provide hands-on opportunity to examine, discuss and understand content. Labs may or may not have deliverables that contribute toward grades – assessed by instructor.
• Quizzes: Periodic quizzes will be given based on assigned reading and prior class lectures - assessed by instructor.
• Case Studies: Each student will conduct a case study of a significant architecture example. Case studies provide content for periodic assignments. Case study research and writing progress is checked periodically.
• Portfolio: Case studies are delivered in the form of a project portfolio containing written and visual content. The content synthesized into the portfolio consists of refined versions of work done

by students for periodic assignments, labs, and workshops, alongside students written case report
- assessed by instructor.

Evaluation of Grades
Assignment   Total Points   Percentage of Final Grade
Periodic Assignments (10) 10@100 each=1000   30%
Lab/Workshop work (10)   10@100 each=1000   30%
Case Study process (2 checks)   2@100 each=200   10%
Portfolio   100   30%
                100%

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
to be determined

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:
Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Response:
Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• *https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx*

Response:
Yes

Course Evaluation Policy
Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• *Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.*

* *

Response:
Yes

ARC 5XXX-Integrated Building Technology 1

Instructor:
Name
Email Address
Office Phone Number
Office Hours: Days of week, hours available, office location

Teaching Assistants:
Please contact through the Canvas website
- Name of TA, email address, office location, office hours
- Name of TA, email address, office location, office hours

Course Description
The first course in a multi-year integrated building technology sequence introduces students to the fundamental aspects of building material systems, construction methods and digital design tools, workflows, and representation.

Rationale and Placement in Curriculum
By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Pre-Requisites / Co-Requisites
Co-Requisite - ARC 5XXX-Graduate Core Studio 1

Course Objectives
- Understand the fundamental aspects of building material systems
- Understand the role of digital design tools
- Develop skills in digital representation methods and output
- Explore the spatial and tectonic properties of architecture by conducting case study
- Use digital tools to explore, analyze, and document design ideas present in architecture
- Demonstrate knowledge and skills by creating a case study report with written and visual content

Materials and Supply Fees
List if applicable

Required Textbooks and Software
Allen, Edward, and Joseph Iano. *Fundamentals of Building Construction: Materials and Methods*. Sixth edition, Wiley, 2014. ISBN 978-1-118-13891-5
Ching, Francis D. K. Building Construction Illustrated. Fourth or fifth edition, 2014. Print.
Additional readings will be provided in the form of a course reader.

Recommended Materials
Hegger, Manfred. Construction Materials Manual. Basel: Birkhäuser, 2006. Print. (eBook available through UF)
Samara, Timothy. Making and Breaking the Grid, Third Edition : A Graphic Design Layout Workshop. Quarto Publishing Group USA, 2023. ISBN: 9780760381946, 0760381941Schittich, Christian, and Florian Musso. Building Simply.

München: Edition Detail, Institut für internationale Architektur-Dokumentation, 2005. Print. (eBook available through UF)

Samara, Timothy. *Making and Breaking the Grid, Third Edition : A Graphic Design Layout Workshop*. Quarto Publishing Group USA, 2023. ISBN: 9780760381946, 0760381941

Course Schedule
This course will cover a range of topics and will be delivered in focused, topical modules.

Materials and Methods (Module 1)
Students are introduced to conceptual frameworks for material investigation, selection, and communication for architecture. Students explore the implications of material decisions in architecture, including embodied carbon. Students evaluate architecture by classification of material configurations: frame and lattice assemblies, solid mass, and groundworks.

Digital (Module 2)
Students are introduced to digital workflows for architecture. Students learn fundamental techniques of architectural representation using digital methods, including image making and editing, 3D surface modeling, 3D solid modeling, digital drafting in 2D and 3D, perspective renderings, layout design and publishing. A case study project carried over from the Materials and Methods Module provides content to learn and apply techniques of digital architectural representation - drawings in plan and section, architectural diagrams and collage renderings. The module culminates in a project presentation layout with title, labels and annotation.

Content Delivery: The modules will be composed of three different methods of content delivery.
- Lectures: present content and issues. Led by module instructors.
- Labs: provide hands-on opportunity to examine, discuss and understand content.
- Workshops: brief intense hands-on sessions to study specific topics within a module. Workshops occur during lab sessions and include group work.

	Week	Readings	Class Topic	Assignment/Activity
Materials and Methods Module	1	XX	Introduction: Architectural Practice + Materiality, Buildings Contain Knowledge	
	2	XX	Material Properties and Decisions, Embodied Carbon	assignment due
	3	XX	Visual/Compositional analysis, case study method of architecture inquiry	Cases assigned, Workshop
	4	XX	Frame/Lattice Assemblies	assignment due
	5	XX	Solid Construction	assignment due

	Week	Readings	Class Topic	Assignment/Activity
Digital Module	6	XX	Intro to workflow, digital photography	Lab
	7	XX	Photoshop: non-destructive editing, layers, collage	Lab, assignment due
	8	XX	InDesign: Portfolio Layouts	Workshop, assignment due
	9	XX	SketchUp	Lab
	10	XX	SketchUp & case study check in	assignment due, workshop
	11	XX	Photoshop 3D: Perspective Vignettes	Lab, assignment due
	12	XX	Rhino	Lab
	13	XX	Rhino & case study check in	assignment due, workshop
	14	XX	Illustrator Linework, Diagrams	Lab, assignment due
	15	XX	InDesign: sheet layout composition and annotation	Lab, assignment due
	16	XX	Summative review	Portfolio due, Workshop

Attendance Policy, Class Expectations, and Make-Up Policy
Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://gradcatalog.ufl.edu/graduate/regulations/
Attendance for all lectures, labs and/or workshops is mandatory, will be taken at the start of meetings, and recorded in canvas. Chronic absences and/or tardiness will have a negative impact on your grade. Tardiness of more than 20 minutes to any lab/lecture will be counted as an unexcused absence. Three or more unexcused absences may result in a full letter-grade reduction in the course. Four unexcused absences can result in failure of the course (see grade breakdown below). Materials covered in the lecture will be tested. If you must miss class, it is your responsibility to notify the instructors in a timely manner, as well as getting the assignments and notes from your classmates.

Evaluation of Grades
Methodology
Learning objectives are reinforced through periodic assignments, scaffolded using case study projects.
- Periodic Assignments - Assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. Students are expected to engage IBT topics through prototyping and testing. Final assessment is by the instructor.
- Labs (individual) and Workshops (group): Conducted during class time, labs and workshops provide hands-on opportunity to examine, discuss and understand content. Labs may or may not have deliverables that contribute toward grades – assessed by instructor.
- Quizzes: Periodic quizzes will be given based on assigned reading and prior class lectures - assessed by instructor.
- Case Studies: Each student will conduct a case study of a significant architecture example. Case studies provide content for periodic assignments. Case study research and writing progress is checked periodically.
- Portfolio: Case studies are delivered in the form of a project portfolio containing written and visual content. The content synthesized into the portfolio consists of refined versions of work done by students for periodic assignments, labs, and workshops, alongside students written case report - assessed by instructor.

Assignment	Total Points	Percentage of Final Grade
Periodic Assignments (10)	10@100 each=1000	30%
Lab/Workshop work (10)	10@100 each=1000	30%
Case Study process (2 checks)	2@100 each=200	10%
Portfolio	100	30%
		100%

UF Coronavirus Policies and Campus Operations
Visit https://coronavirus.ufl.edu/health-guidance/ to stay up to date on UF's COVID related Policies

Attendance Policy, Class Expectations, and Make-Up Policy
Attendance is mandatory. Three or more unexcused absences may result in an administrative drop from the course. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click here to read the university attendance policies.

Grading Policy

		Letter Grade	Numeric Grade	Quality Points	Qualitative Description
PASSING GRADES		A	93 - 100	4.0	Outstanding work only
		A-	90 – 92.9	3.67	Close to outstanding

	B+	87 - 89.9	3.33	Very good work
	B	84 – 86.9	3.0	Good work
	B-	80 – 83.9	2.67	Good work with some problems
	C+	77 - 79.9	2.33	Slightly above average work
	C	74 – 76.9	2.0	Average work
FAILING GRADES	C-	70 - 73.9	1.67	Average work with some problems
	D+	67 - 69.9	1.33	Poor work with some effort
	D	64 - 66.9	1.0	Poor work
	D-	61 - 63.9	0.67	Poor work with some problems
	E	0. - 60.9	0.0	Inadequate work

(Callout pointing to 3.0: "Minimum Cumulative GPA")

More information on UF grading policy may be found at:
UF Graduate Catalog
Grades and Grading Policies

Students Requiring Accommodations
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

Distance Learning Privacy Policy
Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

In-Class Recording
Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not

include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, and exams), field trips, and private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

University Honesty Policy
UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Students in the School of Architecture are expected to adhere to all University of Florida academic honesty policies. Failure to do so will result in lowered grades and/or referral to the University Honor Court. Since the University's policies are necessarily generalized, the School of Architecture further clarifies academic honesty within the specific setting of design education. The following acts are considered to be academic dishonesty:

1. **Plagiarism/misrepresentation**

    There shall be no question of what your work is and what someone else's is. This applies to all aspects of student performance, including but not limited to
    -   CAD drawings and construction details
    -   design guidelines (written and graphic)

    -   design, planning, and management projects or portions of projects

    -   class reports and papers (again, both written and graphic information)

    -   any assignment where sole authorship is indicated, such as take-home tests, individual projects, etc.

    Examples of inappropriate activities include:
    -   copying graphics for a report without crediting the original source

    -   representing someone else's work as your own (using existing CAD construction details, tracing drawings, etc.)

    -   allowing someone else to represent your work as his own

    The importance of precedent and learning from past works is a necessary part of most design processes. Again, it is the intent and degree of "borrowing" ideas that is at question.

    Anything not original must be paraphrased and cited, or quoted; using accepted style formats such as APA, MLA, Chicago Manual of Style, etc. This includes information obtained from the Internet, public documents, graphics, and personal interviews as well as more traditional written sources. Proper crediting of all information that is not

common knowledge is necessary for academic honesty as well as for professionalism. (For example, analysis drawings and/or text should cite the sources from which data was obtained so that if questions arise later, they can be quickly and accurately answered.)

Multiple submissions of the same or similar work without prior approval
If the instructors understand that you are doing a paper associated with your thesis or senior project topic, then doing similar work for two different classes is acceptable—if the instructors agree to it. If a single paper is submitted for one class, then later is submitted for another, and the instructors expect original work, then the multiple submission is inappropriate.

2. **Falsifying information**

   Examples include:

   - misrepresenting reasons why work cannot be done as requested

   - changing or leaving out data, such as manipulating statistics for a research project, or ignoring/hiding inconvenient but vital site information. (However, for educational purposes only, certain aspects of the "real world" may be jointly agreed upon as not being pertinent to the academic goals of the course, such as not dealing with specific project parameters or budget, changing the program, etc.)

   - altering work after it has been submitted

   - hiding, destroying, or otherwise making materials unavailable (hiding reference materials, not sharing materials with other students, etc.)

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

Campus Resources:
> Health and Wellness

U Matter, We Care:
If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: counseling.ufl.edu/cwc, and 392-1575 for information on crisis services as well as non-crisis services; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)
Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints Campus, Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints, View the Distance Learning Student Complaint Process

Orlando Resources

Police / Fire / Medical Emergency – 911
Orlando Police Department Non-Emergency Number: 321.235.5300
Consult CityLab-Orlando Student Resources for Emergency contact information.

Course|New for request 20298

Info

Request: ARC 5XXX Integrated Building Tech 2
Description of request: This is the second integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence.
Submitter: Stephen Bender sbender@ufl.edu
Created: 8/20/2024 8:57:38 AM
Form version: 2

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
ARC

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

Response:
5

Undergraduate students in 5000 level courses
Is this course intended for an audience including undergraduate students?

Response:
No

Rationale for 5000 level course request
Please provide the rationale for submitting this course as a 5000 level course in the space provided below. (i.e. target student audience, program, school). 5000 level courses require joint review and approval by the University Curriculum Committee and Graduate Curriculum Committee or Professional Curriculum Committee.

Response:
This is the second integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Number

Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
None

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.
* *

Response:
Introductory

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Integrated Building Technology 2

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Integrated Building Tech 2

Degree Type
Select the type of degree program for which this course is intended.

Response:

Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Off-Campus, Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit

Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?

Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type

Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type

*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours

Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
3

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
The second course in a multi-year integrated building technology sequence builds on earlier materials and methods and digital design knowledge, then introduces environmental design. Integrated knowledge and skills makes the impact of material and environmental design decisions apparent by introducing digital simulation.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
ARC 5XXX-Graduate Core Studio 2, or department approval

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
ARC5XXX Integrated Building Technology 1

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
This is the second integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
- Understand and advance fundamental aspects of building material systems
- Understand and advance the role and relationship of digital design tools to design projects
- Apply digital design methods to targeted design projects
- Understand the spatial and tectonic relationships of design in the digital realm
- Further Develop skills in digital representation methods and output
- Introduce the principles of context, solar orientation, heat gain and thermal comfort

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Allen, Edward, and Joseph Iano. Fundamentals of Building Construction: Materials and Methods. Sixth edition, Wiley, 2014. ISBN 978-1-118-13891-5
Ching, Francis D. K. Building Construction Illustrated. Fourth or fifth edition, 2014. Print.
Lechner, Norbert, et al. Heating, Cooling, Lighting : Sustainable Design Strategies towards Net Zero Architecture. Fifth edition, John Wiley & Sons, Inc., 2022. ISBN 978-1119585749

Selected readings will be provided in the form of a course reader from:
Moore, Fuller. Environmental Control Systems : Heating, Cooling, Lighting. McGraw-Hill, 1993. ISBN 978-0070428898
Schittich, Christian. Building Simply. DETAIL, 2001, https://doi.org/10.11129/detail.9783955531669.
Hausladen, Gerhard, et al. Building to Suit the Climate : A Handbook. Birkha user,2012, https://doi.org/10.1515/9783034608787.

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
This course will cover a range of topics and will be delivered in focused, topical modules.

Environmental Technology Module
An introduction to climate, and passive thermal response in hot and cold climates and locations aligns with the Core 2 Studio project problem space. The topics of solar geometry, shading devices, and building orientation are tested using tangible studio models and simple digital simulations. Indoor air quality, natural ventilation, the principles of heat flow, and characteristics of thermal mass are taught and explored in studio projects.

Materials and Methods Module
This module continues to explore the implications of material decisions on architecture through understanding the site, soils, earthwork, foundations, demolition and selective demolition. Students are introduced to the range of typical materials by exploring single material-focused projects. Structural and envelope system choices are examined from a material perspective. This content corresponds with the concerns of the Core 2 Studio design projects.

Digital Media Module
This module introduces digital fabrication using laser cutting and 3D printing. The Core 2 Studio project and IBT deliverables intersect so that digital fabrication workflows become integral to the studio design process. Hybrid analog-digital fabricated 3D architectural models at several scales serve as exploration and representation. 3D rendered architectural visualization of architecture in site, and architecture interiors are created for studio designs.

Content Delivery: The modules will be composed of three different methods of content delivery.
• Lectures: present content and issues. Led by module instructors.
• Labs: provide hands-on opportunity to examine, discuss and understand content. These are explicitly linked to co-requisite studio course projects.
• Workshops: brief intense hands-on sessions to study specific topics within a module. Workshops occur during lab sessions and include group work.

Environmental Technology Module

Week	Readings	Class Topic	Assignment/Activity
1	Lechner	Climate, Orientation	Quiz
2	Lechner	Psychrometry, Heat flow principles	Quiz, assignment due
3	Lechner	Principles of thermal comfort	Quiz, assignment due
4	Lechner	Solar geometry, Shading devices	Quiz, assignment due
5	NA	Digital simulation tools – light and heat	Assignment due, lab
6	Lechner	Indoor air quality, Natural ventilation	Quiz, assignment due

Materials and Methods Module

Week	Readings	Class Topic	Assignment/Activity
7	Allen	Site & Foundations	Quiz
8	Allen	Demolition and Selective Demolition	Quiz, assignment due
9	Schittich	Material-Focused Projects	Quiz, assignment due
10	Ching	Structure System Choices-Material Perspective	Quiz, assignment due
11	Allen, Schittich, Hausladen	Envelope Choices-Material Perspective	Quiz, assignment due

Digital Module

Week	Readings	Class Topic	Assignment/Activity
12	NA	Digital fabrication workflows: Laser cutting	Quiz, assignment due, lab
13	NA	Digital fabrication workflows: 3D printing	Assignment due, lab
14	NA	Rendering architecture in a site	Assignment due, lab
15	NA	Rendering architecture interiors	Assignment due, lab
16	NA	Summative review	Portfolio due, Workshop

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Methodology
Learning objectives are reinforced through periodic assignments, scaffolded using case study projects.
• Periodic Assignments - Assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. These assignments are explicitly linked to co-

requisite studio course projects. Students are expected to engage IBT topics through prototyping and testing. Final assessment is by the instructor.
• Labs (individual) and Workshops (group): Conducted during class time, labs and workshops provide hands-on opportunity to examine, discuss and understand content. Labs may or may not have deliverables that contribute toward grades – assessed by instructor.
• Quizzes: Periodic quizzes will be given based on assigned reading and class lectures - assessed by instructor.
• Portfolio: Core 2 Studio and IBT work is seamlessly integrated in the form of a project portfolio containing written and visual content. The content synthesized into the portfolio consists of refined versions of work done by students for periodic assignments, and labs, alongside studio deliverables - assessed by instructor.

Assignment	Total Points	Percentage of Final Grade
Periodic Assignments (14)	14@100 each=1400	35%
Lab/Workshop work (6)	6@100 each=600	15%
Quizzes (10)	10@100 each=1000	25%
Portfolio	100	25%
		100%

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
to be determined

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:
Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Response:
Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• *https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx*

    Response:
    Yes

Course Evaluation Policy
Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• *Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.*

* *

    Response:
    Yes

Integrated Building Technology 2

ARC 5XXX   Section:
Class Periods: Days of week, period, and corresponding time of day
Location: Classroom location
Academic Term: Spring 2026
Total Credits: 3

Instructors:

> Materials and Methods Module
> Faculty Member 1
> Office: XX
> Contact: XX
> Office Hours: XX
>
> Digital Media Module
> Faculty Member 2
> Office: XX
> Contact: XX
> Office Hours: XX
>
> Environmental Design Module
> Faculty Member 3
> Office: XX
> Contact: XX
> Office Hours: XX

Teaching Assistants:

Please contact through the Canvas website

- Name of TA, email address, office location, office hours
- Name of TA, email address, office location, office hours

Course Description

The second course in a multi-year integrated building technology sequence builds on earlier materials and methods and digital design knowledge, then introduces environmental design. Integrated knowledge and skills makes the impact of material and environmental design decisions apparent by introducing digital simulation.

Rationale and Placement in Curriculum

This is the second integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Pre-Requisites / Co-Requisites

Pre-Requisite – ARC5XXX Integrated Building Technology 1
Co-Requisite - ARC 5XXX-Graduate Core Studio 2

Course Objectives

- Understand and advance fundamental aspects of building material systems
- Understand and advance the role and relationship of digital design tools to design projects

- Apply digital design methods to targeted design projects
- Understand the spatial and tectonic relationships of design in the digital realm
- Further Develop skills in digital representation methods and output
- Introduce the principles of context, solar orientation, heat gain and thermal comfort

Materials and Supply Fees
List if applicable

Required Textbooks and Software
Allen, Edward, and Joseph Iano. *Fundamentals of Building Construction: Materials and Methods*. Sixth edition, Wiley, 2014. ISBN 978-1-118-13891-5

Ching, Francis D. K. Building Construction Illustrated. Fourth or fifth edition, 2014. Print.

Lechner, Norbert, et al. Heating, Cooling, Lighting : Sustainable Design Strategies towards Net Zero Architecture. Fifth edition, John Wiley & Sons, Inc., 2022. ISBN 978-1119585749

Selected readings will be provided in the form of a course reader from:

Moore, Fuller. Environmental Control Systems : Heating, Cooling, Lighting. McGraw-Hill, 1993. ISBN 978-0070428898

Schittich, Christian. Building Simply. DETAIL, 2001, https://doi.org/10.11129/detail.9783955531669.

Hausladen, Gerhard, et al. *Building to Suit the Climate : A Handbook*. Birkhäuser, 2012, https://doi.org/10.1515/9783034608787.

Recommended Materials

Course Schedule
This course will cover a range of topics and will be delivered in focused, topical modules.

Environmental Technology Module
An introduction to climate, and passive thermal response in hot and cold climates and locations aligns with the Core 2 Studio project problem space. The topics of solar geometry, shading devices, and building orientation are tested using tangible studio models and simple digital simulations. Indoor air quality, natural ventilation, the principles of heat flow, and characteristics of thermal mass are taught and explored in studio projects.

Materials and Methods Module
This module continues to explore the implications of material decisions on architecture through understanding the site, soils, earthwork, foundations, demolition and selective demolition. Students are introduced to the range of typical materials by exploring single material-focused projects. Structural and envelope system choices are examined from a material perspective. This content corresponds with the concerns of the Core 2 Studio design projects.

Digital Media Module
This module introduces digital fabrication using laser cutting and 3D printing. The Core 2 Studio project and IBT deliverables intersect so that digital fabrication workflows become integral to the studio design process. Hybrid analog-digital fabricated 3D architectural models at several scales serve as exploration and representation. 3D rendered architectural visualization of architecture in site, and architecture interiors are created for studio designs.

Content Delivery: The modules will be composed of three different methods of content delivery.
- Lectures: present content and issues. Led by module instructors.
- Labs: provide hands-on opportunity to examine, discuss and understand content. These are explicitly linked to co-requisite studio course projects.
- Workshops: brief intense hands-on sessions to study specific topics within a module. Workshops occur during lab sessions and include group work.

	Week	Readings	Class Topic	Assignment/Activity
Environmental Technology Module	1	Lechner	Climate, Orientation	Quiz
	2	Lechner	Psychrometry, Heat flow principles	Quiz, assignment due
	3	Lechner	Principles of thermal comfort	Quiz, assignment due
	4	Lechner	Solar geometry, Shading devices	Quiz, assignment due
	5	NA	Digital simulation tools – light and heat	Assignment due, lab
	6	Lechner	Indoor air quality, Natural ventilation	Quiz, assignment due

	Week	Readings	Class Topic	Assignment/Activity
Materials and Methods Module	7	Allen	Site & Foundations	Quiz
	8	Allen	Demolition and Selective Demolition	Quiz, assignment due
	9	Schittich	Material-Focused Projects	Quiz, assignment due
	10	Ching	Structure System Choices-Material Perspective	Quiz, assignment due
	11	Allen, Schittich, Hausladen	Envelope Choices-Material Perspective	Quiz, assignment due

	Week	Readings	Class Topic	Assignment/Activity
Digital Module	12	NA	Digital fabrication workflows: Laser cutting	Quiz, assignment due, lab
	13	NA	Digital fabrication workflows: 3D printing	Assignment due, lab
	14	NA	Rendering architecture in a site	Assignment due, lab
	15	NA	Rendering architecture interiors	Assignment due, lab
	16	NA	Summative review	Portfolio due, Workshop

Attendance Policy, Class Expectations, and Make-Up Policy
Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://gradcatalog.ufl.edu/graduate/regulations/
Attendance for all lectures, labs and/or workshops is mandatory, will be taken at the start of meetings, and recorded in canvas. Chronic absences and/or tardiness will have a negative impact on your grade. Tardiness of more than 20 minutes to any lab/lecture will be counted as an unexcused absence. Three or more unexcused absences may result in a full letter-grade reduction in the course. Four unexcused absences can result in failure of the course (see grade breakdown below). Materials covered in the lecture will be tested. If you must miss class, it is your responsibility to notify the instructors in a timely manner, as well as getting the assignments and notes from your classmates.

Evaluation of Grades
Students will be responsible for the material in the reading assignments as well as the course lectures and laboratory sessions. There will be a range of project assignments and may include both individual and group work. Assignments will ask students to apply knowledge of class material in two potential forms; topic-specific lab assignments relative to direct coursework which will correspond with module topics, and synchronous assignments that complement concurrent, studio-based design projects.

Methodology
Learning objectives are reinforced through periodic assignments, scaffolded using case study projects.

- Periodic Assignments - Assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. These assignments are explicitly linked to co-requisite studio course projects. Students are expected to engage IBT topics through prototyping and testing. Final assessment is by the instructor.
- Labs (individual) and Workshops (group): Conducted during class time, labs and workshops provide hands-on opportunity to examine, discuss and understand content. Labs may or may not have deliverables that contribute toward grades – assessed by instructor.
- Quizzes: Periodic quizzes will be given based on assigned reading and class lectures - assessed by instructor.
- Portfolio: Core 2 Studio and IBT work is seamlessly integrated in the form of a project portfolio containing written and visual content. The content synthesized into the portfolio consists of refined versions of work done by students for periodic assignments, and labs, alongside studio deliverables - assessed by instructor.

Assignment	Total Points	Percentage of Final Grade
Periodic Assignments (14)	14@100 each=1400	35%
Lab/Workshop work (6)	6@100 each=600	15%
Quizzes (10)	10@100 each=1000	25%
Portfolio	100	25%
		100%

UF Coronavirus Policies and Campus Operations
Visit https://coronavirus.ufl.edu/health-guidance/ to stay up to date on UF's COVID related Policies

Attendance Policy, Class Expectations, and Make-Up Policy
Attendance is mandatory. Three or more unexcused absences may result in an administrative drop from the course. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click here to read the university attendance policies.

Grading Policy

	Letter Grade	Numeric Grade	Quality Points	Qualitative Description
PASSING GRADES	A	93 - 100	4.0	Outstanding work only
	A-	90 – 92.9	3.67	Close to outstanding
	B+	87 - 89.9	3.33	Very good work
	B	84 – 86.9	3.0	Good work
	B-	80 – 83.9	2.67	Good work with some problems
	C+	77 - 79.9	2.33	Slightly above average work
	C	74 – 76.9	2.0	Average work
FAILING GRADES	C-	70 - 73.9	1.67	Average work with some problems
	D+	67 - 69.9	1.33	Poor work with some effort
	D	64 - 66.9	1.0	Poor work
	D-	61 - 63.9	0.67	Poor work with some problems
	E	0. - 60.9	0.0	Inadequate work

(Minimum Cumulative GPA — annotation pointing to B / 3.0)

More information on UF grading policy may be found at:

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

Distance Learning Privacy Policy

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, and exams), field trips, and private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report

any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Students in the School of Architecture are expected to adhere to all University of Florida academic honesty policies. Failure to do so will result in lowered grades and/or referral to the University Honor Court. Since the University's policies are necessarily generalized, the School of Architecture further clarifies academic honesty within the specific setting of design education. The following acts are considered to be academic dishonesty:

1. **Plagiarism/misrepresentation**

   There shall be no question of what your work is and what someone else's is. This applies to all aspects of student performance, including but not limited to
   - CAD drawings and construction details
   - design guidelines (written and graphic)

   - design, planning, and management projects or portions of projects

   - class reports and papers (again, both written and graphic information)

   - any assignment where sole authorship is indicated, such as take-home tests, individual projects, etc.

   Examples of inappropriate activities include:
   - copying graphics for a report without crediting the original source

   - representing someone else's work as your own (using existing CAD construction details, tracing drawings, etc.)

   - allowing someone else to represent your work as his own

   The importance of precedent and learning from past works is a necessary part of most design processes. Again, it is the intent and degree of "borrowing" ideas that is at question.

   Anything not original must be paraphrased and cited, or quoted; using accepted style formats such as APA, MLA, Chicago Manual of Style, etc. This includes information obtained from the Internet, public documents, graphics, and personal interviews as well as more traditional written sources. Proper crediting of all information that is not common knowledge is necessary for academic honesty as well as for professionalism. (For example, analysis drawings and/or text should cite the sources from which data was obtained so that if questions arise later, they can be quickly and accurately answered.)

   Multiple submissions of the same or similar work without prior approval
   If the instructors understand that you are doing a paper associated with your thesis or senior project topic, then doing similar work for two different classes is acceptable—if the instructors agree to it. If a single paper is submitted for one class, then later is submitted for another, and the instructors expect original work, then the multiple submission is inappropriate.

2. **Falsifying information**

   Examples include:

   - misrepresenting reasons why work cannot be done as requested

   - changing or leaving out data, such as manipulating statistics for a research project, or ignoring/hiding inconvenient but vital site information. (However, for educational purposes only, certain aspects of the

"real world" may be jointly agreed upon as not being pertinent to the academic goals of the course, such as not dealing with specific project parameters or budget, changing the program, etc.)

- altering work after it has been submitted

- hiding, destroying, or otherwise making materials unavailable (hiding reference materials, not sharing materials with other students, etc.)

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

Campus Resources:
Health and Wellness

U Matter, We Care:
If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: counseling.ufl.edu/cwc, and 392-1575 for information on crisis services as well as non-crisis services; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)
Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints Campus, Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints, View the Distance Learning Student Complaint Process

Orlando Resources

Police / Fire / Medical Emergency – 911
Orlando Police Department Non-Emergency Number: 321.235.5300
Consult CityLab-Orlando Student Resources for Emergency contact information.

Course|New for request 20299

Info

Request: ARC 5XXX Integrated Building Tech 3
Description of request: This is the third integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence.
Submitter: Stephen Bender sbender@ufl.edu
Created: 8/20/2024 5:03:28 PM
Form version: 2

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
ARC

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

Response:
5

Undergraduate students in 5000 level courses
Is this course intended for an audience including undergraduate students?

Response:
No

Rationale for 5000 level course request
Please provide the rationale for submitting this course as a 5000 level course in the space provided below. (i.e. target student audience, program, school). 5000 level courses require joint review and approval by the University Curriculum Committee and Graduate Curriculum Committee or Professional Curriculum Committee.

Response:
This is the third integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Number

Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
None

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.
* *

Response:
Intermediate

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Integrated Building Technology 3

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Integrated Building Tech 3

Degree Type
Select the type of degree program for which this course is intended.

Response:

Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Off-Campus, Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit

Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
6

S/U Only?

Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type

Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type

*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours

Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
6

Course Description

Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
The third course in a multi-year integrated building technology will introduce students to the fundamental aspects and principles of structural systems in buildings, reinforce and advance the material and method systems that correspond to building structures, advance the understanding and relationships between design principles and environmental context, and examine more advanced digital design tools, methodologies and means of representation. Students prepare to use increasingly integrated know

Co-requisites

Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
ARC5XXX Graduate Core Studio 3, or department approval

Prerequisites

Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
ARC5XXX Integrated Building Technology 1, ARC5XXX Graduate Core Studio 2

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
This is the third integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
• Understand the fundamentals of design for building structural systems
• Examine the material relationship of building structure and tectonic and spatial systems
• Reinforce the relationship between design thinking and environmental factors
• Understand at an intermediate level the role and relationship of digital design tools to design projects
• Introduce the principles of parametric design operations and their application as a design method to targeted design projects

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Allen, Edward, and Joseph Iano. Fundamentals of Building Construction: Materials and Methods. Sixth edition, Wiley, 2014. ISBN 978-1-118-13891-5
Ching, Francis D. K. Building Construction Illustrated. Fourth or fifth edition, 2014. Print.
Daniel L. Shodek, Martin Bechthold. Structures. 7th Edition (or later). Pearson/Prentice Hall, c2014.
Lechner, Norbert, et al. Heating, Cooling, Lighting : Sustainable Design Strategies towards Net Zero Architecture. Fifth edition, John Wiley & Sons, Inc., 2022. ISBN 978-1119585749

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
This course will cover a range of topics and will be delivered in focused, topical modules.

Materials and Methods Module
This module continues the investigations with materials and the implications of material decisions on architecture by examining the framed-based material systems, such as wood, timber and steel construction, and will introduce the principles of moisture control, roof system design and water shedding/intrusion.

Environmental Technology Module

Taught in conjunction with or before Core 3 studio this module expands environmental technology topics to include heat gain and loss through building envelope, further develops natural ventilation and passive heating and cooling strategies in different climatic environments. Architecture site analysis is applied including microclimate, storm water and hydrology, local and regional ecosystems. The integration of daylight in architecture is investigated using objective analyses and design guides.

Structural Technology Module
Taught in conjunction with or before Core 3 studio this module includes foundational concepts of mechanics applied to structural systems and material. Students learn structural analysis and design by solving structural problems. Determine magnitude of external forces (live loads, dead loads), how they act on the structure, where they act and how they accumulate. Students gain the ability to diagram the type and magnitude of forces and reactions to find equilibrium. After examining common structural elements including: foundations, columns, bearing walls and beams, roof and floor structures (1-way and 2-way spanning systems), and long-span structures, students evaluate structural systems, including availability, load capacity, and impact on building design and configuration. Based on these factors, as well as building size and function, students select the appropriate structural system and layout for a building.

Content Delivery: The modules will be composed of three different methods of content delivery.
•   Lectures: present content and issues. Led by module instructors.
•   Labs: provide hands-on opportunity to examine, discuss and understand content. These are explicitly linked to co-requisite studio course projects.
•   Workshops: brief intense hands-on sessions to study specific topics within a module. Workshops occur during lab sessions and include group work.

Environmental Technology

Week	Readings	Class topic	Assignment/Activity
1	Lechner	Passive Cooling Strategies Passive Heating Strategies	
	Lechner	Passive Design Tools – Hot and Humid Climates	

Passive design tools applied to Core 2 Projects assignment

Week	Readings	Class topic	Assignment/Activity
2	Lechner	Natural Light	

Natural Light tools applied to Core 2 Projects assignment

Week	Readings	Class topic	Assignment/Activity
NA 3	Simulation Methods	LAB: Simulation Methods applied to Core 2 Projects	
NA	Simulation Methods	Simulation Project Presentations	
	Lechner	Life Safety – Famous Fires and NFPA	Quiz
4	Lechner	Fire Detection and Suppression	Quiz
	NA	Environmental Quality and Resource Stewardship	EXAM (via Canvas)

Materials + Methods

Week	Readings	Class Topic	Assignment/Activity
5	NA	Contraints, Context, Climate, Codes, and Carbon	LAB : Embodied Carbon Tools (EC3, Tally)
	Krippner	Enclosure Systems 1	Assign Quick Cases
6		Building Design Decisions	LAB: Workshop

Planning the Building

Week	Readings	Class Topic	Assignment/Activity
7	TBA	Enclosure Systems 2	Lab outcome due
	TBA	Shaping the sky: roofs, parapets, vegetated roofs, terraces, and roof decks Quick case presentations	
8	Lechner	Thermal Envelopes and	LAB: Workshop

Energy Codes

9   Allen   Vertical Infrastructure: Transportation and Conveyance Systems
Lab outcome due
       -      Whole to Part + Reflect and Look Ahead   LAB: Workshop

Structural Technology

Week	Readings	Class topic	Assignment/Activity
10	Schodek Ch. 1	Fundamentals: Forces and Shapes	Assign Case Studies (groups)
	Ch. 2	Fundamentals: Forces and Behavior	Quiz
11	Ch. 3, 16	Fundamentals: Analysis, Design, Connections	Quiz
	Ch. 13	Structural Systems: logics and geometries	Quiz
12	-	(no lecture)	EXAM (via Canvas)
	Ch. 9	Structural Systems: Frames	Case study presentations
13	Ch. 4, 5, 6, 7	Structural Systems: Spans	Case study presentations
	Ch. 5, 9 ,14	Structural Systems: Heavy + Porous	Case study presentations
14	Ch. 5, 9 ,14	Structural Systems: the exceptional	Case study presentations
	Ch. 14	Lateral Forces: Tall	Case study presentations
15	Ch. 15	Constructional Approaches	Quiz
	Ch. 15	Foundations	Quiz
16		(no lecture)	EXAM (via Canvas)

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Students will be responsible for the material in the reading assignments as well as the course lectures and laboratory sessions. There will be a range of project assignments and may include both individual and group work. Assignments will ask students to apply knowledge of class material in two potential forms; topic-specific lab assignments relative to direct coursework which will correspond with module topics, and synchronous assignments that complement concurrent, studio design projects.

Methodology
Learning objectives are reinforced through periodic assignments, scaffolded using case study projects.
•   Periodic Assignments - Assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. Students are expected to engage IBT topics through prototyping and testing. Final assessment is by the instructor.
•   Labs (individual) and Workshops (group): Conducted during class time, labs and workshops provide hands-on opportunity to examine, discuss and understand content. Labs may or may not have deliverables that contribute toward grades – assessed by instructor.
•   Case Studies (Group or Individual): Student will conduct case studies of assigned architecture example. Process includes data collection (context, documentation, impact), analysis using course specific knowledge, and culminates with a presentation. Quick cases concern topic-specific fragments of architecture.
•   Quizzes: Periodic quizzes will be given based on assigned reading and class lectures - assessed by instructor.
•   Exams: Exams will be given based on assigned reading and class lectures - assessed by instructor.

Each module will be graded separately. The semester grade will be based on the following breakdown relative to content modules and final project. To pass the course, the cumulative

course grade must be 60% or better.

Summary Breakdown for Course Subject Weighting
Environmental Tech Module: 40%
Materials/Methods Module:

    20%
Structural Tech Module: 40%
Total:

100%

Environmental Technology Module: 40% of course grade
Simulation Project (including "applied tools" assignments) – 40% of module grade
Quizzes   20% of module grade
Exam   40% of module grade
Total:

100%

Materials/Methods Module: 20% of course grade
Lab Exercises: 80% of module grade
Case Study: 20% of module grade
Total:

100%

Structural Technology Module: 40% of course grade
Exam 1 & 2:   40% of module grade
Quizzes

40% of module grade
Case Study: 20% of module grade
Total:

100%

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
to be determined

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

    Response:
    Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

    Response:
    Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

    Response:
    Yes

Course Evaluation Policy
Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

Integrated Building Technology 3

Instructors:

Environmental Technology Module
Faculty Member 1
Office: XX
Contact: XX
Office Hours: XX

Structural Technology Module
Faculty Member 2
Office: XX
Contact: XX
Office Hours: XX

Materials/Methods Module
Faculty Member 3
Office: XX
Contact: XX
Office Hours: XX

Teaching Assistants:
Please contact through the Canvas website
- Name of TA, email address, office location, office hours
- Name of TA, email address, office location, office hours

Course Description
The third course in a multi-year integrated building technology will introduce students to the fundamental aspects and principles of structural systems in buildings, reinforce and advance the material and method systems that correspond to building structures, advance the understanding and relationships between design principles and environmental context, and examine more advanced digital design tools, methodologies and means of representation. Students prepare to use increasingly integrated knowledge and skill to make more complex design decisions in future design studio courses.

Rationale and Placement in Curriculum
This is the third integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Pre-Requisites / Co-Requisites
Pre-Requisite – ARC5XXX Integrated Building Technology 1
Pre-Requisite - ARC5XXX Graduate Core Studio 2
or Co-Requisite – ARC5XXX Graduate Core Studio 3

Course Objectives

- Understand the fundamentals of design for building structural systems
- Examine the material relationship of building structure and tectonic and spatial systems
- Reinforce the relationship between design thinking and environmental factors
- Understand at an intermediate level the role and relationship of digital design tools to design projects
- Introduce the principles of parametric design operations and their application as a design method to targeted design projects

Materials and Supply Fees
List if applicable

Required Textbooks and Software
Allen, Edward, and Joseph Iano. *Fundamentals of Building Construction: Materials and Methods*. Sixth edition, Wiley, 2014. ISBN 978-1-118-13891-5

Ching, Francis D. K. Building Construction Illustrated. Fourth or fifth edition, 2014. Print.

Daniel L. Shodek, Martin Bechthold. Structures. 7th Edition (or later). Pearson/Prentice Hall, c2014.

Lechner, Norbert, et al. Heating, Cooling, Lighting : Sustainable Design Strategies towards Net Zero Architecture. Fifth edition, John Wiley & Sons, Inc., 2022. ISBN 978-1119585749

Selected readings will be provided in the form of a course reader from:

Moore, Fuller. Environmental Control Systems : Heating, Cooling, Lighting. McGraw-Hill, 1993. ISBN 978-0070428898

Krippner, Roland, et al. *Building Skins*. Birkhäuser, 2012, https://doi.org/10.11129/detail.9783034615082.

Recommended Materials
Hausladen, Gerhard, et al. *Building to Suit the Climate : A Handbook*. Birkhäuser, 2012, https://doi.org/10.1515/9783034608787.

Grondzik, Walter T., and Alison G. Kwok. *Mechanical and Electrical Equipment for Buildings*. Twelfth edition, Wiley, 2015, http://site.ebrary.com/id/10935017.

Banham, Reyner. The Architecture of the Well-Tempered Environment, 2nd Edition. University of Chicago, Chicago: 1984.

Brown, G. Z. Sun, Wind, and Light. John Wiley and Sons, Inc., New York: 1985

Fitch, James Marston and William Bobenhausen. American Building: The Environmental Forces That Shaped It. Oxford University Press; Subsequent edition (May 6, 1999).

Givoni, B. Man, Climate and Architecture. Second Edition, Van Nostrand Reinhold, New York. 1969 and 1976.

Heschong, Lisa, Thermal Delight in Architecture, MIT press. 1979. Lechner, Norbert, Heating Cooling Lighting: Design Methods for Architects, John Wiley and Sons, New York

Olgyay, Victor. Design With Climate. Van Norstrand Reinhold, New York: 1992.

Course Schedule
This course will cover a range of topics and will be delivered in focused, topical modules.

Materials and Methods Module
This module continues the investigations with materials and the implications of material decisions on architecture by examining the framed-based material systems, such as wood, timber and steel construction, and will introduce the principles of moisture control, roof system design and water shedding/intrusion.

Environmental Technology Module
Taught in conjunction with or before Core 3 studio this module expands environmental technology topics to include heat gain and loss through building envelope, further develops natural ventilation and passive heating and cooling strategies in different climatic environments. Architecture site analysis is applied including microclimate, storm water and

hydrology, local and regional ecosystems. The integration of daylight in architecture is investigated using objective analyses and design guides.

Structural Technology Module
Taught in conjunction with or before Core 3 studio this module includes foundational concepts of mechanics applied to structural systems and material. Students learn structural analysis and design by solving structural problems. Determine magnitude of external forces (live loads, dead loads), how they act on the structure, where they act and how they accumulate. Students gain the ability to diagram the type and magnitude of forces and reactions to find equilibrium. After examining common structural elements including: foundations, columns, bearing walls and beams, roof and floor structures (1-way and 2-way spanning systems), and long-span structures, students evaluate structural systems, including availability, load capacity, and impact on building design and configuration. Based on these factors, as well as building size and function, students select the appropriate structural system and layout for a building.

Content Delivery: The modules will be composed of three different methods of content delivery.
- Lectures: present content and issues. Led by module instructors.
- Labs: provide hands-on opportunity to examine, discuss and understand content. These are explicitly linked to co-requisite studio course projects.
- Workshops: brief intense hands-on sessions to study specific topics within a module. Workshops occur during lab sessions and include group work.

	Week	Readings	Class topic	Assignment/Activity
Environmental Technology	1	Lechner	Passive Cooling Strategies Passive Heating Strategies	
		Lechner	Passive Design Tools – Hot and Humid Climates	Passive design tools applied to Core 2 Projects assignment
	2	Lechner	Natural Light	Natural Light tools applied to Core 2 Projects assignment
		NA	Simulation Methods	LAB: Simulation Methods applied to Core 2 Projects
	3	NA	Simulation Methods	Simulation Project Presentations
		Lechner	Life Safety – Famous Fires and NFPA	Quiz
	4	Lechner	Fire Detection and Suppression	Quiz
		NA	Environmental Quality and Resource Stewardship	EXAM (via Canvas)

	Week	Readings	Class Topic	Assignment/Activity
Materials + Methods	5	**NA**	Contraints, Context, Climate, Codes, and Carbon	LAB : Embodied Carbon Tools (EC3, Tally)
		Krippner	Enclosure Systems 1	Assign Quick Cases
	6		Building Design Decisions	LAB: Workshop
			Planning the Building	
	7	TBA	Enclosure Systems 2	Lab outcome due
		TBA	Shaping the sky: roofs, parapets, vegetated roofs, terraces, and roof decks	Quick case presentations
	8	Lechner	Thermal Envelopes and	LAB: Workshop
			Energy Codes	

| | 9 | Allen | Vertical Infrastructure: Transportation and Conveyance Systems | Lab outcome due |
| | | - | Whole to Part + Reflect and Look Ahead | LAB: Workshop |

Structural Technology	Week	Readings	Class topic	Assignment/Activity
	10	Schodek Ch. 1	Fundamentals: Forces and Shapes	Assign Case Studies (groups)
		Ch. 2	Fundamentals: Forces and Behavior	Quiz
	11	Ch. 3, 16	Fundamentals: Analysis, Design, Connections	Quiz
		Ch. 13	Structural Systems: logics and geometries	Quiz
	12	-	(no lecture)	EXAM (via Canvas)
		Ch. 9	Structural Systems: Frames	Case study presentations
	13	Ch. 4, 5, 6, 7	Structural Systems: Spans	Case study presentations
		Ch. 5, 9 ,14	Structural Systems: Heavy + Porous	Case study presentations
	14	Ch. 5, 9 ,14	Structural Systems: the exceptional	Case study presentations
		Ch. 14	Lateral Forces: Tall	Case study presentations
	15	Ch. 15	Constructional Approaches	Quiz
		Ch. 15	Foundations	Quiz
	16		(no lecture)	EXAM (via Canvas)

Attendance Policy, Class Expectations, and Make-Up Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://gradcatalog.ufl.edu/graduate/regulations/

Attendance for all lectures, labs and/or workshops is mandatory, will be taken at the start of meetings, and recorded in canvas. Chronic absences and/or tardiness will have a negative impact on your grade. Tardiness of more than 20 minutes to any lab/lecture will be counted as an unexcused absence. Three or more unexcused absences may result in a full letter-grade reduction in the course. Four unexcused absences can result in failure of the course (see grade breakdown below). Materials covered in the lecture will be tested. If you must miss class, it is your responsibility to notify the instructors in a timely manner, as well as getting the assignments and notes from your classmates.

Evaluation of Grades

Students will be responsible for the material in the reading assignments as well as the course lectures and laboratory sessions. There will be a range of project assignments and may include both individual and group work. Assignments will ask students to apply knowledge of class material in two potential forms; topic-specific lab assignments relative to direct coursework which will correspond with module topics, and synchronous assignments that complement concurrent, studio design projects.

Methodology

Learning objectives are reinforced through periodic assignments, scaffolded using case study projects.
- Periodic Assignments - Assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. Students are expected to engage IBT topics through prototyping and testing. Final assessment is by the instructor.
- Labs (individual) and Workshops (group): Conducted during class time, labs and workshops provide hands-on opportunity to examine, discuss and understand content. Labs may or may not have deliverables that contribute toward grades – assessed by instructor.

- Case Studies (Group or Individual): Student will conduct case studies of assigned architecture example. Process includes data collection (context, documentation, impact), analysis using course specific knowledge, and culminates with a presentation. Quick cases concern topic-specific fragments of architecture.
- Quizzes: Periodic quizzes will be given based on assigned reading and class lectures - assessed by instructor.
- Exams: Exams will be given based on assigned reading and class lectures - assessed by instructor.

Each module will be graded separately. The semester grade will be based on the following breakdown relative to content modules and final project. To pass the course, the cumulative course grade must be 60% or better.

Summary Breakdown for Course Subject Weighting
Environmental Tech Module: 40%
Materials/Methods Module: 20%
Structural Tech Module: 40%
Total: 100%

Environmental Technology Module: 40% of course grade
Simulation Project (including "applied tools" assignments) – 40% of module grade
Quizzes   20% of module grade
Exam   40% of module grade
Total: 100%

Materials/Methods Module: 20% of course grade
Lab Exercises: 80% of module grade
Case Study: 20% of module grade
Total: 100%

Structural Technology Module: 40% of course grade
Exam 1 & 2:   40% of module grade
Quizzes   40% of module grade
Case Study: 20% of module grade
Total: 100%

UF Coronavirus Policies and Campus Operations
Visit https://coronavirus.ufl.edu/health-guidance/ to stay up to date on UF's COVID related Policies

Attendance Policy, Class Expectations, and Make-Up Policy
Attendance is mandatory. Three or more unexcused absences may result in an administrative drop from the course. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click here to read the university attendance policies.

Grading Policy

	Letter Grade	Numeric Grade	Quality Points	Qualitative Description
	A	93 - 100	4.0	Outstanding work only
P A S S I N G G R A D E S	A-	90 – 92.9	3.67 *Minimum Cumulative GPA*	Close to outstanding
	B+	87 - 89.9	3.33	Very good work
	B	84 – 86.9	3.0	Good work
	B-	80 – 83.9	2.67	Good work with some problems

		C+	77 - 79.9	2.33	Slightly above average work
		C	74 – 76.9	2.0	Average work
FAILING GRADES		C-	70 - 73.9	1.67	Average work with some problems
		D+	67 - 69.9	1.33	Poor work with some effort
		D	64 - 66.9	1.0	Poor work
		D-	61 - 63.9	0.67	Poor work with some problems
		E	0. - 60.9	0.0	Inadequate work

More information on UF grading policy may be found at:
UF Graduate Catalog
Grades and Grading Policies

Students Requiring Accommodations
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

Distance Learning Privacy Policy
Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

In-Class Recording
Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, and exams), field trips, and private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

University Honesty Policy
UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Students in the School of Architecture are expected to adhere to all University of Florida academic honesty policies. Failure to do so will result in lowered grades and/or referral to the University Honor Court. Since the University's policies are necessarily generalized, the School of Architecture further clarifies academic honesty within the specific setting of design education. The following acts are considered to be academic dishonesty:

1. **Plagiarism/misrepresentation**

    There shall be no question of what your work is and what someone else's is. This applies to all aspects of student performance, including but not limited to
    -   CAD drawings and construction details
    -   design guidelines (written and graphic)

    -   design, planning, and management projects or portions of projects

    -   class reports and papers (again, both written and graphic information)

    -   any assignment where sole authorship is indicated, such as take-home tests, individual projects, etc.

    Examples of inappropriate activities include:
    -   copying graphics for a report without crediting the original source

    -   representing someone else's work as your own (using existing CAD construction details, tracing drawings, etc.)

    -   allowing someone else to represent your work as his own

    The importance of precedent and learning from past works is a necessary part of most design processes. Again, it is the intent and degree of "borrowing" ideas that is at question.

    Anything not original must be paraphrased and cited, or quoted; using accepted style formats such as APA, MLA, Chicago Manual of Style, etc. This includes information obtained from the Internet, public documents, graphics, and personal interviews as well as more traditional written sources. Proper crediting of all information that is not common knowledge is necessary for academic honesty as well as for professionalism. (For example, analysis drawings and/or text should cite the sources from which data was obtained so that if questions arise later, they can be quickly and accurately answered.)

Multiple submissions of the same or similar work without prior approval
If the instructors understand that you are doing a paper associated with your thesis or senior project topic, then doing similar work for two different classes is acceptable—if the instructors agree to it. If a single paper is submitted for one class, then later is submitted for another, and the instructors expect original work, then the multiple submission is inappropriate.

2. **Falsifying information**

    Examples include:

    -   misrepresenting reasons why work cannot be done as requested

    -   changing or leaving out data, such as manipulating statistics for a research project, or ignoring/hiding inconvenient but vital site information. (However, for educational purposes only, certain aspects of the "real world" may be jointly agreed upon as not being pertinent to the academic goals of the course, such as not dealing with specific project parameters or budget, changing the program, etc.)

    -   altering work after it has been submitted

    -   hiding, destroying, or otherwise making materials unavailable (hiding reference materials, not sharing materials with other students, etc.)

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

Campus Resources:
>   Health and Wellness

U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress. **Counseling and Wellness Center:** counseling.ufl.edu/cwc, and 392-1575 for information on crisis services as well as non-crisis services; and the University Police Department: 392-1111 or 9-1-1 for emergencies. **Sexual Assault Recovery Services (SARS)** Student Health Care Center, 392-1161. **University Police Department** at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

>   Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. **Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling.

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints Campus, Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints, View the Distance Learning Student Complaint Process

Orlando Resources

Police / Fire / Medical Emergency – 911
Orlando Police Department Non-Emergency Number: 321.235.5300
Consult CityLab-Orlando Student Resources for Emergency contact information.

Course|New for request 20300

Info

Request: ARC 5XXX Integrated Building Tech 4
Description of request: This is the fourth integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence.
Submitter: Stephen Bender sbender@ufl.edu
Created: 8/20/2024 5:08:05 PM
Form version: 2

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
ARC

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

Response:
5

Undergraduate students in 5000 level courses
Is this course intended for an audience including undergraduate students?

Response:
No

Rationale for 5000 level course request
Please provide the rationale for submitting this course as a 5000 level course in the space provided below. (i.e. target student audience, program, school). 5000 level courses require joint review and approval by the University Curriculum Committee and Graduate Curriculum Committee or Professional Curriculum Committee.

Response:
This is the fourth integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Number

Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
None

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.
* *

Response:
Intermediate

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Integrated Building Technology 4

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Integrated Building Tech 4

Degree Type
Select the type of degree program for which this course is intended.

Response:

Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Off-Campus, Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
6

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
6

Course Description

Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
The fourth course in a multi-year integrated building technology sequence builds on earlier materials and methods, digital design, environmental design, building systems, and structural systems knowledge and skills. Students prepare to use integrated knowledge and skill to make design decisions in buildings of increasing complexity. Building systems complexity involves mechanical system integration/distribution, building code constraints, regulations, calculations, and interpretations.

Co-requisites

Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
ARC5XXX-Graduate Core Studio 4. or department approval

Prerequisites

Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
ARC5XXX Integrated Building Technology 3, ARC5XXX-Graduate Core Studio 3

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
This is the fourth integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
- Apply the fundamentals of structural design to shape studio projects.
- Integrate mechanical systems, domestic water and sanitary systems, artificial lighting systems, power systems, fire suppression systems, mechanical movement systems into studio projects.
- Apply room and building acoustical design to studio projects
- Examine the material relationship of building structure and tectonic and spatial systems by detailing building assemblies in studio projects.
- Apply environmental factors to shape design decisions that shape studio projects.
- Apply building code requirements by making design decisions that shape studio projects.

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Allen, Edward, and Joseph Iano. Fundamentals of Building Construction: Materials and Methods. Sixth edition, Wiley, 2014. ISBN 978-1-118-13891-5
Ching, Francis D. K. Building Construction Illustrated. Fourth or fifth edition, 2014. Print.
Daniel L. Shodek, Martin Bechthold. Structures. 7th Edition (or later). Pearson/Prentice Hall, c2014.
Lechner, Norbert, et al. Heating, Cooling, Lighting : Sustainable Design Strategies towards Net Zero Architecture. Fifth edition, John Wiley & Sons, Inc., 2022. ISBN 978-1119585749
Grondzik, Walter T., and Alison G. Kwok. Mechanical and Electrical Equipment for Buildings. Twelfth edition, Wiley, 2015, http://site.ebrary.com/id/10935017.
Ching, Francis D. K., and Steven R. Winkel. Building Codes Illustrated : The Basics. John Wiley & Sons, Inc., 2023. ISBN: 9781119772514

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
This course will cover a range of topics and will be delivered in focused, topical modules.

Environmental Technology Module
Taught in conjunction with or immediately following Graduate Core 4 Studio, this course builds on the previous environmental technology coursework, with an emphasis on acoustical systems:

room acoustics and building acoustics. Mechanical systems, domestic water and sanitary systems, artificial lighting systems, power systems, fire suppression systems, mechanical movement systems are examined and applied to designs. Energy systems and power grid distribution are introduced followed by the introduction of renewable energy systems including wind farms, PV systems, geothermal and solar hot water systems.

Materials and Methods Module
This module focuses on the overall system integration and enclosure. This will include an initial examination of the integration of building codes with regards to construction types, occupancies, and egress fundamentals. The modules will also study the spatial implications of building mechanical systems and the potentials for advanced/green systems of enclosure.

Content Delivery: The modules will be composed of three different methods of content delivery.
• Lectures: present content and issues. Led by module instructors.
• Labs: provide hands-on opportunity to examine, discuss and understand content. These are explicitly linked to co-requisite studio course projects.
• Workshops: brief intense hands-on sessions to study specific topics within a module. Workshops occur during lab sessions and include group work.

Environmental Technology Module

Week	Readings	Class topic	Assignment/Activity
1	Lechner	Intro to HVAC and Thermal Zoning	Quiz
1		Active Heating Systems	Quiz
2	Lechner	Refrigeration and Active Cooling Systems	LAB: HVAC Load Tools 1
2		Heat Loss and Heat Gain	Active heating/cooling fundamentals Assignment due
3	Lechner	Schematic HVAC Design & Cooling Distribution	LAB: HVAC Distribution Tools 1
3	Lechner	Water Supply and Distribution (plumbing)	Active heating/cooling sizing Assignment due Quiz
4	Lechner	Waste Water, reclamation, and discharge	Quiz
4	TBA	Fundamentals, physics, and perception of sound	LAB: Acoustics Tools 1
5	TBA	Room acoustics: reflection, absorption	Principles of Acoustics Assignment due
5	TBA	Room acoustics: subjective - objective measures	Room Acoustics Measurement Assignment due LAB: Acoustics Tools 2
6	TBA	Building acoustics: Noise curves, TL and STC	Quiz
6	TBA	Building acoustics: MEP noise and IIC	LAB: Building Acoustics Workshop
7	Lechner	Perception and physics of light	Building Acoustics Workshop Assignment due
7	Lechner	Electric light source and distribution	Perceptions of Light Assignment due LAB: Light Tools 1
8	Lechner	Artificial light: calculation, simulation, design	LAB: Light Tools 2
8	Lechner	Energy principles, power grid	
9	Lechner	Renewable energy: wind, PV, geothermal	Energy/Power Systems Assignment due
9	NA	EXAM	EXAM

Materials and Methods Module

Week	Readings	Class topic	Assignment/Activity
10	Allen	Plenum: Horizontal System Distribution Building Core: Vertical System Distribution	
10	Allen	No lecture	LAB: Building System Distribution

11   Allen   Advanced Building Systems: Roof   Building System Distribution Assignment due
    11   Allen   Advanced Building Systems: Walls   Roof to Wall Assemblies Assignment due
    12   Allen   Initial issues of Assembly and Detail   LAB: Detailing 1
    12   Allen   Code Fundamentals: Health, Safety, Welfare   Assembly to Detail Assignment due
    13   Allen   Code: Fundamental Egress Methods   Code Search Assignment due
    13   Allen   No lecture   LAB: Code Notes & Calculations
    14   Allen   Examining the Role of Detail   Egress Assignment due LAB: Detailing 1
    14   Allen   Convention/Innovation/Invention   Detail Assignment
    15   NA   Communicating Design Intent   Workshop: Summative Integrated Project – Document Set – DRAFT due
    15   NA   Communicating Design Intent (Summative Integrated Project)   Summative Integrated Project – Document Set – FINAL due, Final Review

Grading Scheme

List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Students will be responsible for the material in the reading assignments as well as the course lectures and laboratory sessions. There will be a range of project assignments and may include both individual and group work. Assignments will ask students to apply knowledge of class material in two potential forms; topic-specific lab assignments relative to direct coursework which will correspond with module topics, and synchronous assignments that complement concurrent, studio-based design projects.

Methodology
Learning objectives are reinforced through periodic assignments, scaffolded using case study projects.
•   Quizzes: Periodic quizzes will be given based on assigned reading and prior class lectures - assessed by instructor
•   Periodic Assignments/Labs - Assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. Assignments scaffold elements of summative project. Final assessment is by the instructor.
•   Labs (individual) and Workshops (group): Conducted during class time, labs and workshops provide hands-on opportunity to examine, discuss and understand content. Labs may or may not have deliverables that contribute toward grades – assessed by instructor.
•   Exams: Exams will be given based on assigned reading and class lectures - assessed by instructor.
•   Summative Integrated Project (Document Set): Outcomes of assignments and labs will be refined and integrated into a set of documents that communicate design intent through applied knowledge. Grades will be based on the quality and completeness of work, the continuous development of clarity and rigor of the application of technical knowledge to support design concepts, and ability to present in visual, written, and verbal form. Assessed by instructor with input from panel of faculty and outside expert critics.

Each module and the Integrated Project will be graded separately. The semester grade will be based on the following breakdown relative to content modules and final project. To pass the course, the cumulative course grade must be 60% or better.

Course Module Weighting
Environmental Tech Module: 60%
Materials/Methods Module: 30%
Summative Integrated Project   10%

Total: 100%

Environmental Technology Module: 60% of course grade

Assignments	20% of module grade
Labs (applied tools)	20% of module grade
Quizzes	20% of module grade
Exam	40% of module grade
Total:	

100%

Materials and Methods Module: 30% of course grade

Assignments	60% of module grade
Labs (applied tools)	40% of module grade
Total:	

100%

Summative Integrated Project – Document Set – 10% of course grade

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
to be determined

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:
Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access

needs, as early as possible in the semester.

Response:
Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• *https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx*

Response:
Yes

Course Evaluation Policy
Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• *Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.*

* *

Response:
Yes

Integrated Building Technology 4

ARC 5XXX   Section:
Class Periods: Days of week, period, and corresponding time of day
Location: Classroom location
Academic Term: Spring 2026
Total Credits: 6

Instructors:

Environmental Technology Module
Faculty Member 1
Office: XX
Contact: XX
Office Hours: XX

Materials & Methods Module
Faculty Member 2
Office: XX
Contact: XX
Office Hours: XX

Teaching Assistants:
Please contact through the Canvas website
- Name of TA, email address, office location, office hours
- Name of TA, email address, office location, office hours

Course Description
The fourth course in a multi-year integrated building technology sequence builds on earlier materials and methods, digital design, environmental design, building systems, and structural systems knowledge and skills. Students prepare to use integrated knowledge and skill to make design decisions in buildings of increasing complexity. Building systems complexity involves mechanical system integration/distribution, building code constraints, regulations, calculations, and interpretations.

Rationale and Placement in Curriculum
This is the fourth integrated building technology course in a sequence of four building technology fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. By teaching these topics as a series of related modules with hands-on learning laboratory assignments, students are expected to learn the important technological information associated with each topic, to see sustainable design connections across modules, and to develop a facility in integrating these ideas into their design studio projects.

Course Pre-Requisites / Co-Requisites
Pre-Requisite – ARC5XXX Integrated Building Technology 3
Pre-Requisite – ARC5XXX-Graduate Core Studio 3
Pre-Requisite or Co-Requisite - ARC5XXX-Graduate Core Studio 4

Course Objectives
- Apply the fundamentals of structural design to shape studio projects.
- Integrate mechanical systems, domestic water and sanitary systems, artificial lighting systems, power systems, fire suppression systems, mechanical movement systems into studio projects.
- Apply room and building acoustical design to studio projects

- Examine the material relationship of building structure and tectonic and spatial systems by detailing building assemblies in studio projects.
- Apply environmental factors to shape design decisions that shape studio projects.
- Apply building code requirements by making design decisions that shape studio projects.

NAAB Student Performance Criteria
<u>Primary Location for Student Performance Criteria</u>
- None

<u>Secondary Location for Student Performance Criteria</u>
- SC.4 Technical Knowledge

Materials and Supply Fees
List if applicable

Required Textbooks and Software
Allen, Edward, and Joseph Iano. *Fundamentals of Building Construction: Materials and Methods*. Sixth edition, Wiley, 2014. ISBN 978-1-118-13891-5

Ching, Francis D. K. Building Construction Illustrated. Fourth or fifth edition, 2014. Print.

Daniel L. Shodek, Martin Bechthold. Structures. 7th Edition (or later). Pearson/Prentice Hall, c2014.

Lechner, Norbert, et al. Heating, Cooling, Lighting : Sustainable Design Strategies towards Net Zero Architecture. Fifth edition, John Wiley & Sons, Inc., 2022. ISBN 978-1119585749

Grondzik, Walter T., and Alison G. Kwok. *Mechanical and Electrical Equipment for Buildings*. Twelfth edition, Wiley, 2015, http://site.ebrary.com/id/10935017.

Ching, Francis D. K., and Steven R. Winkel. *Building Codes Illustrated : The Basics*. John Wiley & Sons, Inc., 2023. ISBN: 9781119772514

Recommended Materials
Hausladen, Gerhard, et al. *Building to Suit the Climate: A Handbook*. Birkhäuser, 2012, https://doi.org/10.1515/9783034608787.

Course Schedule
This course will cover a range of topics and will be delivered in focused, topical modules.

Environmental Technology Module
Taught in conjunction with or immediately following Graduate Core 4 Studio, this course builds on the previous environmental technology coursework, with an emphasis on acoustical systems: room acoustics and building acoustics. Mechanical systems, domestic water and sanitary systems, artificial lighting systems, power systems, fire suppression systems, mechanical movement systems are examined and applied to designs. Energy systems and power grid distribution are introduced followed by the introduction of renewable energy systems including wind farms, PV systems, geothermal and solar hot water systems.

Materials and Methods Module
This module focuses on the overall system integration and enclosure. This will include an initial examination of the integration of building codes with regards to construction types, occupancies, and egress fundamentals. The modules will also study the spatial implications of building mechanical systems and the potentials for advanced/green systems of enclosure.

Content Delivery: The modules will be composed of three different methods of content delivery.
- Lectures: present content and issues. Led by module instructors.
- Labs: provide hands-on opportunity to examine, discuss and understand content. These are explicitly linked to co-requisite studio course projects.

- Workshops: brief intense hands-on sessions to study specific topics within a module. Workshops occur during lab sessions and include group work.

Weekly Schedule

	Week	Readings	Class topic	Assignment/Activity
Environmental Technology Module	1	Lechner	Intro to HVAC and Thermal Zoning	Quiz
	1		Active Heating Systems	Quiz
	2	Lechner	Refrigeration and Active Cooling Systems	LAB: HVAC Load Tools 1
	2		Heat Loss and Heat Gain	*Active heating/cooling fundamentals Assignment due*
	3	Lechner	Schematic HVAC Design & Cooling Distribution	LAB: HVAC Distribution Tools 1
	3	Lechner	Water Supply and Distribution (plumbing)	*Active heating/cooling sizing Assignment due* Quiz
	4	Lechner	Waste Water, reclamation, and discharge	Quiz
	4	TBA	Fundamentals, physics, and perception of sound	LAB: Acoustics Tools 1
	5	TBA	Room acoustics: reflection, absorption	*Principles of Acoustics Assignment due*
	5	TBA	Room acoustics: subjective - objective measures	*Room Acoustics Measurement Assignment due* LAB: Acoustics Tools 2
	6	TBA	Building acoustics: Noise curves, TL and STC	Quiz
	6	TBA	Building acoustics: MEP noise and IIC	*LAB: Building Acoustics Workshop*
	7	Lechner	Perception and physics of light	*Building Acoustics Workshop Assignment due*
	7	Lechner	Electric light source and distribution	*Perceptions of Light Assignment due* LAB: Light Tools 1
	8	Lechner	Artificial light: calculation, simulation, design	LAB: Light Tools 2
	8	Lechner	Energy principles, power grid	
	9	Lechner	Renewable energy: wind, PV, geothermal	*Energy/Power Systems Assignment due*
	9	NA	EXAM	*EXAM*

	Week	Readings	Class topic	Assignment/Activity
Materials and Methods Module	10	Allen	Plenum: Horizontal System Distribution Building Core: Vertical System Distribution	
	10	Allen	No lecture	LAB: Building System Distribution
	11	Allen	Advanced Building Systems: Roof	*Building System Distribution Assignment due*
	11	Allen	Advanced Building Systems: Walls	*Roof to Wall Assemblies Assignment due*
	12	Allen	Initial issues of Assembly and Detail	LAB: Detailing 1
	12	Allen	Code Fundamentals: Health, Safety, Welfare	Assembly to Detail Assignment due
	13	Allen	Code: Fundamental Egress Methods	Code Search Assignment due
	13	Allen	No lecture	LAB: Code Notes & Calculations
	14	Allen	Examining the Role of Detail	Egress Assignment due LAB: Detailing 1
	14	Allen	Convention/Innovation/Invention	Detail Assignment

	15	NA	Communicating Design Intent	Workshop: Summative Integrated Project – Document Set – DRAFT due
	15	NA	Communicating Design Intent (Summative Integrated Project)	Summative Integrated Project – Document Set – FINAL due, Final Review

Attendance Policy, Class Expectations, and Make-Up Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://gradcatalog.ufl.edu/graduate/regulations/

Attendance for all lectures, labs and/or workshops is mandatory, will be taken at the start of meetings, and recorded in canvas. Chronic absences and/or tardiness will have a negative impact on your grade. Tardiness of more than 20 minutes to any lab/lecture will be counted as an unexcused absence. Three or more unexcused absences may result in a full letter-grade reduction in the course. Four unexcused absences can result in failure of the course (see grade breakdown below). Materials covered in the lecture will be tested. If you must miss class, it is your responsibility to notify the instructors in a timely manner, as well as getting the assignments and notes from your classmates.

Evaluation of Grades

Students will be responsible for the material in the reading assignments as well as the course lectures and laboratory sessions. There will be a range of project assignments and may include both individual and group work. Assignments will ask students to apply knowledge of class material in two potential forms; topic-specific lab assignments relative to direct coursework which will correspond with module topics, and synchronous assignments that complement concurrent, studio-based design projects.

Methodology

Learning objectives are reinforced through periodic assignments, scaffolded using case study projects.

- Quizzes: Periodic quizzes will be given based on assigned reading and prior class lectures - assessed by instructor
- Periodic Assignments/Labs - Assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. Assignments scaffold elements of summative project. Final assessment is by the instructor.
- Labs (individual) and Workshops (group): Conducted during class time, labs and workshops provide hands-on opportunity to examine, discuss and understand content. Labs may or may not have deliverables that contribute toward grades – assessed by instructor.
- Exams: Exams will be given based on assigned reading and class lectures - assessed by instructor.
- *Summative Integrated Project (Document Set): Outcomes of assignments and labs will be refined and integrated into a set of documents that communicate design intent through applied knowledge. Grades will be based on the quality and completeness of work, the continuous development of clarity and rigor of the application of technical knowledge to support design concepts, and ability to present in visual, written, and verbal form. Assessed by instructor with input from panel of faculty and outside expert critics.*

Each module and the Integrated Project will be graded separately. The semester grade will be based on the following breakdown relative to content modules and final project. To pass the course, the cumulative course grade must be 60% or better.

Course Module Weighting
Environmental Tech Module: 60%
Materials/Methods Module: 30%
Summative Integrated Project   10%
Total: 100%

Environmental Technology Module: 60% of course grade
Assignments   20% of module grade
Labs (applied tools)   20% of module grade

Quizzes	20% of module grade
Exam	40% of module grade
Total:	100%

Materials and Methods Module: 30% of course grade

Assignments	60% of module grade
Labs (applied tools)	40% of module grade
Total:	100%

Summative Integrated Project – Document Set – 10% of course grade

UF Coronavirus Policies and Campus Operations
Visit https://coronavirus.ufl.edu/health-guidance/ to stay up to date on UF's COVID related Policies

Attendance Policy, Class Expectations, and Make-Up Policy
Attendance is mandatory. Three or more unexcused absences may result in an administrative drop from the course. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click here to read the university attendance policies.

Grading Policy

	Letter Grade	Numeric Grade	Quality Points	Qualitative Description
PASSING GRADES	A	93 - 100	4.0	Outstanding work only
	A-	90 – 92.9	3.67	Close to outstanding
	B+	87 - 89.9	3.33	Very good work
	B	84 – 86.9	3.0	Good work
	B-	80 – 83.9	2.67	Good work with some problems
	C+	77 - 79.9	2.33	Slightly above average work
	C	74 – 76.9	2.0	Average work
FAILING GRADES	C-	70 - 73.9	1.67	Average work with some problems
	D+	67 - 69.9	1.33	Poor work with some effort
	D	64 - 66.9	1.0	Poor work
	D-	61 - 63.9	0.67	Poor work with some problems
	E	0. - 60.9	0.0	Inadequate work

(Minimum Cumulative GPA — annotation pointing to 3.0)

More information on UF grading policy may be found at:
UF Graduate Catalog
Grades and Grading Policies

Students Requiring Accommodations
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

Distance Learning Privacy Policy
Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

In-Class Recording
Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, and exams), field trips, and private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

University Honesty Policy
UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Students in the School of Architecture are expected to adhere to all University of Florida academic honesty policies. Failure to do so will result in lowered grades and/or referral to the University Honor Court. Since the University's policies are necessarily generalized, the School of Architecture further clarifies academic honesty within the specific setting of design education. The following acts are considered to be academic dishonesty:

1. **Plagiarism/misrepresentation**

   There shall be no question of what your work is and what someone else's is. This applies to all aspects of student performance, including but not limited to
   - CAD drawings and construction details
   - design guidelines (written and graphic)

   - design, planning, and management projects or portions of projects

   - class reports and papers (again, both written and graphic information)

   - any assignment where sole authorship is indicated, such as take-home tests, individual projects, etc.

   Examples of inappropriate activities include:
   - copying graphics for a report without crediting the original source

   - representing someone else's work as your own (using existing CAD construction details, tracing drawings, etc.)

   - allowing someone else to represent your work as his own

   The importance of precedent and learning from past works is a necessary part of most design processes. Again, it is the intent and degree of "borrowing" ideas that is at question.

   Anything not original must be paraphrased and cited, or quoted; using accepted style formats such as APA, MLA, Chicago Manual of Style, etc. This includes information obtained from the Internet, public documents, graphics, and personal interviews as well as more traditional written sources. Proper crediting of all information that is not common knowledge is necessary for academic honesty as well as for professionalism. (For example, analysis drawings and/or text should cite the sources from which data was obtained so that if questions arise later, they can be quickly and accurately answered.)

   Multiple submissions of the same or similar work without prior approval
   If the instructors understand that you are doing a paper associated with your thesis or senior project topic, then doing similar work for two different classes is acceptable—if the instructors agree to it. If a single paper is submitted for one class, then later is submitted for another, and the instructors expect original work, then the multiple submission is inappropriate.

2. **Falsifying information**

   Examples include:

   - misrepresenting reasons why work cannot be done as requested

   - changing or leaving out data, such as manipulating statistics for a research project, or ignoring/hiding inconvenient but vital site information. (However, for educational purposes only, certain aspects of the "real world" may be jointly agreed upon as not being pertinent to the academic goals of the course, such as not dealing with specific project parameters or budget, changing the program, etc.)

   - altering work after it has been submitted

   - hiding, destroying, or otherwise making materials unavailable (hiding reference materials, not sharing materials with other students, etc.)

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

Campus Resources:

Health and Wellness

U Matter, We Care:
If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: counseling.ufl.edu/cwc, and 392-1575 for information on crisis services as well as non-crisis services; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)
Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints Campus, Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints, View the Distance Learning Student Complaint Process

Orlando Resources

Police / Fire / Medical Emergency – 911
Orlando Police Department Non-Emergency Number: 321.235.5300
Consult CityLab-Orlando Student Resources for Emergency contact information.

Course|New for request 20030

Info

Request: ARC 5XXXL Graduate Core Studio 3
Description of request: Graduate Core Studio 3 is part of the graduate Master of Architecture Degree Track Three (Core Program), a 100-credit degree for students whose undergraduate degree is in a field other than architecture.
Submitter: Stephen Bender sbender@ufl.edu
Created: 8/20/2024 8:28:18 AM
Form version: 3

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
ARC

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

Response:
5

Undergraduate students in 5000 level courses
Is this course intended for an audience including undergraduate students?

Response:
No

Rationale for 5000 level course request
Please provide the rationale for submitting this course as a 5000 level course in the space provided below. (i.e. target student audience, program, school). 5000 level courses require joint review and approval by the University Curriculum Committee and Graduate Curriculum Committee or Professional Curriculum Committee.

Response:
Graduate Core Studio 3 is part of the graduate Master of Architecture Degree Track Three (Core Program), a 100-credit degree for students whose undergraduate degree is in a field other than architecture.

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Lab Code

Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
L

Category of Instruction

Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.
* *

Response:
Intermediate

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title

*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Graduate Core Studio 3

Transcript Title

Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Graduate Core Studio 3

Degree Type

Select the type of degree program for which this course is intended.

Response:
Graduate

Delivery Method(s)

Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Off-Campus, Online

Co-Listing

Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term

Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year

Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic

Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?

Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit

Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that

credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
6

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
6

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic

Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

> Response:
> Continuation of core studio sequence with studio projects related to program development, structural integration, mechanical systems integration, and energy analysis. Students analyze urban context as dynamic evolving systems including commerce, public space, infrastructure, and morphology. Emphasis is on digital techniques of exploration, information, and representation. Projects scaffold application of program development, structure, energy analysis, and mechanical systems.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

> Response:
> N/A

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

> Response:
> ARC 5XXX Graduate Core Studio 2

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

> Response:

The third of a series of architecture design fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. Core 3 is the first in the sequence of urban studios of the Core curriculum that address the city as context. It investigates the pre-industrial urban context as dynamic evolving systems including commerce, public space, infrastructure, and morphology.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
1. Create architecture that is informed by research and analysis, that explores the potential of architecture to participate in an urban context by responding to the physical and cultural context.
2. Synthesize program development, and code requirements, structural system, and mechanical systems into architecture relying on energy, structural, and carbon analysis tools.
3. Develop building envelope proposals that mediate formal, spatial, and atmospheric relationships between the interior and exterior.
4. Apply tectonic language, material considerations, and spatial organization based on a conceptual approach, that is developed and documented using the architectural conventions of plan, section, and detail.

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Required Textbooks and Software
Instructor will select software from:
UF|SOA Student Computing Requirements
UF|SOA Software Requirements

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
PROJECT 1 - Poetics of Interpretation
Urban Situation: pre-industrial city
An architectural Etude to explore the fundamental rigors of responding to concepts, codes, and useful organizational systems. This will be done as small-scale (5,000 sf) urban infill project in Charleston, SC. Students propose spatial response to contextual issues – immediate context and broader social & climate issues. Students develop plan, section, and circulation as spatial systems and drawing conventions (conceptual level) Students propose ground/sky relationships and develop plan and section drawings. Students propose climate responsive strategies (hot and humid) that are quantitatively measured in parallel courses.

PROJECT 2 – Cultural Center: Reconsidering the Role of Civic Architecture and Public Space
Urban Situation: Florida City
How can we recall the past while holding an optimistic vision of the future through architecture? Certainly, this is a challenge. We will explore these ideas through developing architecture inspired by culture, climate, and civic engagement within a Florida city. Students develop conceptual responses to context – social, climate, local.
Students respond to requirements of a complex building program using spatial organization strategies– large and small spaces +/- 50,000 sf. Students iterate architectural form, structure, enclosure and circulation systems driven by a conceptual position. Students propose appropriate

climate responsive strategies (hot and humid) and test them using simulation models. Students integrate schematic design level active climate control systems. Students demonstrate schematic level drawing conventions in plan, section, and circulation systems. Students use physical and computer modeling techniques to study design.

Projects scaffold periodic assignments.

Weekly Schedule

Week	Topic	Assignment
Week 1	Project 1	Periodic Assignments 1
Week 2	Project 1	Periodic Assignments 2
Week 3	Project 1	Periodic Assignments 3
Week 4	Project 1	Periodic Assignments 4
Week 5	Project 1	Periodic Assignments 5
Week 6	Project 1	Periodic Assignments 6
Week 7	Project 2	Project 1 Review
Week 8	Project 2	Periodic Assignments 7
Week 9	Project 2	Periodic Assignments 8
Week 10	Project 2	Periodic Assignments 9
Week 11	Project 2	Project 2 Interim Review
Week 12	Project 2	Periodic Assignments 11
Week 13	Project 2	Periodic Assignments 12
Week 14	Project 2	Periodic Assignments 13
Week 15	Project 2	Review Preparation
Week 16	Project 2	Project 2 Review

Grading Scheme

List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Learning objectives are reinforced through periodic assignments, scaffolded by problems defined in projects. The work performed in periodic assignment contributes to the project outcome. Students use a creative iterative design process by direct experience of design evolution: ideation, prototyping, and testing.
• Projects – Projects scaffold periodic assignments, which increase in complexity. Projects cause students to demonstrate ability to perform learning objectives toward development of a synthetic whole. Additional projects may be added at the discretion of the instructor. Assessed by the instructor and a panel of faculty, and professional experts.
• Periodic Assignments - Model and drawing assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. The nature of periodic assignments changes depending on the phase of iterative design process: ideation, prototyping, and testing. Students are expected to engage in self-assessment, and peer assessment as a discourse to seek problems and propose answers. Final assessment is by the instructor.

Assignment	Total Points	Percentage of Final Grade
Periodic assignments (25)	100	50
Projects (2 or more)	100	50
Total	200	100

Instructor(s)

Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:

to be determined

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

    Response:
    Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

    Response:
    Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

    Response:
    Yes

Course Evaluation Policy
Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-

results/">https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

Graduate Core Studio 3
ARC 5XXX   Section:
Class Periods: Days of week, period, and corresponding time of day
Location: Classroom location
Academic Term: Fall 202X

Instructor:
Name
Email Address
Office Phone Number
Office Hours: Days of week, hours available, office location

Course Description
Continuation of core studio sequence with studio projects related to program development, structural integration, mechanical systems integration, and energy analysis. Students analyze urban context as dynamic evolving systems including commerce, public space, infrastructure, and morphology. Emphasis is on digital techniques of exploration, information, and representation. Projects scaffold application of program development, structure, energy analysis, and mechanical systems.

Rationale and Placement in Curriculum
The third of a series of architecture design fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. Core 3 is the first in the sequence of urban studios of the Core curriculum that address the city as context. It investigates the pre-industrial urban context as dynamic evolving systems including commerce, public space, infrastructure, and morphology.

Course Pre-Requisites / Co-Requisites
ARC 5XXX Graduate Core Studio 2
department permission

Course Objectives
1. Create architecture that is informed by research and analysis, that explores the potential of architecture to participate in an urban context by responding to the physical and cultural context.
2. Synthesize program development, and code requirements, structural system, and mechanical systems into architecture relying on energy, structural, and carbon analysis tools.
3. Develop building envelope proposals that mediate formal, spatial, and atmospheric relationships between the interior and exterior.
4. Apply tectonic language, material considerations, and spatial organization based on a conceptual approach, that is developed and documented using the architectural conventions of plan, section, and detail.

Materials and Supply Fees
No fees

Required Textbooks and Software
Instructor will select software from:
UF|SOA Student Computing Requirements
UF|SOA Software Requirements

Course Schedule
PROJECT 1 - Poetics of Interpretation
Urban Situation: pre-industrial city
An architectural Etude to explore the fundamental rigors of responding to concepts, codes, and useful organizational systems. This will be done as small-scale (5,000 sf) urban infill project in Charleston, SC. Students

propose spatial response to contextual issues – immediate context and broader social & climate issues. Student develop plan, section, and circulation as spatial systems and drawing conventions (conceptual level) Students propose ground/sky relationships and develop plan and section drawings. Students propose climate responsive strategies (hot and humid) that are quantitatively measured in parallel courses.

PROJECT 2 – Cultural Center: Reconsidering the Role of Civic Architecture and Public Space
Urban Situation: Florida City
How can we recall the past while holding an optimistic vision of the future through architecture? Certainly, this is a challenge. We will explore these ideas through developing architecture inspired by culture, climate, and civic engagement within a Florida city. Students develop conceptual responses to context – social, climate, local. Students respond to requirements of a complex building program using spatial organization strategies– large and small spaces +/- 50,000 sf. Students iterate architectural form, structure, enclosure and circulation systems driven by a conceptual position. Students propose appropriate climate responsive strategies (hot and humid) and test them using simulation models. Students integrate schematic design level active climate control systems. Students demonstrate schematic level drawing conventions in plan, section, and circulation systems. Students use physical and computer modeling techniques to study design.

Projects scaffold periodic assignments.

Weekly Schedule

Week	Topic	Assignment
Week 1	Project 1	Periodic Assignments 1
Week 2	Project 1	Periodic Assignments 2
Week 3	Project 1	Periodic Assignments 3
Week 4	Project 1	Periodic Assignments 4
Week 5	Project 1	Periodic Assignments 5
Week 6	Project 1	Periodic Assignments 6
Week 7	Project 2	Project 1 Review
Week 8	Project 2	Periodic Assignments 7
Week 9	Project 2	Periodic Assignments 8
Week 10	Project 2	Periodic Assignments 9
Week 11	Project 2	Project 2 Interim Review
Week 12	Project 2	Periodic Assignments 11
Week 13	Project 2	Periodic Assignments 12
Week 14	Project 2	Periodic Assignments 13
Week 15	Project 2	Review Preparation
Week 16	Project 2	Project 2 Review

Attendance Policy, Class Expectations, and Make-Up Policy
State whether attendance is required and if so, how will it be monitored?   What are the penalties for absence, tardiness, cell phone policy, laptop policy, etc.   What are the arrangements for missed homework, missed quizzes, and missed exams? This statement is required: Excused absences must be consistent with university policies in the Graduate Catalog (http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance) and require appropriate documentation. Additional information can be found here:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Evaluation of Grades
Methodology

Learning objectives are reinforced through periodic assignments, scaffolded by problems defined in projects. The work performed in periodic assignment contributes to the project outcome. Students use a creative iterative design process by direct experience of design evolution: ideation, prototyping, and testing.

- Projects – Projects scaffold periodic assignments, which increase in complexity. Projects cause students to demonstrate ability to perform learning objectives toward development of a synthetic whole. Additional projects may be added at the discretion of the instructor. Assessed by the instructor and a panel of faculty, and professional experts.
- Periodic Assignments - Model and drawing assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. The nature of periodic assignments changes depending on the phase of iterative design process: ideation, prototyping, and testing. Students are expected to engage in self-assessment, and peer assessment as a discourse to seek problems and propose answers. Final assessment is by the instructor.

Assignment	Total Points	Percentage of Final Grade
Periodic assignments (25)	100	50
Projects (2 or more)	100	50
Total	200	100

UF Coronavirus Policies and Campus Operations
Visit https://coronavirus.ufl.edu/health-guidance/ to stay up to date on UF's COVID related Policies

Attendance Policy, Class Expectations, and Make-Up Policy
Attendance is mandatory. Three or more unexcused absences may result in an administrative drop from the course. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click here to read the university attendance policies.

Grading Policy

	Letter Grade	Numeric Grade	Quality Points	Qualitative Description
PASSING GRADES	A	93 - 100	4.0	Outstanding work only
	A-	90 – 92.9	3.67	Close to outstanding
	B+	87 - 89.9	3.33	Very good work
	B	84 – 86.9	3.0	Good work
	B-	80 – 83.9	2.67	Good work with some problems
	C+	77 - 79.9	2.33	Slightly above average work
	C	74 – 76.9	2.0	Average work
FAILING GRADES	C-	70 - 73.9	1.67	Average work with some problems
	D+	67 - 69.9	1.33	Poor work with some effort
	D	64 - 66.9	1.0	Poor work
	D-	61 - 63.9	0.67	Poor work with some problems
	E	0. - 60.9	0.0	Inadequate work

(Minimum Cumulative GPA — 3.0)

More information on UF grading policy may be found at:

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

Distance Learning Privacy Policy

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, and exams), field trips, and private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report

any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Students in the School of Architecture are expected to adhere to all University of Florida academic honesty policies. Failure to do so will result in lowered grades and/or referral to the University Honor Court. Since the University's policies are necessarily generalized, the School of Architecture further clarifies academic honesty within the specific setting of design education. The following acts are considered to be academic dishonesty:

1. **Plagiarism/misrepresentation**

   There shall be no question of what your work is and what someone else's is. This applies to all aspects of student performance, including but not limited to
   - CAD drawings and construction details
   - design guidelines (written and graphic)

   - design, planning, and management projects or portions of projects

   - class reports and papers (again, both written and graphic information)

   - any assignment where sole authorship is indicated, such as take-home tests, individual projects, etc.

   Examples of inappropriate activities include:
   - copying graphics for a report without crediting the original source

   - representing someone else's work as your own (using existing CAD construction details, tracing drawings, etc.)

   - allowing someone else to represent your work as his own

   The importance of precedent and learning from past works is a necessary part of most design processes. Again, it is the intent and degree of "borrowing" ideas that is at question.

   Anything not original must be paraphrased and cited, or quoted; using accepted style formats such as APA, MLA, Chicago Manual of Style, etc. This includes information obtained from the Internet, public documents, graphics, and personal interviews as well as more traditional written sources. Proper crediting of all information that is not common knowledge is necessary for academic honesty as well as for professionalism. (For example, analysis drawings and/or text should cite the sources from which data was obtained so that if questions arise later, they can be quickly and accurately answered.)

   Multiple submissions of the same or similar work without prior approval
   If the instructors understand that you are doing a paper associated with your thesis or senior project topic, then doing similar work for two different classes is acceptable—if the instructors agree to it. If a single paper is submitted for one class, then later is submitted for another, and the instructors expect original work, then the multiple submission is inappropriate.

2. **Falsifying information**

   Examples include:

   - misrepresenting reasons why work cannot be done as requested

   - changing or leaving out data, such as manipulating statistics for a research project, or ignoring/hiding inconvenient but vital site information. (However, for educational purposes only, certain aspects of the

"real world" may be jointly agreed upon as not being pertinent to the academic goals of the course, such as not dealing with specific project parameters or budget, changing the program, etc.)

- altering work after it has been submitted

- hiding, destroying, or otherwise making materials unavailable (hiding reference materials, not sharing materials with other students, etc.)

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

Campus Resources:

Health and Wellness

U Matter, We Care:
If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: counseling.ufl.edu/cwc, and 392-1575 for information on crisis services as well as non-crisis services; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)
Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints Campus, Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints, View the Distance Learning Student Complaint Process

Orlando Resources

Police / Fire / Medical Emergency – 911
Orlando Police Department Non-Emergency Number: 321.235.5300
Consult CityLab-Orlando Student Resources for Emergency contact information.

Course|New for request 20031

Info

Request: ARC 5XXXL Graduate Core Studio 4
Description of request: Graduate Core Studio 4 is part of the graduate Master of Architecture Degree Track Three (Core Program), a 100-credit degree for students whose undergraduate degree is in a field other than architecture.
Submitter: Stephen Bender sbender@ufl.edu
Created: 8/20/2024 8:36:24 AM
Form version: 3

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

    Response:
    ARC

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

    Response:
    5

Undergraduate students in 5000 level courses
Is this course intended for an audience including undergraduate students?

    Response:
    No

Rationale for 5000 level course request
Please provide the rationale for submitting this course as a 5000 level course in the space provided below. (i.e. target student audience, program, school). 5000 level courses require joint review and approval by the University Curriculum Committee and Graduate Curriculum Committee or Professional Curriculum Committee.

    Response:
    Graduate Core Studio 4 is part of the graduate Master of Architecture Degree Track Three (Core Program), a 100-credit degree for students whose undergraduate degree is in a field other than architecture.

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

    Response:
    XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
L

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.
* *

Response:
Intermediate

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Graduate Core Studio 4

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Graduate Core Studio 4

Degree Type
Select the type of degree program for which this course is intended.

Response:
Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Off-Campus, Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that

credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
6

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
6

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic

Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
Continuation of core studio sequence Graduate Core Studio 4 is the second in the sequence of urban studios that investigate the role of architecture in contemporary urban conditions evolving in the dense cities developed by the industrial revolution such as New York City. Students analyze context as dynamic evolving systems including commerce, public space, infrastructure, and morphology. Projects scaffold application of integrated building technology topics.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
N/A

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
ARC 5XXX Graduate Core Studio 3

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
The fourth and last of a series of architecture design fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge

sufficient that they can perform in the advanced graduate studio sequence. It is the second in the sequence of urban studios of the Core curriculum that address the city as context.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
1. Create architecture that is informed by research and analysis, that explores the potential of architecture to participate in an urban context by responding to the physical and cultural context.
2. Synthesize program, public space, building technology (structure, enclosure/cladding, mechanical systems, acoustics, lighting), and code requirements into urban scale architectural proposals.
3. Develop multi-building urban design proposals that address urban conditions in contemporary evolving dense cities.
4. Propose public space attendant to accessibility, transitions between levels, street boundaries, urban volumetrics, and facades (building skins) that makes a clear contribution to the public realm.

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Required Textbooks and Software
Instructor will select software from:
UF|SOA Student Computing Requirements
UF|SOA Software Requirements

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
PROJECT 1 – Metropolis
Urban Situation: contemporary, dense, post- industrial revolution city
Project 1 tackles the association of buildings from which contemporary urban public space emerges. Students uncover the role of architecture and public space within the city by mapping contemporary dense urban conditions, urban assemblages as its context. Students conduct background research- and context-informed technical and analytical investigations of the issues that define the Metropolis, Large and Extra-Large Projects will inform student focus for schematic development of the public space and buildings in their proposals, including accessibility, careful design of the areas at the ground level, design of the surrounding public space and building skin understanding its spatial contribution to the public realm.

Week	Topic	Assignment
Week 1	Research/Investigations	Periodic Assignments 1
Week 2	Research/Investigations	Periodic Assignments 2
Week 3	Research/Investigations	Periodic Assignments 3
Week 4	Research/Investigations	Interim Review
Week 5	Site Visit	Periodic Assignments 5
Week 6	Project 1	Periodic Assignments 6
Week 7	Project 1	Periodic Assignments 7
Week 8	Project 1	Interim Review
Week 9	Project 1	Periodic Assignments 8

Week 10	Project 1	Periodic Assignments 9
Week 11	Project 1	Periodic Assignments 10
Week 12	Project 1	Periodic Assignments 11
Week 13	Project 1	Periodic Assignments 12
Week 14	Project 1	Periodic Assignments 13
Week 15	Project 1	Review Preparation
Week 16	Project 1	Final Review

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Methodology
Learning objectives are reinforced through periodic assignments, scaffolded by problems defined in projects. The work performed in periodic assignment contributes to the project outcome. Students use a creative iterative design process by direct experience of design evolution: ideation, prototyping, and testing.
• Projects – Projects scaffold periodic assignments, which increase in complexity. Projects cause students to demonstrate ability to perform learning objectives toward development of a synthetic whole. Additional projects may be added at the discretion of the instructor. Assessed by the instructor and a panel of faculty, and professional experts.
• Periodic Assignments - Model and drawing assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. The nature of periodic assignments changes depending on the phase of iterative design process: ideation, prototyping, and testing. Students are expected to engage in self-assessment, and peer assessment as a discourse to seek problems and propose answers. Final assessment is by the instructor.

Assignment	Total Points	Percentage of Final Grade
Periodic assignments (25)	100	50
Projects (1 or more)	100	50
Total	200	100

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
to be determined

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:

Yes

Accomodations

Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Response:
Yes

UF Grading Policies for assigning Grade Points

Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Response:
Yes

Course Evaluation Policy

Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

Graduate Core Studio 4

ARC 5XXX   Section:
Class Periods: Days of week, period, and corresponding time of day
Location: Classroom location
Academic Term: Fall 202X

Instructor:
Name
Email Address
Office Phone Number
Office Hours: Days of week, hours available, office location

Course Description
Continuation of core studio sequence Graduate Core Studio 4 is the second in the sequence of urban studios that investigate the role of architecture in contemporary urban conditions evolving in the dense cities developed by the industrial revolution such as New York City. Students analyze context as dynamic evolving systems including commerce, public space, infrastructure, and morphology. Projects scaffold application of integrated building technology topics.

Rationale and Placement in Curriculum
The fourth and last of a series of architecture design fundamentals courses offered to bring students without an architecture pre-professional degree to a level of skill and knowledge sufficient that they can perform in the advanced graduate studio sequence. It is the second in the sequence of urban studios of the Core curriculum that address the city as context.

Course Pre-Requisites / Co-Requisites
ARC 5XXX Graduate Core Studio 3
department permission

Course Objectives
1. Create architecture that is informed by research and analysis, that explores the potential of architecture to participate in an urban context by responding to the physical and cultural context.
2. Synthesize program, public space, building technology (structure, enclosure/cladding, mechanical systems, acoustics, lighting), and code requirements into urban scale architectural proposals.
3. Develop multi-building urban design proposals that address urban conditions in contemporary evolving dense cities.
4. Propose public space attendant to accessibility, transitions between levels, street boundaries, urban volumetrics, and facades (building skins) that makes a clear contribution to the public realm.

Materials and Supply Fees
No fees

Required Textbooks and Software
Instructor will select software from:
UF|SOA Student Computing Requirements
UF|SOA Software Requirements

Course Schedule
PROJECT 1 – Metropolis
Urban Situation: contemporary, dense, post- industrial revolution city
Project 1 tackles the association of buildings from which contemporary urban public space emerges. Students uncover the role of architecture and public space within the city by mapping contemporary dense urban conditions, urban assemblages as its context. Students conduct background research- and context-informed

technical and analytical investigations of the issues that define the Metropolis, Large and Extra-Large Projects will inform student focus for schematic development of the public space and buildings in their proposals, including accessibility, careful design of the areas at the ground level, design of the surrounding public space and building skin understanding its spatial contribution to the public realm.

Week	Topic	Assignment
Week 1	Research/Investigations	Periodic Assignments 1
Week 2	Research/Investigations	Periodic Assignments 2
Week 3	Research/Investigations	Periodic Assignments 3
Week 4	Research/Investigations	Interim Review
Week 5	Site Visit	Periodic Assignments 5
Week 6	Project 1	Periodic Assignments 6
Week 7	Project 1	Periodic Assignments 7
Week 8	Project 1	Interim Review
Week 9	Project 1	Periodic Assignments 8
Week 10	Project 1	Periodic Assignments 9
Week 11	Project 1	Periodic Assignments 10
Week 12	Project 1	Periodic Assignments 11
Week 13	Project 1	Periodic Assignments 12
Week 14	Project 1	Periodic Assignments 13
Week 15	Project 1	Review Preparation
Week 16	Project 1	Final Review

Attendance Policy, Class Expectations, and Make-Up Policy
State whether attendance is required and if so, how will it be monitored?   What are the penalties for absence, tardiness, cell phone policy, laptop policy, etc.   What are the arrangements for missed homework, missed quizzes, and missed exams? This statement is required: Excused absences must be consistent with university policies in the Graduate Catalog (http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance) and require appropriate documentation. Additional information can be found here: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Evaluation of Grades
Methodology
Learning objectives are reinforced through periodic assignments, scaffolded by problems defined in projects. The work performed in periodic assignment contributes to the project outcome. Students use a creative iterative design process by direct experience of design evolution: ideation, prototyping, and testing.
- Projects – Projects scaffold periodic assignments, which increase in complexity. Projects cause students to demonstrate ability to perform learning objectives toward development of a synthetic whole. Additional projects may be added at the discretion of the instructor. Assessed by the instructor and a panel of faculty, and professional experts.
- Periodic Assignments - Model and drawing assignments are made each class meeting and are due at the beginning of the next class unless stated otherwise. The nature of periodic assignments changes depending on the phase of iterative design process: ideation, prototyping, and testing. Students are expected to engage in self-assessment, and peer assessment as a discourse to seek problems and propose answers. Final assessment is by the instructor.

Assignment	Total Points	Percentage of Final Grade
Periodic assignments (25)	100	50
Projects (1 or more)	100	50

Total	200	100

UF Coronavirus Policies and Campus Operations
Visit https://coronavirus.ufl.edu/health-guidance/ to stay up to date on UF's COVID related Policies

Attendance Policy, Class Expectations, and Make-Up Policy
Attendance is mandatory. Three or more unexcused absences may result in an administrative drop from the course. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click here to read the university attendance policies.

Grading Policy

	Letter Grade	Numeric Grade	Quality Points	Qualitative Description
PASSING GRADES	A	93 - 100	4.0	Outstanding work only
	A-	90 – 92.9	3.67	Close to outstanding
	B+	87 - 89.9	3.33	Very good work
	B	84 – 86.9	3.0 _(Minimum Cumulative GPA)_	Good work
	B-	80 – 83.9	2.67	Good work with some problems
	C+	77 - 79.9	2.33	Slightly above average work
	C	74 – 76.9	2.0	Average work
FAILING GRADES	C-	70 - 73.9	1.67	Average work with some problems
	D+	67 - 69.9	1.33	Poor work with some effort
	D	64 - 66.9	1.0	Poor work
	D-	61 - 63.9	0.67	Poor work with some problems
	E	0. - 60.9	0.0	Inadequate work

More information on UF grading policy may be found at:
UF Graduate Catalog
Grades and Grading Policies

Students Requiring Accommodations
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

Distance Learning Privacy Policy

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

In-Class Recording
Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, and exams), field trips, and private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

University Honesty Policy
UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Students in the School of Architecture are expected to adhere to all University of Florida academic honesty policies. Failure to do so will result in lowered grades and/or referral to the University Honor Court. Since the University's policies are necessarily generalized, the School of Architecture further clarifies academic honesty within the specific setting of design education. The following acts are considered to be academic dishonesty:

1. **Plagiarism/misrepresentation**

   There shall be no question of what your work is and what someone else's is. This applies to all aspects of student performance, including but not limited to
   - CAD drawings and construction details
   - design guidelines (written and graphic)

   - design, planning, and management projects or portions of projects

- class reports and papers (again, both written and graphic information)

- any assignment where sole authorship is indicated, such as take-home tests, individual projects, etc.

Examples of inappropriate activities include:
- copying graphics for a report without crediting the original source

- representing someone else's work as your own (using existing CAD construction details, tracing drawings, etc.)

- allowing someone else to represent your work as his own

The importance of precedent and learning from past works is a necessary part of most design processes. Again, it is the intent and degree of "borrowing" ideas that is at question.

Anything not original must be paraphrased and cited, or quoted; using accepted style formats such as APA, MLA, Chicago Manual of Style, etc. This includes information obtained from the Internet, public documents, graphics, and personal interviews as well as more traditional written sources. Proper crediting of all information that is not common knowledge is necessary for academic honesty as well as for professionalism. (For example, analysis drawings and/or text should cite the sources from which data was obtained so that if questions arise later, they can be quickly and accurately answered.)

Multiple submissions of the same or similar work without prior approval
If the instructors understand that you are doing a paper associated with your thesis or senior project topic, then doing similar work for two different classes is acceptable—if the instructors agree to it. If a single paper is submitted for one class, then later is submitted for another, and the instructors expect original work, then the multiple submission is inappropriate.

2. **Falsifying information**

Examples include:

- misrepresenting reasons why work cannot be done as requested

- changing or leaving out data, such as manipulating statistics for a research project, or ignoring/hiding inconvenient but vital site information. (However, for educational purposes only, certain aspects of the "real world" may be jointly agreed upon as not being pertinent to the academic goals of the course, such as not dealing with specific project parameters or budget, changing the program, etc.)

- altering work after it has been submitted

- hiding, destroying, or otherwise making materials unavailable (hiding reference materials, not sharing materials with other students, etc.)

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

Campus Resources:

Health and Wellness

> **U Matter, We Care:**
> If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.
>
> **Counseling and Wellness Center:** counseling.ufl.edu/cwc, and 392-1575 for information on crisis services as well as non-crisis services; and the University Police Department: 392-1111 or 9-1-1 for emergencies.
>
> **Sexual Assault Recovery Services (SARS)**
> Student Health Care Center, 392-1161.
>
> **University Police Department** at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

Academic Resources

> **E-learning technical support**, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.
>
> **Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling.
>
> **Library Support**, Various ways to receive assistance with respect to using the libraries or finding resources.
>
> **Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.
>
> **Writing Studio,** 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.
>
> **Student Complaints Campus,** Visit the Student Honor Code and Student Conduct Code webpage for more information.
>
> **On-Line Students Complaints,** View the Distance Learning Student Complaint Process

Orlando Resources

> Police / Fire / Medical Emergency – 911
> Orlando Police Department Non-Emergency Number: 321.235.5300
> Consult CityLab-Orlando Student Resources for Emergency contact information.

Course|New for request 19841

Info

Request: ENY 6XXX Global Change and Insect Declines
Description of request: Requesting consideration of the course "Global Change and Insect Declines" for inclusion in future course catalogs. The following edits have been made in response to feedback from the CALS committee.

Instructor information now listed first in the syllabus.
Removed prerequisites for the graduate syllabus.
Added "discussion of expectations of previous course work" to the first day of class in the course schedule.
Added further explanation of expectations for the class project.
Added critical dates to Column 3 of the course schedule.
Submitter: David Plotkin dplotkin@ufl.edu
Created: 4/3/2024 1:42:07 PM
Form version: 1

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
ENY

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

Response:
4

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
None

Category of Instruction
*Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment. *

    Response:
    Joint (Ugrad/Grad)

• 1000 level = Introductory undergraduate
• 2000 level = Introductory undergraduate
• 3000 level = Intermediate undergraduate
• 4000 level = Advanced undergraduate
• 5000 level = Introductory graduate
• 6000 level = Intermediate graduate
• 7000 level = Advanced graduate
• 4000/5000= Joint undergraduate/graduate
• 4000/6000= Joint undergraduate/graduate

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

    Response:
    Global Change and Insect Declines

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

    Response:
    Global Change & Insects

Degree Type
Select the type of degree program for which this course is intended.

    Response:
    Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

    Response:
    Online

Co-Listing

Will this course be jointly taught to undergraduate, graduate, and/or professional students?

    Response:
    Yes

Co-Listing Explanation
*Please detail how coursework differs for undergraduate, graduate, and/or professional students. Additionally, please upload a copy of both the undergraduate and graduate syllabus to the request in .pdf format. *
It is recommended that a Course Differentiation document be provided for review and approval purposes. Please see the example below.

• Differentiation of Co-Listed Courses - Example

* *
* For more information please see the* Co-Listed Graduate Undergraduate Courses Policy.

    Response:
    The differences between the graduate and undergraduate coursework for this course are as follows:

    For the final exam, worth 20% of the final grade, undergraduate and graduate students will be given different final exams. Some questions may be present in both exams, but graduate students will be required to answer additional questions in the same amount of time.

    Graduate students are required to do a class project worth 15% of the final grade, which is not part of the undergraduate syllabus. Graduate students are also expected to submit a written proposal of their project idea (approximately one page, double-spaced) before Wednesday's class in Week 4, and are expected to submit a short progress report (approximately one page, double-spaced) before Wednesday's class in Week 9. Each of these assignments is worth 10% of the total project grade (i.e., 1.5% of the overall class grade).

    The different grading schemes for undergraduates and graduates are as follows:

    Undergraduate students will be graded based on their presentation (30% of final grade), their weekly participation (30% of final grade), weekly discussion questions (20% of final grade), and a final exam (20% of final grade).

    Graduate students will be graded based on their presentation (25% of final grade), their weekly participation (25% of final grade), weekly discussion questions (15% of final grade), a class project (15% of final grade), and a final exam (20% of final grade).

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

    Response:
    Spring

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

    Response:

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
2

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• *Regularly Scheduled [base hr]*
• *Thesis/Dissertation Supervision [1.0 headcount hr]*
• *Clinical Instruction [1.0 headcount hr]*
• *Directed Individual Studies [0.5 headcount hr]*
• *Supervision of Student Interns [0.8 headcount hr]*
• *Supervision of Teaching/Research [0.5 headcount hr]*
• *Supervision of Cooperative Education [0.8 headcount hr]*

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
2

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
This course will introduce students to the global impacts of anthropogenic change on insect diversity and abundance. Each week students will read pertinent papers on important topics such as pollution, pesticides, and climate change, followed by group discussions on how these factors are impacting insects in Florida and globally.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
N/A

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
BSC 2005 or ENY 2040 or ENY 3005

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.

• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
Portions of the rationale written below have been modified from text originally published by two of the course instructors (Kawahara, Reeves) in the Proceedings of the National Academy of Sciences (Kawahara, A. Y., Reeves, L. E., Barber, J. R., & Black, S. H. (2021). Eight simple actions that individuals can take to save insects from global declines. Proceedings of the National Academy of Sciences, 118(2), e2002547117.)

Insects constitute the vast majority of known animalspecies and play key ecological roles in terrestrial ecosystems. The majority of flowering plants depend on insects for pollination. As consumers ofwaste products, insects are essential to the recycling of nutrients. Humans and their agriculture rely heavily on such "ecosystem services" provided by insects which together have at least an annual value of $70 billion (2020 valuation) in the United States. Ironically, even as insects gain recognition as essential members of ecosystems, a concern has arisenthat their diversity and abundance may be in global decline, owing to habitat degradation and loss, climate change, pollution, and other causes. At an individual level, people can play a key role with immediate local impacts. In light of the importance of insects to human existence and the negative trends in insect abundance and diversity that have been shown in numerous recent studies, it is vital that people learn how they can take action. This course offers students an opportunity to learn about these threats to insect populations, and facilitates their engagement in discussion about the factors contributing to insect declines, in greater detail than is currently offered in any other course in the current UF curriculum. This enables motivated students to take action on their own, and gives them the skill set to properly educate their colleagues and their community on how they can take action as well.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
After completing this course, students will be able to:

Evaluate which factors are the most significant contributors to declines of a particular insect population in a particular habitat, using their knowledge of the different biotic and abiotic factors that contribute to insect declines on a global scale.

Critically assess new developments in science policy (in the context of how these policies address the problem of insect declines) using their experiences participating in class discussions of the factors contributing to insect declines.

Formulate hypotheses about potential new contributors to insect declines, using the information conveyed by instructors and student presenters about the commonalities and patterns of currently-known contributors.

Design research projects that further investigate the impacts of insect declines, using their knowledge of the methodologies of insect-related scientific studies discussed by instructors and student presenters.

Create opportunities for outreach (at the academic and/or the community science levels) that can impact the development of ecologically beneficial policies, using their experience communicating the importance and implications of insect declines as part of the grad-student class project.

Course Textbook(s) and/or Other Assigned Reading

*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
There are no required or recommended textbooks associated with this course; all assigned readings are peer-reviewed articles from scientific journals. instructors will provide students with free access to all assigned readings at the beginning of the semester via Canvas. References for these assigned readings are listed below, in the order they appear in the syllabus based on the projected weekly schedule.

Wagner, D. L., Grames, E. M., Forister, M. L., Berenbaum, M. R., & Stopak, D. (2021). Insect decline in the Anthropocene: Death by a thousand cuts. Proceedings of the National Academy of Sciences, 118(2), e2023989118.

Henen, B. T. (2016). Do scientific collecting and conservation conflict. Herpetol Conserv Biol, 11, 13-18.

Wilson, E. O. (1987). The little things that run the world (the importance and conservation of invertebrates). Conservation biology, 344-346.

Polus, E., Vandewoestijne, S., Choutt, J., & Baguette, M. (2007). Tracking the effects of one century of habitat loss and fragmentation on calcareous grassland butterfly communities. Biodiversity and Conservation, 16(12), 3423-3436.

Salvato, M. H. (2001). Influence of mosquito control chemicals on butterflies (Nymphalidae, Lycaenidae, Hesperiidae) of the lower Florida Keys.

Tallamy, D. W., Narango, D. L., & Mitchell, A. B. (2021). Do non-native plants contribute to insect declines?. Ecological Entomology, 46(4), 729-742.

Martins, R. T., Couceiro, S. R., Melo, A. S., Moreira, M. P., & Hamada, N. (2017). Effects of urbanization on stream benthic invertebrate communities in Central Amazon. Ecological indicators, 73, 480-491.

Owens, A. C., Cochard, P., Durrant, J., Farnworth, B., Perkin, E. K., & Seymoure, B. (2020). Light pollution is a driver of insect declines. Biological Conservation, 241, 108259.

Dominoni, D., Smit, J. A., Visser, M. E., & Halfwerk, W. (2020). Multisensory pollution: Artificial light at night and anthropogenic noise have interactive effects on activity patterns of great tits (Parus major). Environmental Pollution, 256, 113314.

Harvey, J. A., Tougeron, K., Gols, R., Heinen, R., Abarca, M., Abram, P. K., ... & Chown, S. L. (2023). Scientists' warning on climate change and insects. Ecological monographs, 93(1), e1553.

Deutsch, C. A., Tewksbury, J. J., Tigchelaar, M., Battisti, D. S., Merrill, S. C., Huey, R. B., &

Naylor, R. L. (2018). Increase in crop losses to insect pests in a warming climate. Science, 361(6405), 916-919.

Ward, N. L., & Masters, G. J. (2007). Linking climate change and species invasion: an illustration using insect herbivores. Global Change Biology, 13(8), 1605-1615.

Meyer III, W. M., Eble, J. A., Franklin, K., McManus, R. B., Brantley, S. L., Henkel, J., ... & Moore, W. (2015). Ground-dwelling arthropod communities of a sky island mountain range in Southeastern Arizona, USA: obtaining a baseline for assessing the effects of climate change. PLoS One, 10(9), e0135210.

Reece, J. S., Noss, R. F., Oetting, J., Hoctor, T., & Volk, M. (2013). A vulnerability assessment of 300 species in Florida: threats from sea level rise, land use, and climate change. PloS one, 8(11), e80658.

Kawahara, A. Y., Reeves, L. E., Barber, J. R., & Black, S. H. (2021). Eight simple actions that individuals can take to save insects from global declines. Proceedings of the National Academy of Sciences, 118(2), e2002547117.

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
Week 1: Importance of insects
Week 2: Insect collecting and conservation
Week 3: Evaluating and addressing declines
Week 4: Habitat destruction
Week 5: Pesticides – vector control
Week 6: Pesticides - bees
Week 7: Water pollution
Week 8: Light pollution
Week 9: Noise pollution
Week 10: Global warming - climate
Week 11: Global warming - short-term impacts
Week 12: Invasive species
Week 13: Droughts and rainfall impacts
Week 14: Environmental change and FL insects
Week 15: Solutions

(note: this is the projected schedule based on the maximum number of available weeks in a spring semester, not counting spring break). In the event there is one fewer week in the semester, the topic in week 14 will be removed from the schedule and replaced with the topic from week 15.

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Graduate students will be graded based on their presentation (25% of final grade), their weekly participation (25% of final grade), weekly discussion questions (15% of final grade), a class project (15% of final grade), and a final exam (20% of final grade).

Students will be expected to read assigned course materials before each class, and are expected to engage in discussion on Wednesdays by asking relevant questions or providing relevant

comments that demonstrate some familiarity with the assigned reading materials. Students will be awarded one point for each class attended (both Mondays and Wednesdays) and will be awarded two points for participation during each Wednesday class. These point totals will be compared to the maximum possible point total across all weeks of class (59 points in a 15-week semester, 55 points in a 14-week semester) in order to calculate overall participation scores for final grades.

Graduate students are expected to submit a written proposal of their project idea (approximately one page, double-spaced) before Wednesday's class in Week 4, and are expected to submit a short progress report (approximately one page, double-spaced) before Wednesday's class in Week 9. Each of these assignments is worth 10% of the total project grade (i.e., 1.5% of the overall class grade). Results of the final project must be submitted on the last day of class of the semester.

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
Akito Kawahara,
Lawrence Reeves,
David Plotkin

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:
Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Response:
Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• *https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx*

Response:
Yes

Course Evaluation Policy
Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• *Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.*

* *

Response:
Yes

Global Change and Insect Declines

(ENY 6XXX & ZOO 6XXX)

Spring

Course Personnel
Dr. Akito Kawahara (Co-instructor)
Associate Curator of Entomology
Florida Museum of Natural History
Email: kawahara@flmnh.ufl.edu
Phone: 352-273-2018
Office hours: Wednesdays 1:00 PM – 2:00 PM. Office: 218 McGuire Hall

Dr. Lawrence Reeves (Co-instructor)
Assistant Professor
Entomology and Nematology Department
Florida Medical Entomology Laboratory
Email: lereeves@ufl.edu
Office hours: Fridays 1:00 PM – 3:00 PM. Zoom only.

Dr. David Plotkin (Co-instructor)
Kawahara Lab Project Manager
Florida Museum of Natural History
Email: dplotkin@ufl.edu
Phone: 352-273-3722
Office hours: Mondays 1:00 PM – 3:00 PM. Office: 130 McGuire Hall.

TBD (Teaching assistant)

General Class Information:
Course Description
This course will introduce students to the global impacts of anthropogenic change on insect diversity and abundance. Each week students will read pertinent papers on important topics such as pollution, pesticides, and climate change, followed by group discussions on how these factors are impacting insects in Florida and globally.

Course Learning Objectives
After completing this course, students will be able to:

Evaluate which factors are the most significant contributors to declines of a particular insect population in a particular habitat, using their knowledge of the different biotic and abiotic factors that contribute to insect declines on a global scale.

Critically *assess* new developments in science policy (in the context of how these policies address the problem of insect declines) using their experiences participating in class discussions of the factors contributing to insect declines.

Formulate hypotheses about potential new contributors to insect declines, using the information conveyed by instructors and student presenters about the commonalities and patterns of currently-known contributors.

Design research projects that further investigate the impacts of insect declines, using their knowledge of the methodologies of insect-related scientific studies discussed by instructors and student presenters.

Create opportunities for outreach (at the academic and/or the community science levels) that can impact the development of ecologically beneficial policies, using their experience communicating the importance and implications of insect declines as part of the grad-student class project.

Prerequisites
There are no prerequisites.

Credits:
2-credits

Course Meetings
Monday and Wednesday, Period 5 (11:45 am – 12:35 pm).

The course will meet twice each week, Mondays and Wednesdays over Zoom. Monday classes will be a lecture format followed by Wednesday student presentation and discussion. Each student will be expected to lead one discussion, which means most Wednesday classes will begin with a student-led presentation on the assigned reading. The remaining classes will begin with a short lecture on the topic by one or more instructors, followed by a group paper discussion.

Textbooks
There are no required or recommended textbooks associated with this course. A list of citations of the assigned readings is in the Course Schedule section of the syllabus;

instructors will provide students with free access to all assigned readings at the beginning of the semester via Canvas.

Grading:
Graduate students will be graded based on their presentation (25% of final grade), their weekly participation (25% of final grade), weekly discussion questions (15% of final grade), a class project (15% of final grade), and a final exam (20% of final grade).

The final exam will take place at the date and time scheduled by the university (https://registrar.ufl.edu/courses/final-exam). Undergraduate and graduate students will be given different final exams. Some questions may be present in both exams, but graduate students will be required to answer additional questions in the same amount of time.

The student-led presentations should include a short (~10 minute) summary of the paper assigned for that week's discussion, using Powerpoint. The student leading the presentation should also prepare to initiate further discussion by asking a few open-ended questions about the paper, or questions about topics closely related to the paper. A list of papers will be provided at the start of the semester, and students will sign up to present one of those papers in a specific class. If a student wants to present a different paper on a similar topic related to insect declines, they may be permitted to do so at the discretion of the instructors. Any student interested in presenting a different paper must send a copy of this alternate paper to the instructors, by e-mail or Canvas, for approval a minimum of *two weeks* before they are scheduled to present.

Class participation implies attendance and active participation in all classes. Students will be expected to read assigned course materials before each class, and are expected to engage in discussion on Wednesdays by asking relevant questions or providing relevant comments that demonstrate some familiarity with the assigned reading materials. Students will be awarded one point for each class attended (both Mondays and Wednesdays) and will be awarded two points for participation during each Wednesday class. These point totals will be compared to the maximum possible point total across all weeks of class (59 points in a 15-week semester, 55 points in a 14-week semester) in order to calculate overall participation scores for final grades.

Each week, students will be expected to submit three substantive questions or comments about the assigned paper for Wednesday discussion. These three questions/comments should be sent to the instructors over Canvas, by 5:00 PM Eastern

every Tuesday, the day before the class discussion. Students are not required to submit questions/comments the same week they have signed up to lead the presentation.

The design of the class project for graduate students is open-ended, but the project's overarching goal should be some form of outreach, at the academic or community science level, that increases awareness of declining insect populations. As examples, the project can involve collection and communication/distribution of novel insect observations in a field setting over the course of the semester, reviewing and summarizing relevant literature (with possible intent to submit as a peer-reviewed publication under mentorship of the instructors), or conducting science-communication activities via social media and other online platforms. Students can propose alternate project ideas, subject to instructor approval. The skills acquired and developed during completion of this project will help students complete the above-mentioned course learning objectives.

Graduate students are expected to submit a written proposal of their project idea (approximately one page, double-spaced) before Wednesday's class in Week 4, and are expected to submit a short progress report (approximately one page, double-spaced) before Wednesday's class in Week 9. Each of these assignments is worth 10% of the total project grade (i.e., 1.5% of the overall class grade). Results of the final project must be submitted on the last day of class of the semester. The form these results will take depends on the nature of the project. Students that choose to collect and communicate/distribute novel insect observations should are expected to spend an average of 2 hours per week collecting data for at least 8 weeks, and to then write a report (5+ pages, double-spaced) summarizing their findings and developing preliminary hypotheses about the insect populations they observed. Students that choose to review and summarize relevant literature are expected to submit a fully formatted literature review (12+ pages, double-spaced) that follows the formatting and submission guidelines of a peer-reviewed scientific journal of their choice. Students that conduct science-communication activities via social media are expected to spend an average of 3 hours per week creating and distributing these communications for at least 8 weeks, and to then write a short summary (2+ pages, double-spaced) outlining the breadth of these science-communication activities and their impact. A full list of relevant URLs should be appended to the 2-page summary so that instructors can view the science-communication activities directly. If a student writes a proposal for an approved alternate project idea, instructors will assess the written proposal and then make it clear what expectations are for the proposed project, ensuring that such expectations are equal for all students with regards to commitments of time and effort.

Attendance Policy:
Students are expected to attend all classes, unless an acceptable reason for absence is provided, in accordance with university-wide attendance policies. (https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/).
Students that provide acceptable reasons for absences will receive attendance and participation points for the days they are absent, as outlined in the Grading section of the syllabus.

Course Schedule
Spring semesters vary between having 14 or 15 weeks of class. The course schedule outlined below is for a Spring semester with 15 weeks of classes (e.g., Spring 2027). For semesters with 14 weeks of class (e.g., Spring 2025, 2026), the topic and assignments in week 14 will be removed from the schedule and replaced with the topic and assignments from week 15.

Week	Date	Topics and Critical due dates	Lecturer / Discussion Leader	Reading
1		Intro – Importance of insects Review syllabus and outline expectations of previous course work	Kawahara	
		Submit discussion questions	Kawahara	Wagner et al. (2021)
2		*No class (MLK day)*		
		Submit discussion questions	Student-led presentation	Henen (2016)
3		Evaluating and addressing declines	Kawahara	
		Submit discussion questions	Student-led presentation	Wilson (1987)
4		Habitat destruction	Guest Lecture (Sarah Steele Cabrera)	
		Submit discussion questions **Grad student project proposal due date**	Student-led presentation	Polus et al. (2007)
5		Pesticides – vector control	Reeves	
		Submit discussion questions	Student-led presentation	Salvato (2001)
6		Pesticides 2 - bees	Guest Lecture (Chase Kimmel)	

		Submit discussion questions	Student-led presentation	Tallamy et al. (2020)
7		Water pollution	Plotkin	
		Submit discussion questions	Student-led presentation	Martins et al. (2017)
8		Light pollution	Guest Lecture (Yash Sondhi)	
		Submit discussion questions	Student-led presentation	Owens et al. (2020)
9		Noise pollution	Kawahara	
		Submit discussion questions **Grad student project progress report due date**	Student-led presentation	Dominoni et al. (2009)
10		Global warming	Reeves	
		Submit discussion questions	Student-led presentation	Harvey et al. (2022)
11		Global warming 2	Plotkin	
		Submit discussion questions	Student-led presentation	Deutsch et al. (2018)
12		Invasive species	Plotkin	
		Submit discussion questions	Student-led presentation	Ward & Masters (2007)
13		Droughts and rainfall impacts	Reeves	
		Submit discussion questions	Student-led presentation	Meyer et al. (2015)
14		Environmental change and FL insects	Reeves	
		Submit discussion questions	Student-led presentation	Reece et al. (2013)
15		Solutions	Kawahara	
		Submit discussion questions **Grad student project due date**	Student-led presentation	Kawahara et al. (2021)

University of Florida Policy Statements

Grades and Grade Points
Numerical grades will be converted into letter grades in accordance with the standard grading scale adopted by the Department of Entomology and Nematology.

A: 93 - 100%
A-: 90 - 92.9%
B+: 87 - 89.9%
B: 83 - 86.9%
B- 80 - 82.9%
C+: 77 - 79.9%
C: 73 - 76.9%
C- 70 - 72.9%
D+: 67 - 69.9%
D: 63 - 66.9%
D- 60 - 62.9%
E: below 60%

For information on current UF policies for assigning grade points, see:
https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Absences and Make-Up Work
Requirements for class attendance and make-up exams, assignments and other work
are consistent with university policies that can be found at:
https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

In-Class Recording
Our class sessions may be audio visually recorded for students in the class to refer
back and for enrolled students who are unable to attend live. Students who participate
with their camera engaged or utilize a profile image are agreeing to have their video or
image recorded. If you are unwilling to consent to have your profile or video image
recorded, be sure to keep your camera off and do not use a profile image. Likewise,
students who un-mute during class and participate orally are agreeing to have their
voices recorded. If you are not willing to consent to have your voice recorded during
class, you will need to keep your mute button activated and communicate exclusively
using the "chat" feature, which allows students to type questions and comments live.
The chat will not be recorded or shared. As in all courses, unauthorized recording and
unauthorized sharing of recorded materials is prohibited.

Students are allowed to record video or audio of class lectures. However, the purposes
for which these recordings may be used are strictly controlled. The only allowable
purposes are (1) for personal educational use, (2) in connection with a complaint to the
university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All

other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Online Course Evaluation Process
Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at: https://gatorevals.aa.ufl.edu/public-results/.

Academic Honesty
As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "*On my honor, I have neither given nor received unauthorized aid in doing this assignment.*"

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The

Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- · University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
  Training Programs
- U Matter We Care, www.umatter.ufl.edu/
- Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/
- Student Success Initiative, http://studentsuccess.ufl.edu.
- Student Complaints, Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/
- Student Complaints, Online Course: https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint

Additional Health and Wellness Resources

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

Additional Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Student Complaints: View the Distance Learning Student Complaint Process.

Global Change and Insect Declines

(ENY XXXX & ZOO XXXX)

Spring

The differences between the graduate and undergraduate syllabi of this course are as follows:

For the final exam, worth 20% of the final grade, undergraduate and graduate students will be given different final exams. Some questions may be present in both exams, but graduate students will be required to answer additional questions in the same amount of time.

Graduate students are required to do a class project worth 15% of the final grade, which is not part of the undergraduate syllabus. Graduate students are also expected to submit a written proposal of their project idea (approximately one page, double-spaced) before Wednesday's class in Week 4, and are expected to submit a short progress report (approximately one page, double-spaced) before Wednesday's class in Week 9. Each of these assignments is worth 10% of the total project grade (i.e., 1.5% of the overall class grade).

The different grading schemes for undergraduates and graduates are as follows:

Undergraduate students will be graded based on their presentation (30% of final grade), their weekly participation (30% of final grade), weekly discussion questions (20% of final grade), and a final exam (20% of final grade).

Graduate students will be graded based on their presentation (25% of final grade), their weekly participation (25% of final grade), weekly discussion questions (15% of final grade), a class project (15% of final grade), and a final exam (20% of final grade).

Global Change and Insect Declines

(ENY 4XXX & ZOO 4XXX)

Spring

Course Personnel
Dr. Akito Kawahara (Co-instructor)
Associate Curator of Entomology
Florida Museum of Natural History
Email: kawahara@flmnh.ufl.edu
Phone: 352-273-2018
Office hours: Wednesdays 1:00 PM – 2:00 PM. Office: 218 McGuire Hall

Dr. Lawrence Reeves (Co-instructor)
Assistant Professor
Entomology and Nematology Department
Florida Medical Entomology Laboratory
Email: lereeves@ufl.edu
Office hours: Fridays 1:00 PM – 3:00 PM. Zoom only.

Dr. David Plotkin (Co-instructor)
Kawahara Lab Project Manager
Florida Museum of Natural History
Email: dplotkin@ufl.edu
Phone: 352-273-3722
Office hours: Mondays 1:00 PM – 3:00 PM. Office: 130 McGuire Hall.

TBD (Teaching assistant)

General Class Information:
Course Description
This course will introduce students to the global impacts of anthropogenic change on insect diversity and abundance. Each week students will read pertinent papers on important topics such as pollution, pesticides, and climate change, followed by group discussions on how these factors are impacting insects in Florida and globally.

Course Learning Objectives
After completing this course, students will be able to:

Evaluate which factors are the most significant contributors to declines of a particular insect population in a particular habitat, using their knowledge of the different biotic and abiotic factors that contribute to insect declines on a global scale.

Critically *assess* new developments in science policy (in the context of how these policies address the problem of insect declines) using their experiences participating in class discussions of the factors contributing to insect declines.

Formulate hypotheses about potential new contributors to insect declines, using the information conveyed by instructors and student presenters about the commonalities and patterns of currently-known contributors.

Prerequisites
Students are required to have taken any one of the following courses

BSC 2005 Biological Sciences
BSC 2010 Integrated Principles of Biology 1
ENY 1001 Bugs and People
ENY 2040 The Insects

Students that do not fulfill the above requirement but have taken an analogous course at another university or have relevant experience at another institution may contact the instructors by e-mail (see *Course Personnel*) to request permission to enroll. These requests will be assessed by instructors on an individual basis.

Credits:
2-credits

Course Meetings
Monday and Wednesday, Period 5 (11:45 am – 12:35 pm).

The course will meet twice each week, Mondays and Wednesdays over Zoom. Monday classes will be a lecture format followed by Wednesday student presentation and discussion. Each student will be expected to lead one discussion, which means most Wednesday classes will begin with a student-led presentation on the assigned reading. The remaining classes will begin with a short lecture on the topic by one or more instructors, followed by a group paper discussion.

Textbooks

There are no required or recommended textbooks associated with this course. A list of citations of the assigned readings is in the Course Schedule section of the syllabus; instructors will provide students with free access to all assigned readings at the beginning of the semester via Canvas.

Grading:
Undergraduate students will be graded based on their presentation (30% of final grade), their weekly participation (30% of final grade), weekly discussion questions (20% of final grade), and a final exam (20% of final grade).

The final exam will take place at the date and time scheduled by the university (https://registrar.ufl.edu/courses/final-exam). Undergraduate and graduate students will be given different final exams. Some questions may be present in both exams, but graduate students will be required to answer additional questions in the same amount of time.

The student-led presentations should include a short (~10 minute) summary of the paper assigned for that week's discussion, using Powerpoint. The student leading the presentation should also prepare to initiate further discussion by asking a few open-ended questions about the paper, or questions about topics closely related to the paper. A list of papers will be provided at the start of the semester, and students will sign up to present one of those papers in a specific class. If a student wants to present a different paper on a similar topic related to insect declines, they may be permitted to do so at the discretion of the instructors. Any student interested in presenting a different paper must send a copy of this alternate paper to the instructors, by e-mail or Canvas, for approval a minimum of *two weeks* before they are scheduled to present.

Class participation implies attendance and active participation in all classes. Students will be expected to read assigned course materials before each class, and are expected to engage in discussion on Wednesdays by asking relevant questions or providing relevant comments that demonstrate some familiarity with the assigned reading materials. Students will be awarded one point for each class attended (both Mondays and Wednesdays) and will be awarded two points for participation during each Wednesday class. These point totals will be compared to the maximum possible point total across all weeks of class (59 points in a 15-week semester, 55 points in a 14-week semester) in order to calculate overall participation scores for final grades.

Each week, students will be expected to submit three substantive questions or comments about the assigned paper for Wednesday discussion. These three

questions/comments should be sent to the instructors over Canvas, by 5:00 PM Eastern every Tuesday, the day before the class discussion. Students are not required to submit questions/comments the same week they have signed up to lead the presentation.

Attendance Policy:
Students are expected to attend all classes, unless an acceptable reason for absence is provided, in accordance with university-wide attendance policies. (https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/).
Students that provide acceptable reasons for absences will receive attendance and participation points for the days they are absent, as outlined in the Grading section of the syllabus.

Course Schedule

Spring semesters vary between having 14 or 15 weeks of class. The course schedule outlined below is for a Spring semester with 15 weeks of classes (e.g., Spring 2027). For semesters with 14 weeks of class (e.g., Spring 2025, 2026), the topic and assignments in week 14 will be removed from the schedule and replaced with the topic and assignments from week 15.

Week	Date	Topics and Critical Due dates	Lecturer / Discussion Leader	Reading
1		Intro – Importance of insects

Review syllabus and outline expectations of previous course work | Kawahara | |
		Submit discussion questions	Kawahara	Wagner et al. (2021)
2		*No class (MLK day)*		
		Submit discussion questions	Student-led presentation	Henen (2016)
3		Evaluating and addressing declines	Kawahara	
		Submit discussion questions	Student-led presentation	Wilson (1987)
4		Habitat destruction	Guest Lecture (Sarah Steele Cabrera)	
		Submit discussion questions	Student-led presentation	Polus et al. (2007)
5		Pesticides – vector control	Reeves	

		Submit discussion questions	Student-led presentation	Salvato (2001)
6		Pesticides 2 - bees	Guest Lecture (Chase Kimmel)	
		Submit discussion questions	Student-led presentation	Tallamy et al. (2020)
7		Water pollution	Plotkin	
		Submit discussion questions	Student-led presentation	Martins et al. (2017)
8		Light pollution	Guest Lecture (Yash Sondhi)	
		Submit discussion questions	Student-led presentation	Owens et al. (2020)
9		Noise pollution	Kawahara	
		Submit discussion questions	Student-led presentation	Dominoni et al. (2009)
10		Global warming	Reeves	
		Submit discussion questions	Student-led presentation	Harvey et al. (2022)
11		Global warming 2	Plotkin	
		Submit discussion questions	Student-led presentation	Deutsch et al. (2018)
12		Invasive species	Plotkin	
		Submit discussion questions	Student-led presentation	Ward & Masters (2007)
13		Droughts and rainfall impacts	Reeves	
		Submit discussion questions	Student-led presentation	Meyer et al. (2015)
14		Environmental change and FL insects	Reeves	
		Submit discussion questions	Student-led presentation	Reece et al. (2013)
15		Solutions	Kawahara	
		Submit discussion questions	Student-led presentation	Kawahara et al. (2021)

University of Florida Policy Statements

<u>Grades and Grade Points</u>
Numerical grades will be converted into letter grades in accordance with the standard grading scale adopted by the Department of Entomology and Nematology.

A: 93 - 100%
A-: 90 - 92.9%
B+: 87 - 89.9%
B: 83 - 86.9%
B- 80 - 82.9%
C+: 77 - 79.9%
C: 73 - 76.9%
C- 70 - 72.9%
D+: 67 - 69.9%
D: 63 - 66.9%
D- 60 - 62.9%
E: below 60%

For information on current UF policies for assigning grade points, see:
https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Absences and Make-Up Work
Requirements for class attendance and make-up exams, assignments and other work
are consistent with university policies that can be found at:
https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

In-Class Recording
Our class sessions may be audio visually recorded for students in the class to refer
back and for enrolled students who are unable to attend live. Students who participate
with their camera engaged or utilize a profile image are agreeing to have their video or
image recorded. If you are unwilling to consent to have your profile or video image
recorded, be sure to keep your camera off and do not use a profile image. Likewise,
students who un-mute during class and participate orally are agreeing to have their
voices recorded. If you are not willing to consent to have your voice recorded during
class, you will need to keep your mute button activated and communicate exclusively
using the "chat" feature, which allows students to type questions and comments live.
The chat will not be recorded or shared. As in all courses, unauthorized recording and
unauthorized sharing of recorded materials is prohibited.

Students are allowed to record video or audio of class lectures. However, the purposes
for which these recordings may be used are strictly controlled. The only allowable
purposes are (1) for personal educational use, (2) in connection with a complaint to the
university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All

other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at: https://gatorevals.aa.ufl.edu/public-results/.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "*On my honor, I have neither given nor received unauthorized aid in doing this assignment.*"
It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

Software Use
All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Services for Students with Disabilities
The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

Campus Helping Resources
Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The

Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- · University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
  - Counseling Services
  - Groups and Workshops
  - Outreach and Consultation
  - Self-Help Library
  - Training Programs
- U Matter We Care, www.umatter.ufl.edu/
- Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/
- Student Success Initiative, http://studentsuccess.ufl.edu.
- Student Complaints, Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/
- Student Complaints, Online Course: https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint

Additional Health and Wellness Resources

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

Additional Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Student Complaints: View the Distance Learning Student Complaint Process.

Course|New for request 19869

Info

Request: GMS 6XXX Aging and the Brain
Description of request: GMS 6XXX - Aging and the Brain
Submitter: Ikiah Young ilyoung@ufl.edu
Created: 4/11/2024 4:21:21 PM
Form version: 1

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
GMS

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

Response:
6

Undergraduate students in 5000 level courses
Is this course intended for an audience including undergraduate students?

Response:
No

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
None

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area.

*Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment. *

> Response:
> Intermediate

• *1000 level = Introductory undergraduate*
• *2000 level = Introductory undergraduate*
• *3000 level = Intermediate undergraduate*
• *4000 level = Advanced undergraduate*
• *5000 level = Introductory graduate*
• *6000 level = Intermediate graduate*
• *7000 level = Advanced graduate*
• *4000/5000= Joint undergraduate/graduate*
• *4000/6000= Joint undergraduate/graduate*

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

> Response:
> Aging and the brain

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

> Response:
> Aging and the brain

Degree Type
Select the type of degree program for which this course is intended.

> Response:
> Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

> Response:
> Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

> Response:
> No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Fall

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
2024

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:

No

Contact Type

Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type

*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours

Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
3

Course Description

Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
To address questions of the primary causes of aging and the history of research on aging. Theories of aging will be applied to the brain and cognitive decline and include biomarkers from biochemistry to physiology, through to structural changes. Differences in the rate of aging due to sex, resilience, compensation, and cognitive reserve, and the role of aging in disease will be discussed. Finally, therapeutic implications and related topics will be explored.

Co-requisites

Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:

N/A

Prerequisites

Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
Consent of instructor. Designed for graduate students in the Online M.Sc. program, PhD programs, and Biomedical Neuroscience M.Sc. program.

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
This course has been designed to establish an advanced foundation in Aging and the brain for MS and graduate students pursuing a degree in Neuroscience. It is also suitable for students enrolled in the online University of Florida (UF) Biomedical Neuroscience Certificate and Master's Degree programs. Graduate students in other UF colleges and advanced undergraduate students with a background in neuroscience are encouraged to inquire about registration.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
Our objective is to facilitate the acquisition of advanced knowledge in the field of the aging brain. This knowledge will enable you to recognize the significance of questions and emerging findings in this field and empower you to undertake in-depth studies on specific topics within this domain. After completing this course, students will be able to:
•   Identify the different theories/mechanisms/hallmarks of aging.

- Describe early behavioral measures of cognitive decline in humans and animal models.
- Exemplify measures of biological aging as they relate to the brain.
- Discuss sex differences and reserve/resilience mechanisms that may modulate the trajectory of age-related cognitive decline.
- Explore age-associated Neuroinflammation and Oxidative stress
- Experience using recording from brain slices

Course Textbook(s) and/or Other Assigned Reading

*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Assigned articles

Weekly Schedule of Topics

Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
This is a 12-week course divided into 10 modules, with one module completed per week, covering specific topics within neurodevelopment. Each module comprises 2-4 subunits to enhance accessibility and understanding. The online course offers flexibility in learning, with face-to-face sessions scheduled with instructors as needed.

Each unit comprises a reading assignment, a video lecture in VoiceThread (VT) format, and a self-check quiz to assess understanding of the material. Each VT lecture lasts approximately 10-15 minutes and can be viewed slide-by-slide for convenience. You will progress through the 10 modules sequentially, with each module considered complete after taking the unit self-check quizzes.

1) Introduction to Aging, senescence, and longevity
- Chronological age, Biological age, Senescence
- Overview of the aging process and its impact on brain structure and function.
- Introduction to key concepts such as neuroplasticity and cognitive reserve.
- Understanding common myths and misconceptions about aging and cognition.

2) Neurobiology of Aging
- Exploration of structural and functional changes in the aging brain.
- Discussion on neurochemical alterations and their implications for cognitive function.
- Introduction to age-related neurodegenerative diseases such as Alzheimer's and Parkinson's.

3) Cognitive Changes in Aging
- Examination of typical cognitive changes associated with aging, including memory decline, attentional changes, and executive function decline.
- Understanding the variability in cognitive aging across individuals.
- Discussion on cognitive resilience and factors that may mitigate age-related cognitive decline.

4) Lifestyle Factors and Brain Health
- Importance of lifestyle factors in promoting brain health and cognitive vitality.
- Discussion on the role of nutrition, physical activity, mental stimulation, and social engagement in maintaining cognitive function.
- Strategies for incorporating brain-healthy habits into daily life.

5) Cognitive Training and Brain Exercises
- Overview of cognitive training programs and brain exercises aimed at enhancing cognitive function.
- Exploration of evidence-based interventions for improving memory, attention, and other

cognitive abilities.
• Practical tips for integrating cognitive training into daily routines.

6) Managing Cognitive Decline/ Intervention/Therapeutic agents/Exercise
• Strategies for managing cognitive decline in aging, including medication, cognitive rehabilitation, and lifestyle modifications.
• Discussion on the importance of early detection and intervention for neurodegenerative diseases.
• Introduction to support services and resources for individuals with cognitive impairment and their caregivers.

7) Promoting Brain Health Through Social Engagement
• Exploration of the link between social engagement and cognitive health in aging.
• Discussion on the benefits of social interaction, community involvement, and meaningful activities for brain health.
• Strategies for fostering social connections and building a supportive social network.

8) Aging Brain and Emotional Well-being
• Understanding the impact of emotional well-being on cognitive health in aging.
• Discussion on the relationship between stress, depression, and cognitive function.
• Coping strategies for managing emotional challenges and promoting resilience in older adults.

9) Brain-Healthy Aging Across the Lifespan
• Importance of lifelong brain health promotion and preventive measures.
• Discussion on promoting brain health at different life stages, from childhood to older adulthood.
• Strategies for optimizing cognitive function and reducing the risk of age-related cognitive decline.

10) Putting Knowledge into Practice
• Recap of key concepts and insights gained throughout the course.
• Development of personalized action plans for promoting brain health and cognitive vitality.
• Reflection on the importance of ongoing learning and adaptation in maintaining cognitive well-being.

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
The self-check quizzes, due each Friday at 11:59 pm, will account for 30% of your grade. The remaining 70% will be based on weekly primary literature assignments. For each module/topic, 1 or 2 primary literature articles will be assigned, and you'll write and post an 800-1000-word essay/summary on the assigned article. Evaluation of your essays will be conducted using a grading rubric provided as a guide for your work on these assignments.

A letter grade will be given at the end of the course that will reflect the weighted percentages of the points you have earned:
93-100% = A
90-92%= A-
87-89% = B+
83-86% = B
80-82% = B-
77-79% = C+
73-76% = C
70-72% = C-
67-69% = D+

63-66% = D

<63% =E

Instructor(s)

Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:

Ashok Kumar

Thomas Foster

Attendance & Make-up

Please confirm that you have read and understand the University of Florida Attendance policy.

A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:

Yes

Accomodations

Please confirm that you have read and understand the University of Florida Accommodations policy.

A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Response:

Yes

UF Grading Policies for assigning Grade Points

Please confirm that you have read and understand the University of Florida Grading policies.

Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Response:

Yes

Course Evaluation Policy

Course Evaluation Policy

Please confirm that you have read and understand the University of Florida Course Evaluation Policy.

A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

UNIVERSITY OF FLORIDA
COLLEGE OF MEDICINE SYLLABUS
NEUROSCIENCE
Aging and the Brain: (3 credit hours)
Semester: Fall 2024
Delivery Format: Online

Instructor Name: Ashok Kumar, PhD and Thomas Foster, PhD
Room Number: N/A
Phone Number: 352-575-7045 (Kumar), 352-562-9747 (Foster)
Email Address: kash@ufl.edu, foster@ufl.edu
Office Hours: Arranged by student request
Graduate Assistant: N/A
Preferred Course Communications: Email
Prerequisites: Consent of instructor. Designed for graduate students in the Online M.Sc.
program, PhD programs, and Biomedical Neuroscience M.Sc. program.

Course Description:

This course will address the primary causes of aging and the history of research on aging. Theories of aging will be applied to the brain and cognitive decline, encompassing biomarkers from biochemistry to physiology, as well as structural changes. Examples will be drawn from recent animal and human research, with a focus on examining cellular and molecular mechanisms. Additionally, differences in the rate of aging due to sex, resilience, compensation, and cognitive reserve, as well as the role of aging in diseases, will be discussed. Age-associated changes in synaptic plasticity and their impact on cognitive function will be explained. Finally, therapeutic implications and related topics will be explored.

Purpose and Outcome:

The purpose of this course is to equip students for research in aging neuroscience. By the end of this course, students should have acquired fundamental knowledge of the aging brain and associated cellular and physiological alterations, as well as their impact on synaptic and cognitive function. Additionally, students will be introduced to basic concepts in slice physiology recorded from hippocampal brain slices. This knowledge will enable you to recognize the significance of questions and emerging findings in this field, empowering you to undertake in-depth studies on specific topics within this domain.

Course Overview:

This course is organized into 10 modules, each focusing on key aspects of the aging brain, the associated changes, and their functional impact on synaptic plasticity. Each module includes Voice Thread (VT) lectures, self-check quizzes, and reading assignments. This course will address questions of the primary causes of aging and the history of research on aging. Theories of aging will be applied to the brain and cognitive decline and include biomarkers from biochemistry to physiology, through to structural changes. Examples will be drawn from recent human research involving large populations and cellular molecular mechanisms examined using animal models whenever possible. Differences in the rate of aging due to sex, resilience, compensation, and cognitive reserve, and the role of aging in disease will be discussed. Finally, therapeutic implications and related topics will be explored.

Relation to Program Outcomes

This course has been designed to establish an advanced foundation in Aging and the brain for MS and graduate students pursuing a degree in Neuroscience. It is also suitable for students enrolled in the online University of Florida (UF) Biomedical Neuroscience Certificate and Master's Degree programs. Graduate students in other UF colleges and advanced undergraduate students with a background in neuroscience are encouraged to inquire about registration.

Course Objectives and Goals

Our objective is to facilitate the acquisition of advanced knowledge in the field of the aging brain. This knowledge will enable you to recognize the significance of questions and emerging findings in this field and empower you to undertake in-depth studies on specific topics within this domain. After completing this course, students will be able to:
- Identify the different theories/mechanisms/hallmarks of aging.
- Describe early behavioral measures of cognitive decline in humans and animal models.
- Exemplify measures of biological aging as they relate to the brain.
- Discuss sex differences and reserve/resilience mechanisms that may modulate the trajectory of age-related cognitive decline.
- Explore age-associated Neuroinflammation and Oxidative stress
- Experience using recording from brain slices

Instructional Methods

This is a 12-week course divided into 10 modules, with one module completed per week, covering specific topics within neurodevelopment. Each module comprises 2-4 subunits to enhance accessibility and understanding. The online course offers flexibility in learning, with face-to-face sessions scheduled with instructors as needed.

Each unit comprises a reading assignment, a video lecture in VoiceThread (VT) format, and a self-check quiz to assess understanding of the material. Each VT lecture lasts approximately 10-15 minutes and can be viewed slide-by-slide for convenience. You will progress through the 10 modules sequentially, with each module considered complete after taking the unit self-check quizzes.

The self-check quizzes, due each Friday at 11:59 pm, will account for 30% of your grade. The remaining 70% will be based on weekly primary literature assignments. For each module/topic, 1 or 2 primary literature articles will be assigned, and you'll write and post an 800-1000-word essay on the assigned article. Evaluation of your essays will be conducted using a grading rubric provided as a guide for your work on these assignments.

How to succeed in this online course

First, it is important to recognize that online learning presents unique challenges. With the online classroom accessible 24/7, there is a risk of procrastination, missing deadlines, and not dedicating enough time to studies, which can impact performance on exams and assignments. These challenges are amplified for students who may lack self-motivation or effective time management skills, including the use of reminders.

Unlike traditional instructional settings where students attend the same class, the online setting allows each student to "create" their own class experience. While this approach theoretically accommodates various learning styles, some students may not have identified their optimal learning style yet.

Our observation indicates that poor performance in online courses is often directly tied to inadequate time management, such as attempting to complete a week's worth of work just before the deadline. Rushing to finish assignments before the 11:59 pm deadline is not a reliable strategy for success as it limits the opportunity to seek clarification on unclear material. Asking questions on lecture slides and module discussion boards and receiving prompt responses from instructors are valuable features of online learning. Completing self-check quizzes during the week can help identify areas of confusion. Typically, we aim to address posted questions within 12-24 hours, often much sooner.

You are expected to meet the assignment deadlines as posted; however, it's important to note that the self-check quizzes for each module can be completed at your own pace throughout the week. These quizzes are due on Fridays at 11:59 pm.

Description of Course Content:

1) Introduction to Aging, senescence, and longevity
- Chronological age, Biological age, Senescence

- Overview of the aging process and its impact on brain structure and function.
- Introduction to key concepts such as neuroplasticity and cognitive reserve.
- Understanding common myths and misconceptions about aging and cognition.

2) Neurobiology of Aging
- Exploration of structural and functional changes in the aging brain.
- Discussion on neurochemical alterations and their implications for cognitive function.
- Introduction to age-related neurodegenerative diseases such as Alzheimer's and Parkinson's.

3) Cognitive Changes in Aging
- Examination of typical cognitive changes associated with aging, including memory decline, attentional changes, and executive function decline.
- Understanding the variability in cognitive aging across individuals.
- Discussion on cognitive resilience and factors that may mitigate age-related cognitive decline.

4) Lifestyle Factors and Brain Health
- Importance of lifestyle factors in promoting brain health and cognitive vitality.
- Discussion on the role of nutrition, physical activity, mental stimulation, and social engagement in maintaining cognitive function.
- Strategies for incorporating brain-healthy habits into daily life.

5) Cognitive Training and Brain Exercises
- Overview of cognitive training programs and brain exercises aimed at enhancing cognitive function.
- Exploration of evidence-based interventions for improving memory, attention, and other cognitive abilities.
- Practical tips for integrating cognitive training into daily routines.

6) Managing Cognitive Decline/ Intervention/Therapeutic agents/Exercise
- Strategies for managing cognitive decline in aging, including medication, cognitive rehabilitation, and lifestyle modifications.
- Discussion on the importance of early detection and intervention for neurodegenerative diseases.
- Introduction to support services and resources for individuals with cognitive impairment and their caregivers.

7) Promoting Brain Health Through Social Engagement
- Exploration of the link between social engagement and cognitive health in aging.
- Discussion on the benefits of social interaction, community involvement, and meaningful activities for brain health.

- Strategies for fostering social connections and building a supportive social network.

8) Aging Brain and Emotional Well-being
- Understanding the impact of emotional well-being on cognitive health in aging.
- Discussion on the relationship between stress, depression, and cognitive function.
- Coping strategies for managing emotional challenges and promoting resilience in older adults.

9) Brain-Healthy Aging Across the Lifespan
- Importance of lifelong brain health promotion and preventive measures.
- Discussion on promoting brain health at different life stages, from childhood to older adulthood.
- Strategies for optimizing cognitive function and reducing the risk of age-related cognitive decline.

10) Putting Knowledge into Practice
- Recap of key concepts and insights gained throughout the course.
- Development of personalized action plans for promoting brain health and cognitive vitality.
- Reflection on the importance of ongoing learning and adaptation in maintaining cognitive well-being.

Course Materials and Technology:
Suggested Reading Material
Assigned articles

Required Technology
- Laptop or desktop computer equipped with a microphone and video camera. A microphone and video camera may be used to post comments to VoiceThread and for online Face-to-face meetings if requested.
    a. There is a Canvas app that can be used to access the course.
    b. There are VoiceThread apps that are available for iOS and Android devices that can be used to view and post comments on VTs. While these portable devices are excellent for watching lectures and asking questions, we strongly recommend that you use a laptop or desktop computer when working on this course.

- High-speed, broadband internet connection such as DSL or cable. We highly recommend that you use a broadband, stable Internet connection when taking exams.
    c. SPECIAL NOTE: Some users with satellite Internet service may find their online courses do not load quickly or consistently due to satellite network issues.

- It is highly recommended that you work with Canvas and VT through **Firefox or Chrome Browsers.** For specific questions about browser compatibilities and general questions about e-learning at UF please visit https://wiki.helpdesk.ufl.edu/FAQs/E-Learning.

- You should also make sure you have the **most recent version of Adobe Flash player** installed on your computer. Adobe Flash player can be downloaded from this website.

For additional technical support for this class, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- UF eLearning

Academic Requirements and Grading

Assignments and Grading

For each of the 10 modules, students will complete a self-check Module quiz. Self-check quizzes are due each Friday by 11:59 pm.

The scores from the self-check quizzes will be weighted to represent 30% of your grade. Seventy percent of your course grade will come from weekly assignments that you will submit after a review of primary literature. You will be given grading rubrics for these assignments so that you will understand what is required to complete these assignments and how they will be evaluated.

Weighting of course assignments (% of final grade)

Unit Self-check Quizzes: 30% Grade

Weekly Assignments: 70% Grade

Assignments, quizzes, and tests will not be accepted late.

All self-check quizzes for a module are due Fridays at 11:59 pm. You will be able to view the correct answers for all quizzes that you submit for 24 hours starting at 12:01 am on the Saturday following the Friday on which they are due. Self-check quizzes not completed by the Friday 11:59 deadline will result in zeros for those quizzes.

As a rule, unless you have a medical excuse or a confirmed family emergency with appropriate documentation, we will not accept late assignments, quizzes, and tests. We recognize that personal circumstances arise that may interfere with your ability to meet a deadline. If this occurs, please let us know as soon as you know-preferably a minimum of 24 hours before the deadline. We will not be receptive to retrospective requests for deadline extensions. Your emails will be responded to within 24 business hours (typically sooner).

If you encounter computer technical difficulties, be sure to include a UF helpdesk ticket number in your request for a deadline extension if you plan to request one. The extension request MUST be submitted within 24 hours of the technical difficulty.

Grading scale

A letter grade will be given at the end of the course that will reflect the weighted percentages of the points you have earned:

93-100% = A

90-92%= A-

87-89% = B+

83-86% = B

80-82% = B-

77-79% = C+

73-76% = C

70-72% = C-

67-69% = D+

63-66% = D

<63% =E

Grading Policy:

Students will be expected to complete <u>all requirements for one module each week</u>. There will be no deadline extensions for the completion of a module unless granted by the course directors before the scheduled completion date. You will receive zeros for failure to submit module self-check quizzes or assignments by their deadlines in the absence of an approved excuse.

More information on UF grading policy may be found at:

 http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades

Policy Related to Required Class Attendance:

This course is entirely online and is asynchronous. Thus, there is no formal class attendance policy. Requirements for make-up quizzes, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Excused absences must be consistent with university policies in the Graduate Catalog (http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance).

Additional information can be found here:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Expectations Regarding Course Behavior:

Communication Guidelines

WHEN DO I CONTACT THE UF HELPDESK?
If you have **technical difficulties with E-learning**, please contact the UF helpdesk at learning-support@ufl.edu, or (352) 392-4357 - select option 2. If your technical difficulties will cause you to miss a due date, you MUST report the problem to E-learning. Include the ticket number that you are given in an e-mail to the instructor to explain the late assignment/quiz/test.

Types of questions that should be directed to the Help Desk:

1. I can't log into E-learning
2. I have clicked on the "submit" button for my quiz and nothing is happening
3. I can't upload an assignment (be sure that you have reviewed the tutorial on how to do this BEFORE you contact the Help Desk)
4. E-learning has given me an error message and I can't submit my assignment.

NOTE: *Late work that involves technical difficulties with E-learning MUST be accompanied by a ticket number from the Help Desk.*

ALSO *- Be sure to be familiar with the hours of operation for the UF help desk since they are oftentimes not available after 10:30pm on workdays and after 8:00 pm on weekends. There hours are posted at http://helpdesk.ufl.edu/about/business-hours/*

WHEN DO I POST QUESTIONS TO THE COURSE QUESTIONS DISCUSSION BOARD?
Questions that deal with the course itself should be submitted to the Course Questions board. Posted questions should NOT be about grades or a private matter. Do not post personal grade questions on the Course Questions discussion board.

Before posting a question, check those already posted to be sure that you are not duplicating a question. These should be things that other students in the class might have trouble with. For example:
1. I am unable to post comments to VoiceThread.
2. The link to specific VoiceThread is not working.
3. One of the quiz questions did not display properly.

Posting on the Course questions board is the fastest way to get an answer to your question. Be sure to give it a meaningful heading!

Questions of a private nature should be e-mailed to the course instructor (see below on how to e-mail within E-learning). In all cases, please allow 24 hours for a response. Every effort will be made to answer questions posted over the weekend within 24 hours. If not addressed, they will be addressed on the following Monday.

WHEN DO I EMAIL MY INSTRUCTOR?
Questions about the course should be e-mailed to the instructor through the e-mail tool in E-learning.
Examples of e-mail questions for the instructor to get clear, concise responses:
1. I think there is an error in my grade for the assignment in module 3 (be sure to explain exactly why you think there is an error and provide documentation)
2. I am behind in the course and I would like to know how I may catch up (in such a case, your instructor may ask you to set up a Skype meeting or a time to call on the telephone)

If you have questions about the course itself, please reread the syllabus before asking a question. If the answer is not in the syllabus, check the Course Questions discussion board (this discussion board can be located by clicking on the discussions menu tab on the left of the course home page). If the answer to your question is not there, please post the question on the Course Questions discussion board.

DO NOT e-mail the instructor with general course questions. If your question is personal, e-mail your instructor from within the e-learning system using the instructions below.
Late work that involves technical difficulties with E-learning MUST be accompanied by a ticket number from the Help Desk.

HOW TO EMAIL YOUR INSTRUCTOR
When emailing your instructor, please do so through Canvas.
To send an e-mail from the course:
1. Click on the mail icon that is located the left side of your screen.
2. Click the "Compose Message" button.
3. "To: window" will display.
4. Locate your instructor's name.
5. Always include a description in your subject line
6. Type your message and add any necessary attachments. Be sure that your subject line is meaningful.
7. Click "send."

Academic Integrity:

PLAGIARISM

Weekly assignments involve review of the primary literature to formulate their essay for each topic. Students must understand what plagiarism is and must not engage in this behavior when completing assignments in this course. The University of Florida Student Honor Code states that plagiarism includes but is not limited to:

1. Quoting oral or written materials including but not limited to those found on the internet, whether published or unpublished, without proper attribution.
2. Submitting a document or assignment that in whole or in part is identical or substantially identical to a document or assignment not authored by the student.

Students whose assignments/tests exhibit evidence of plagiarism will receive zeros for those assignments and tests for the first offense and will receive a warning. Students who continue to engage in this behavior after the first warning will be reported to the UF Dean of Students Office.

PROHIBITED COLLABORATION OR CONSULTATION
Students found to be involved in sharing answers and/or collaborating on assignments will receive zeros for those exams and assignments. Students who continue to engage in this behavior after the first warning will be reported to the UF Dean of Students Office.

Students are expected to act by the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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**."

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

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

It is your responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:
https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/
http://gradschool.ufl.edu/students/introduction.html

Please also review the use of copyrighted materials, which can be found on the Health Science

Center Library's web page:

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Online Faculty Course Evaluation Process:

Students are **<u>expected</u>** to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback professionally and respectfully is available at

https://gatorevals.aa.ufl.edu/students/ . Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Support Services:

Accommodations for Students with Disabilities:

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. Students need to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health:

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.

- You Matter We Care website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care

website, which is staffed by Dean of Students and Counseling Center personnel.

- The Student Health Care Center at UF Health is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at UF Health offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the website at: https://shcc.ufl.edu/

- UF Health Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32698, ufhealth.org/emergency-room-trauma-center.

- University Police Department: Visit police.ufl.edu/ or call 352-392-1111 (or 9-1-1 for emergencies).

- Crisis intervention is always available 24/7 from:

  Alachua County Crisis Center:
  (352) 264-6789
  http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services career.ufl.edu/.

Library Support: cms.uflib.ufl.edu/ ask various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall 352-392-2010 or to make an appointment 352 392-6420. General study skills and tutoring. teachingcenter.ufl.edu/

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. writing.ufl.edu/writing-studio/

Student Complaints On-Campus: sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

On-Line Students Complaints: distance.ufl.edu/student-complaint-process

Course|New for request 19862

Info

Request: GMS 6XXX Neuroimaging
Description of request: GMS 6XXX - Neuroimaging
Submitter: Ikiah Young ilyoung@ufl.edu
Created: 4/10/2024 10:37:25 AM
Form version: 1

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

    Response:
GMS

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

    Response:
6

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

    Response:
XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

    Response:
None

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.
* *

    Response:
Intermediate

- *1000 level = Introductory undergraduate*
- *2000 level = Introductory undergraduate*
- *3000 level = Intermediate undergraduate*
- *4000 level = Advanced undergraduate*
- *5000 level = Introductory graduate*
- *6000 level = Intermediate graduate*
- *7000 level = Advanced graduate*
- *4000/5000= Joint undergraduate/graduate*
- *4000/6000= Joint undergraduate/graduate*

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Neuroimaging

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Neuroimaging

Degree Type
Select the type of degree program for which this course is intended.

Response:
Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the

department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
2024

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
1

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or

headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
1

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
Images are powerful tools that excel at conveying complex and often subtle ideas or concepts at speeds unrivaled by other forms of information-based media. The Online Master's Program's Neuroimaging course is designed to provide a historical perspective on the development of those research-based and clinical imaging techniques that were most foundational to the fields of neuroscience and neurology.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
N/A

Prerequisites

Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
Consent of instructor. Designed for graduate students in the Online MSc program or PhD programs and Biomedical Neuroscience MSc students.

Completing Prerequisites:

• *Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.*
• *Use parentheses to specify groupings in multiple requirements.*
• *Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.*
• *Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).*
• *"Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.*
• *If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)*

*Example: *
<ol>
• *Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.*
• *Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
This course is an elective course in the Online Biomedical Neuroscience Graduate Master of Science program. Post-baccalaureate students, MSc and PhD graduate students, and working professionals who are interested in learning about the discovery and development of neuroimaging methods are also encouraged to enroll in this course.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
The primary learning objectives for this course are listed below. Each learning module has been structured to help you successfully complete these objectives.?Uponcompleting this course, you will be able to…

- Identify the origins of neuroimaging methods with the most relevance to neuroscience and neurology

- Identify the components of microscope assemblies used for the purpose of neuroimaging

- Describe the physical mechanisms behind signal generation, signal collection, and image reconstruction in various neuroimaging techniques

- Compare and contrast neuroimaging methods based on their salient characteristics such as what types of samples can be imaged, what biomolecular targets can be identified, and resolution limits.

- Identify challenges specific to visualizing the spinal cord and brain as well as describe how these challenges were overcome through the development of histological techniques (historically) and clinical imaging techniques (contemporarily).

- Perform basic calculations for the preparation of reagents necessary for staining and immunolabeling protocols

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
The content of each module is included as a viewable lecture in VoiceThread. Audio and text transcripts of the lecture materials from which the course content is derived is available as part of these lectures which are accessible from the course's pages in Canvas.

There are no official textbook requirements for this course. Some interesting and recommended texts on the history of and technique-specific descriptions of various imaging modalities instrumental to the field of neuroimaging include the following…

Hooke, Robert, 1635-1703. Micrographia, or, Some Physiological Descriptions of Minute Bodies Made by Magnifying Glasses : with Observations and Inquiries Thereupon. London.

Murphy, D. B., & Davidson, M. W. (2012). Fundamentals of Light Microscopy and Electronic Imaging: Second Edition. John Wiley and Sons. https://doi.org/10.1002/9781118382905

Mescher A.L.(Ed.), (2024) Junqueira's Basic Histology: Text and Atlas, 17th Edition. McGraw Hill.

Westbrook, C., & Talbot, J. (2018). MRI in Practice (5th ed.). Wiley.

Haacke, E.M. (1999). Magnetic Resonance Imagine: Principles and Sequence Design. Germany: Wiley

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
Week(s)

Topics

1 Course Introduction

Mod 1 – Foundations of Light Microscopy
Mod 2 – Neuroimaging and Histology : A Study in Stains and Contrast
Mod 3 – Contemporary Light Microscopy
Mod 4 – Further Up the Electromagnetic Spectrum
Mod 5 – Further Down the Electromagnetic Spectrum

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Assignment
Points Available
Module 1 Test: 80
Module 2 Test: 85
Module 3 Test:105
Module 4 Test: 130
Module 5 Test: 205
Total Points = 605

Letter Grade

Grade Points

93-100 A 4.0
90-92 A- 3.67
87-89 B+ 3.33
83-86 B 3.0
80-82 B- 2.67
77-79 C+ 2.33
73-76 C 2.0
70-72 C- 1.67
67-69 D+ 1.33
63-66 D 1.0
60-62 D- 0.67
Below 60 E 0.0

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
Jeremy Flint

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx...

Response:
Yes

Accomodations

Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Response:
Yes

UF Grading Policies for assigning Grade Points

Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Response:
Yes

Course Evaluation Policy

Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

UNIVERSITY OF FLORIDA
COLLEGE OF MEDICINE SYLLABUS
NEUROSCIENCE
GMS7795 Neuroimaging (1 credit hour)
Semester: Summer A
Delivery Format: Online

Instructor Name: Jeremy Flint, PhD
Room Number: N/A
Email Address: jflint@mbi.ufl.edu
Office Hours: Arranged by student request
Graduate Assistant: N/A
Required Course Communications: Email through Canvas
Prerequisites: Consent of instructor. Designed for graduate students in the Online MSc program or PhD programs and Biomedical Neuroscience MSc students.

Course Overview

Images are powerful tools that excel at conveying complex and often subtle ideas or concepts at speeds unrivaled by other forms of information-based media. Their historic contributions to our understanding of microbiology and pathology as well as their more contemporary roles in modern clinical diagnostics can hardly be overstated. The Online Master's Program's Neuroimaging course (GMS7795) is designed to provide a historical perspective on the development of those research-based and clinical imaging techniques that were most foundational to the fields of neuroscience and neurology. Assignments in this course are designed to help students understand the conditions and context under which numerous application-based imaging methods were discovered and developed. In addition, they will better understand both the features and limitations associated with these imaging methods so as to gain a better perspective of when these imaging protocols are or are not appropriate to employ.

Relation to Program Outcomes
This course is an elective course in the Online Biomedical Neuroscience Graduate Master of Science program. Post-baccalaureate students, MSc and PhD graduate students, and working professionals who are interested in learning about the discovery and development of neuroimaging methods are also encouraged to enroll in this course.

Course Objectives and Goals

The primary learning objectives for this course are listed below. Each learning module has been structured to help you successfully complete these objectives. Upon completing this course, you will be able to…

- Identify the origins of neuroimaging methods with the most relevance to neuroscience and neurology
- Identify the components of microscope assemblies used for the purpose of neuroimaging
- Describe the physical mechanisms behind signal generation, signal collection, and image reconstruction in various neuroimaging techniques
- Compare and contrast neuroimaging methods based on their salient characteristics such as what types of samples can be imaged, what biomolecular targets can be identified, and resolution limits.
- Identify challenges specific to visualizing the spinal cord and brain as well as describe how these challenges were overcome through the development of histological techniques (historically) and clinical imaging techniques (contemporarily).
- Perform basic calculations for the preparation of reagents necessary for staining and immunolabeling protocols

Instructional Methods

This is an online asynchronous course that has been created using CANVAS, an online course management system. The course is divided into 5 modules and is designed to be completed over the course of one, five-week period spanning the first half (summer A) or second half (summer B) of the summer semester.

To enable students to get the most out of this course, I have integrated several online communication tools into this course that should make it easier to actively engage in the curriculum. In this course, all lectures will involve the use of VoiceThread, an asynchronous learning platform. Test materials will be accessed and submitted through the Canvas course platform.

Module tests (5 total) will be used to assess students' mastery of the course curriculum. They will consist primarily of short-answer response (multiple choice, matching, true-false, and fill-in-the-blank) style questions.

How to Succeed in this Online Course

First, you need to be aware that online learning poses its own unique challenges. Because the online classroom is available to you 24 hours a day it is easy to delay work on course material, forget deadlines, and not put enough time into course work to perform well on exams and assignments. These challenges can be exacerbated when students are not 'self-starters' or do not possess good time management skills.

Unlike traditional instructional settings in which each student goes to the same class, the online setting enables every student to "create" the class of his or her choosing. In theory, this type of instruction should be more adaptable to a variety of learning styles; however, the reality is that some students have not yet determined their optimal learning style.

Poor performance in online courses often can be directly linked to procrastination and poor time management (trying to do a week's worth of work just before the deadline). Rushing to complete and submit assignments at literally the last minute is NOT a good strategy because you (1) forfeit your opportunity to ask questions about materials you may not understand and (2) it is very easy to miss your opportunity to submit your assignments. In general, I always try to answer questions you have about course content within 48 hrs of your posting of your question. Oftentimes, I answer much more quickly. Your questions are important to me and constitute a very important part of the teacher/student interaction. Waiting until the day or hour an assignment is due does not allow me to provide you with the educational support that I would like to provide since I may not be able to answer your questions before an assignment's submission deadline has passed.

You are expected to adhere to the posted assignment deadlines; however, you are encouraged to complete module assignments before they are due if this is convenient for you. It is possible to request an assignment deadline extension, but requests must be submitted to me and approved prior to the deadline if possible.

The most important single piece of advice I have for students in relation to ensuring their highest performance on module tests is to **STUDY AND REVIEW THE INDICATED MATERIALS ON THE LEARNING OBJECTIVES PAGE FOR EACH MODULE!** Read through this content each time you sit down to study or before listening to the lecture content. Review the content on these pages thoroughly and do so IMMEDIATELY before you sign on to conduct your weekly exams. Developing a working knowledge of the content indicated on the Learning Objectives pages will ensure you have the information needed to perform successfully on each module exam.

Description of Course Content

COURSE TOPICS

This 5-week course is offered only during Summer term. The course is divided into 5 modules that will be completed one per week. The following table shows the module topics that we will cover in this course and the corresponding week for each module.

Week(s)	Topics
1	Course Introduction
1	Mod 1 – Foundations of Light Microscopy

2	Mod 2 – Neuroimaging and Histology : A Study in Stains and Contrast
3	Mod 3 – Contemporary Light Microscopy
4	Mod 4 – Further Up the Electromagnetic Spectrum
5	Mod 5 – Further Down the Electromagnetic Spectrum

Course Materials and Technology

Reading and Viewing Materials

The content of each module is included as a viewable lecture in VoiceThread. Audio and text transcripts of the lecture materials from which the course content is derived is available as part of these lectures which are accessible from the course's pages in Canvas.

There are no official textbook requirements for this course. Some interesting and recommended texts on the history of and technique-specific descriptions of various imaging modalities instrumental to the field of neuroimaging include the following…

Hooke, Robert, 1635-1703. *Micrographia, or, Some Physiological Descriptions of Minute Bodies Made by Magnifying Glasses : with Observations and Inquiries Thereupon*. London.

Murphy, D. B., & Davidson, M. W. (2012). *Fundamentals of Light Microscopy and Electronic Imaging: Second Edition*. John Wiley and Sons. https://doi.org/10.1002/9781118382905

Mescher A.L.(Ed.), (2024) *Junqueira's Basic Histology: Text and Atlas, 17th Edition*. McGraw Hill.

Westbrook, C., & Talbot, J. (2018). *MRI in Practice* (5th ed.). Wiley.

Haacke, E. M. (1999). Magnetic Resonance Imaging: Physical Principles and Sequence Design. Germany: Wiley.

Required Technology

- **Laptop or desktop computer with dedicated audio and video recording capabilities.** The computer interface is a requirement for viewing lecture material and submitting assignment materials through the Canvas software suite. A computer is also necessary for emailing your instructor with questions about coursework or assessments and receiving responses to those questions through Canvas. The microphone (audio) and camera (video) components are necessary for in-person meetings with your instructor over Zoom.

- **High speed, broad band internet connection such as DSL or cable.** A broadband Internet connection is strongly recommended. Slower connections may affect your ability to interact with materials in the course. It is also recommended that you try to

submit course exams and assignments well ahead of the deadline since we have found that network speeds can slow significantly as the deadlines in online courses approach due to increased use.

SPECIAL NOTE: Some users with satellite Internet service may find their online courses do not load quickly or consistently due to satellite network design issues.

- **Installation of LockDown Browser on computer that you will use for this course.** All tests will be taken using LockDown Browser. The computer you use to take exams should be "hard wired" to the internet. WiFi is not stable enough to support a reliable connection for taking tests.

- Canvas courses are best viewed using Chrome or Firefox. For specific questions about browser compatibilities and general questions about e-learning at UF please go to https://wiki.helpdesk.ufl.edu/FAQs/E-Learning.

For any technical issues you encounter with your course please contact the UF computing Help Desk at 352-392-4357. For Help Desk hours visit: http://helpdesk.ufl.edu/ .

Academic Assignments and Grading

- VoiceThread lectures are accessible through the course website. Students are required to ask any questions they have about the lecture material through Canvas email. The answers to questions that would benefit all students taking the course will be distributed to currently enrolled students through Canvas email.
- Module tests have been designed to reinforce the lecture assignments. All tests will be taken using LockDown browser. The material content of your exams is included in the Learning Objectives page for each module and is designed to assist you as a study guide.
- Exams will be conducted through the Canvas course platform.
- Online, scheduled synchronous meetings between students and the instructor will be available by request throughout the semester using Zoom Conferences.

MODULE TESTS

Modules 1-5 include module tests that will be taken using LockDown browser. The Module tests consist of T/F, multiple choice, matching, fill-in-the-blank, multiple answers, and short essay questions.

These tests are timed and the questions will be randomized. Importantly, the time limit for completing the exam starts when you start the exam. *If you begin a 40 min exam 20 minutes before it is due (e.g. 11:39 pm), you will have only 20 min to complete the exam because Lockdown browser will automatically submit your exam when it is due.*

I strongly recommend that you take the ALL online tests well before the time they are due which is 11:59 pm. The speed of the internet can significantly decrease between 10 pm and midnight and can be particularly problematic during times when there is a dramatic increase in online instruction. Thus, to avoid time delays during testing, you should try to complete exams during non-peak hours and, of course, avoid using Wi-Fi connections.

GRADING

The average of the scores that you earn from the five module tests will determine your final grade for this course.

Module tests will be graded and the scores earned on them will be visible within the week following their due-date.

Students are expected to complete all assignments by the deadlines listed on the assignment pages in Canvas' course syllabus. Students should carefully examine the auto-generated Canvas course syllabus that lists the specific assignments associated with each module and the dates/times that these assignments are due. **It is important to make a note of due dates for the assignments to ensure timely submission of your coursework.**

There will be no deadline extensions for the completion of a module unless an extension is requested by the student and granted by me (see Exam/Assignment Policy below). Failure to submit a module test by the course deadline will be recorded as a zero if no extension was granted.

Course Assignment Point Distribution

Assignment	Points Available
Module 1 Test	80
Module 2 Test	85
Module 3 Test	105
Module 4 Test	130
Module 5 Test	205
	Total Points = 605

GRADING SCALE

Percentage total points earned	Letter Grade	Grade Points
93-100	A	4.0
90-92	A-	3.67
87-89	B+	3.33
83-86	B	3.0
80-82	B-	2.67
77-79	C+	2.33
73-76	C	2.0
70-72	C-	1.67
67-69	D+	1.33
63-66	D	1.0
60-62	D-	0.67
Below 60	E	0.0

Please be aware that a C- is not an acceptable grade for graduate students. If you obtain a C- in a course, it may be possible for you to retake the course but your C- will remain part of your calculated cumulative GPA. If you are enrolled in either the Biomedical Neuroscience Certificate or MSc programs you must have a cumulative final GPA of 3.00 or higher in order to register for classes in the next term, or to graduate in the case it is in your final term. Failure to maintain a mean GPA of 3.0 or higher as is required to remain in good academic standing during your tenure in the Online Master's or Certificate program may result in your inability to register for classes and could lead to your removal from the program prior to the fulfillment of your degree requirements.

Additional information on UF grading policy may be found at:
http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades

Exam Policy

Late assignments and tests
I recognize that personal circumstances arise that may interfere with your ability to meet a deadline. If you anticipate missing a deadline, please let me know as soon as possible and I will work with you to resolve the issue. Your emails will be responded to within 2 business days (typically sooner). Please see the UF Attendance Policies concerning absences, religious holidays, and illness. In general, late assignments, quizzes, and tests will not be accepted unless you have obtained a deadline extension from the instructor.

If you encounter technical difficulties with assignments (e.g. LockDown browser malfunction), be sure to include a UF helpdesk ticket number (http://helpdesk.ufl.edu/) in your request for a deadline extension if you plan to request one. The extension request MUST be submitted within 24 hours of the technical difficulty.

Class Attendance Policy

This course is entirely online and is asynchronous. Thus, there is no formal class attendance policy. Requirements for make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Excused absences that lead to missed assignment deadlines must be consistent with university policies in the Graduate Catalog
http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance.

Additional information can be found here:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Expectations Regarding Course Behavior

WHEN DO I CONTACT THE UF HELPDESK?

In the event that you have **technical difficulties with E-learning**, please contact the UF helpdesk at learning-support@ufl.edu, or (352) 392-4357 - select option 2. If your technical difficulties will cause you to miss a due date, you MUST report the problem to E-learning. Include the ticket number that you are given in an e-mail to the instructor to explain the late assignment/quiz/test.

Types of questions that should be directed to the Help Desk:

1. I can't log into E-learning
2. I have clicked on the "submit" button for my quiz and nothing is happening
3. I can't upload an assignment (be sure that you have reviewed the tutorial on how to do this BEFORE you contact the Help Desk)
4. E-learning has given me an error message and I can't submit my assignment.

NOTE: _Late work that involves technical difficulties with E-learning MUST be accompanied by a ticket number from the Help Desk._

ALSO _- Be sure to be familiar with the hours of operation for the UF help desk since they are oftentimes not available after 10:30pm on workdays and after 8:00 pm on weekends. There hours are posted at_ http://helpdesk.ufl.edu/about/business-hours/

WHEN DO I POST QUESTIONS TO THE COURSE QUESTIONS DISCUSSION BOARD?

Questions solicited to other students that deal with course content itself should be submitted to the Course Questions board. Posted questions should NOT be about grades or a private matter. Do not post personal questions or questions about grades on the Course Questions discussion board.

Before posting a question, check those already posted to be sure that you are not duplicating a question. These should be things that other students in the class might have trouble with. For example:

1. I am unable to post comments to VoiceThread.
2. The link to Blendspace or a specific VoiceThread is not working.
3. One of the quiz questions did not display properly.

Posting on the Course questions board is a good way to get answers about issues that have been encountered by other students. Be sure to give it a meaningful heading!

Questions of a private nature, those regarding course content you are struggling to understand and require clarification for, or those involving the content of instructor assessments must be e-mailed to the course instructor DIRECTLY THROUGH CANVAS (see below on how to e-mail within E-learning). In all cases, please allow 48 hours for a response. Every effort will be made to answer questions posted over the weekend by the following Monday.

WHEN DO I EMAIL MY INSTRUCTOR?

Questions about the course should be e-mailed to the instructor in Canvas through the e-mail tool in E-learning.
Examples of e-mail questions for the instructor to get clear, concise responses:

1. I think there is an error in my grade for question 4 on the first assignment in module 3 (be sure to explain exactly why you think there is an error and provide documentation)
2. I am behind in the course and I would like to know how I may catch up (in such a case, your instructor may ask you to set up a Skype meeting or a time to call on the telephone)

If you have questions about the course itself, please reread the syllabus before asking a question. If the answer is not in the syllabus, check the Course Questions discussion board (this discussion board can be located by clicking on the discussions menu tab on the left of the course home page). If the answer to your question is not there, please post the question on the Course Questions discussion board.

DO NOT e-mail the instructor with general course questions. If your question is of a personal nature, e-mail your instructor from within e-learning system using the instructions below. Late work that involves technical difficulties with E-learning MUST be accompanied by a ticket number from the Help Desk.

HOW TO EMAIL YOUR INSTRUCTOR
When emailing your instructor, do so through Canvas to guarantee delivery and ensure the fastest response.
To send an e-mail from the course:
1. Click on the mail icon that is located the left side of your screen.
2. Click the "Compose Message" button.
3. "To: window" will display.
4. Locate your instructor's name.
5. Always include a description in your subject line. Include relevant information such as the name and number of the assignment and module. Include the number of the question you are addressing.
6. Type your message and add any necessary attachments. Be sure that your subject line is meaningful.
7. Click "send."

ACADEMIC INTEGRITY
Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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**."

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

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

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:
https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/
http://gradschool.ufl.edu/students/introduction.html

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

PLAGIARISM
Students must understand what plagiarism is and must not engage in this behavior when completing assignments and tests in this course. The University of Florida Student Honor Code states that plagiarism includes but is not limited to:
- Quoting oral or written materials including but not limited to those found on the internet, whether published or unpublished, without proper attribution.
- Submitting a document or assignment that in whole or in part is identical or substantially identical to a document or assignment not authored by the student.

Student whose assignments/tests exhibit evidence of plagiarism will receive zeros for those assignments and tests for the first offense and will receive a warning. Students who continue to engage in this behavior after the warning will be reported to the UF Dean of Students Office.

PROHIBITED COLLABORATION OR CONSULTATION
Student found to be involved in sharing answers and/or collaborating on exams or assignments will receive zeros for those exams and assignments. Students who continue to engage in this behavior after the warning will be reported to the UF Dean of Students Office.

Online Faculty Course Evaluation Process
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at

https://gatorevals.aa.ufl.edu/students/ . Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Support Services

Accommodations for Students with Disabilities:
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting https://disability.ufl.edu/students/get-started/ . It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health
Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.

- You Matter We Care website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.

- If you live in Gainesville or the immediate surrounding areas, the Student Health Care Center at UF Health is a satellite clinic of the main Student Health Care Center that is located on Fletcher Drive on campus is available to you. Student Health at UF Health offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/

- If you live in Gainesville or the immediate surrounding areas, the UF Health Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32698, ufhealth.org/emergency-room-trauma-center.

- University Police Department: Visit police.ufl.edu/ or call 352-392-1111 (or 9-1-1 for emergencies).

- Crisis intervention is always available 24/7 from:

  Alachua County Crisis Center:
  (352) 264-6789
  http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx
  Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services career.ufl.edu/.

Library Support: cms.uflib.ufl.edu/ ask various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall 352-392-2010 or to make an appointment 352 392-6420. General study skills and tutoring. teachingcenter.ufl.edu/

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. writing.ufl.edu/writing-studio/

Student Complaints On-Campus: sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

On-Line Students Complaints: distance.ufl.edu/student-complaint-process

Course|New for request 19861

Info

Request: GMS 6XXX Neuroscience Professional Survival Skills
Description of request: Neuroscience Professional Survival Skills
Submitter: Ikiah Young ilyoung@ufl.edu
Created: 4/10/2024 10:29:33 AM
Form version: 1

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

    Response:
    GMS

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

    Response:
    6

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

    Response:
    XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

    Response:
    None

Category of Instruction
*Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment. *

    Response:
    Intermediate

- *1000 level = Introductory undergraduate*
- *2000 level = Introductory undergraduate*
- *3000 level = Intermediate undergraduate*
- *4000 level = Advanced undergraduate*
- *5000 level = Introductory graduate*
- *6000 level = Intermediate graduate*
- *7000 level = Advanced graduate*
- *4000/5000= Joint undergraduate/graduate*
- *4000/6000= Joint undergraduate/graduate*

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

> Response:
> Neuroscience Professional Survival Skills

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

> Response:
> Neurosci Prof Survival Skills

Degree Type
Select the type of degree program for which this course is intended.

> Response:
> Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

> Response:
> Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

> Response:
> No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the

department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
2024

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or

headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
3

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
The ability to effectively communicate scientific ideas through written, poster, or oral presentations is critically important in professional settings. Persons who excel in these skills often have a tremendous advantage over their peers in terms of job opportunities and career advancement. Neuroscience Professional Survival Skills is designed to provide students with foundational knowledge that will enable them to effectively improve their communication skills.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
N/A

Prerequisites

Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
Consent of instructor. Designed for graduate students in the Online MSc program or PhD programs and Biomedical Neuroscience MSc students

Completing Prerequisites:

• *Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.*
• *Use parentheses to specify groupings in multiple requirements.*
• *Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.*
• *Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).*
• *"Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.*
• *If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)*

*Example: *
<ol>
• *Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.*
• *Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
This course is a required course in the Online Biomedical Neuroscience Graduate Master of Science program. Post-baccalaureate students, MSc and PhD graduate students, and working professionals who are interested in improving their writing and presentation skills are also encouraged to enroll in this course.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
The primary learning objectives for this course are listed below. Each learning module has been structured to help you successfully complete these objectives. Upon completing this course, you will be able to…

• Describe how individuals read scientific documents and what their expectations are
• Describe the importance of word selection (diction) and how word use affects writing clarity
• Recognize and write logically cohesive passages
• Create "publication-ready" digital scientific figures
• Describe the similarities between research papers and research proposals
• Create and deliver effective poster and oral presentations

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
The textbook Scientific Writing and Communication - Papers, Proposals, and Presentations, 4th Edition, by Angelika H. Hofmann, Oxford University Press is required for this course.

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
Week(s)
Topics
1 Course Introduction
Mod 1 – Understanding Expectations of Readers
Mod 2 – Word Selection and Writing Clarity
Mod 3 – From Sentences to Paragraphs
Mod 4 – Scientific Manuscripts: The Introduction
Mod 5 – Scientific Manuscripts: Materials and Methods
Mod 6 – Scientific Manuscripts: Results and Discussion
Mod 7 – Scientific Manuscripts: Abstracts
Mod 8 – Preparation of Publishable Digital Figures and Figure Legends
Mod 9 – Research Proposals
Mod 10 – Poster Presentations
Mod 11 – Oral Presentations

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
The percent of the total points possible for this course (436 points) that you earn from the five module tests (115 points possible), the nine writing assignments (261 points possible), the peer review (15 points possible), and the oral presentation (45 points possible) will determine your final grade for this course.

Course Assignment Point Distribution
Module Tests (5) 115
Writing Assignments (9) 261
Peer Reviews (1) 15
Oral Presentation (1) 45
Total Points = 436

Letter Grade

Grade Points

93-100 A 4.0
90-92 A- 3.67
87-89 B+ 3.33
83-86 B 3.0

80-82 B- 2.67
77-79 C+ 2.33
73-76 C 2.0
70-72 C- 1.67
67-69 D+ 1.33
63-66 D 1.0
60-62 D- 0.67
Below 60 E 0.0

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

    Response:
Jeremy Flint

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

    Response:
Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

    Response:
Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

    Response:

Yes

Course Evaluation Policy

Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

UNIVERSITY OF FLORIDA
COLLEGE OF MEDICINE SYLLABUS
NEUROSCIENCE
GMS7795 Neuroscience Professional Survival Skills (3 credit hours)
Semester: Spring
Delivery Format: Online

Instructor Name: Jeremy Flint, PhD
Room Number: N/A
Email Address: jflint@mbi.ufl.edu
Office Hours: Arranged by student request
Graduate Assistant: N/A
Required Course Communications: Email through Canvas
Prerequisites: Consent of instructor. Designed for graduate students in the Online MSc program or PhD programs and Biomedical Neuroscience MSc students.

Course Overview

The ability to effectively communicate scientific ideas through written, poster, or oral presentations is critically important in professional settings. Persons who excel in these skills often have a tremendous advantage over their peers in terms of job opportunities and career advancement. Neuroscience Professional Survival Skills (GMS7795) is designed to provide students with foundational knowledge that will enable them to effectively improve their communication skills. Assignments in this course will help students to improve their scientific writing in the context of scientific papers and grant proposals, to learn how to create effective digital figures and professional posters, and finally to learn various strategies to improve the effectiveness and clarity of their oral presentations.

Relation to Program Outcomes

This course is a required course in the Online Biomedical Neuroscience Graduate Master of Science program. Post-baccalaureate students, MSc and PhD graduate students, and working professionals who are interested in improving their writing and presentation skills are also encouraged to enroll in this course.

Course Objectives and Goals

The primary learning objectives for this course are listed below. Each learning module has been structured to help you successfully complete these objectives. Upon completing this course, you will be able to…

- Describe how individuals read scientific documents and what their expectations are
- Describe the importance of word selection (diction) and how word use affects writing clarity
- Recognize and write logically cohesive passages
- Create "publication-ready" digital scientific figures
- Describe the similarities between research papers and research proposals
- Create and deliver effective poster and oral presentations

Instructional Methods

This is an online asynchronous course that has been created using CANVAS, an online course management system. The course is divided into 11 modules. Most modules are designed to be completed over the course of one week – module 11; however, will be completed over the course of three weeks.

To enable students to get the most out of this course, I have integrated several online communication tools into this course that should make it easier to actively engage in the creative processes of writing and digital media creation. In this course, all lectures and some assignments will involve the use of VoiceThread, an asynchronous learning platform. Writing and media creation assignments will be submitted, peer-reviewed, and discussed within the Canvas course platform.

The textbook *Scientific Writing and Communication - Papers, Proposals, and Presentations, 4th Edition,* by Angelika H. Hofmann, Oxford University Press is **required for this course**. This book is available as a paperback or eTextbook and is worth purchasing because (1) each module contains a reading assignment taken from this textbook and (2) the book will serve as an excellent reference text for you once the course is completed. When appropriate, I have supplemented the assigned textbook chapters with specific papers.

Student assessments include short writing assignments (7 total) designed to reinforce the module materials, tests to insure concepts are understood (3 total), critiques of manuscript figures and posters (2 total) and creation of a short oral presentation using VoiceThread.

How to Succeed in this Online Course

First, you need to be aware that online learning poses its own unique challenges. Because the online classroom is available to you 24 hours a day it is easy to delay work on course material, forget deadlines, and not put enough time into course work to perform well on exams and assignments. These challenges can be exacerbated when students are not 'self-starters' or do not possess good time management skills.

Unlike traditional instructional settings in which each student goes to the same class, the online setting enables every student to "create" the class of his or her choosing. In theory, this type of instruction should be more adaptable to a variety of learning styles; however, the reality is that some students have not yet determined their optimal learning style.

Poor performance in online courses often can be directly linked to procrastination and poor time management (trying to do a week's worth of work just before the deadline). Rushing to complete and submit assignments at literally the last minute is NOT a good strategy because you (1) forfeit your opportunity to ask questions about materials you may not understand and (2) it is very easy to miss your opportunity to submit your assignments. In general, I always try to answer questions you have about course content within 48 hrs of your posting of your question. Oftentimes, I answer much more quickly. Your questions are important to me and constitute a very important part of the teacher/student interaction. Waiting until the day or hour an assignment is due does not allow me to provide you with the educational support that I would like to provide since I may not be able to answer your questions before an assignment is due.

You are expected to adhere to the posted assignment deadlines; however, you are encouraged to complete module assignments before they are due if this is convenient for you. It is possible to request an assignment deadline extension, but requests must be submitted to me and approved prior to the deadline if possible.

Description of Course Content

COURSE TOPICS

This 13-week course is offered only during Spring term. The course is divided into 11 modules that will be completed every week. The exception is module 11 which will be completed over the course of 3 weeks. The following table shows the module topics that we will cover in this course and the number of weeks that will be spent on each module.

Week(s)	Topics
1	Course Introduction
1	Mod 1 – Understanding Expectations of Readers
2	Mod 2 – Word Selection and Writing Clarity
3	Mod 3 – From Sentences to Paragraphs
4	Mod 4 – Scientific Manuscripts: The Introduction
5	Mod 5 – Scientific Manuscripts: Materials and Methods
6	Mod 6 – Scientific Manuscripts: Results and Discussion
7	Mod 7 – Scientific Manuscripts: Abstracts
8	Mod 8 – Preparation of Publishable Digital Figures and Figure Legends
9	Mod 9 – Research Proposals
10	Mod 10 – Poster Presentations
11-13	Mod 11 – Oral Presentations

Course Materials and Technology

Reading Materials

The following textbook is **required** for this course

- *Scientific Writing and Communication - Papers, Proposals, and Presentations (4th Edition)* by Angelika H. Hofmann. Oxford University Press. This book is available as a paperback and eTextbook.

All modules include assigned reading assignments from this text. I have selected this text because it should also serve as valuable reference text to you.

Required Technology

- **Laptop or desktop computer equipped with microphone and video camera.** The microphone and video camera can be used to post comments/questions to VoiceThread lectures and will be used to create the VoiceThread project for Module 11. There are VoiceThread apps that are available for free for iOS and Android devices that can be used to view the VT and comment on them. These apps should not be used when creating VoiceThreads. For these, I strongly recommend that you use a laptop or desktop computer.

- **High speed, broad band internet connection such as DSL or cable.** A broadband Internet connection is strongly recommended. Slower connections may affect your ability to interact with materials in the course. It is also recommended that you try to submit course exams and assignments well ahead of the deadline since we have found that network speeds can significantly slow as the deadlines in online courses approach due to increased use.

  SPECIAL NOTE: Some users with satellite Internet service may find their online courses do not load quickly or consistently due to satellite network design issues.

- **Installation of LockDown Browser on computer that you will use for this course.** All tests will be taken using LockDown Browser. The computer you use to take exams should be "hard wired" to the internet. WiFi is not stable enough to support a reliable connection for taking tests. Instructions on how to install LockDown Browser are included in the course introduction module.

- Canvas courses are best viewed using Chrome or Firefox. For specific questions about browser compatibilities and general questions about e-learning at UF please go to https://wiki.helpdesk.ufl.edu/FAQs/E-Learning.

For any technical issues you encounter with your course please contact the UF computing Help Desk at 352-392-4357. For Help Desk hours visit: http://helpdesk.ufl.edu/ .

Academic Assignments and Grading

- Readings are assigned from the required textbook (see course materials above) and in some instances, published primary literature.
- VoiceThread lectures are accessible through the course website. Students are required to ask any questions they have about the lecture material through Canvas email. The answers to questions that would benefit all students taking the course will be distributed to currently enrolled students through Canvas email.
- Module tests have been designed to reinforce the lecture and reading assignments. All tests will be taken using LockDown browser and specific directions for taking and viewing the results of these tests accompany each test. Pay particular attention to when the results of your test will be visible to you.
- Written assignments and assigned peer reviews will be submitted through the Canvas course platform.
- Online, scheduled synchronous meetings between students and the instructor will be available by request throughout the semester using Zoom Conferences.

MODULE TESTS

Modules 1-3 include module tests that will be taken using LockDown browser. The Module tests consist of T/F, multiple choice, matching, fill-in-the-blank, multiple answers, and short essay questions.

These tests are timed and the questions will be randomized. Importantly, the time limit for completing the exam starts when you start the exam. *If you begin a 40 min exam 20 minutes before it is due (e.g. 11:59 pm), you will have only 20 min to complete the exam because Lockdown browser will automatically submit your exam when it is due.*

You will receive your score for the test when you submit it but your score will not contain the results for any short written answer questions in the test. You will not receive your final score for the module tests that include short written answer questions until I grade them. I will post the corrected test results within 48 hours of the due date/time. You will then be given 24 hours to view each test and you will be able to see correct/incorrect answers and the comments I post on your tests.

I strongly recommend that you take the ALL online tests well before the time they are due which is 11:59 pm. The speed of the internet can significantly decrease between 10 pm and midnight and can be particularly problematic during times when there is a dramatic increase

in online instruction. Thus, to avoid time delays during testing, you should try to complete exams during non-peak hours and, of course, avoid using Wi-Fi connections.

WRITTEN ASSIGNMENTS

You will complete nine assignments that involve writing and/or written critiques of written material, and one peer review. These assignments are accompanied by grading rubrics that will provide you with guidelines about how your assignments will be evaluated.

ORAL PRESENTATION

Students will create a short oral presentation (5 min) using VoiceThread in Module 11. These presentations will be shared with the class and each student will be assigned one presentation to peer review. Projects and peer reviews will be graded using rubrics provided with the assignments.

GRADING

The percent of the total points possible for this course (436 points) that you earn from the five module tests (115 points possible), the nine writing assignments (261 points possible), the peer review (15 points possible), and the oral presentation (45 points possible) will determine your final grade for this course.

Module tests will be graded automatically except for any short answer questions which will be graded by your instructors or course TAs. Grading rubrics will be used to evaluate writing assignments, peer reviews, and the oral presentation. You will be given the rubrics ahead of time so that you will understand what is required to successfully complete these assignments and projects and how they will be evaluated.

Students are expected to complete <u>all assignments</u> by the deadlines found in the online course syllabus. Students should carefully examine the auto-generated Canvas course syllabus that lists the specific assignments associated with each module and the dates/times that these assignments are due. **It is important to make a note of due dates for the various quizzes, tests, and assignments since they vary across modules.**

There will be no deadline extensions for the completion of a module unless an extension is requested by the student and granted by me (see Exam/Assignment Policy below). Failure to submit a module assignment, quiz, test, or the final project by the course deadline will be recorded as a zero if no extension was granted.

Course Assignment Point Distribution

Assignment type	Points Availabe
Module Tests (5)	115
Writing Assignments (9)	261
Peer Reviews (1)	15
Oral Presentation (1)	45
	Total Points = 436

GRADING SCALE

Percentage total points earned	Letter Grade	Grade Points
93-100	A	4.0
90-92	A-	3.67
87-89	B+	3.33
83-86	B	3.0
80-82	B-	2.67
77-79	C+	2.33
73-76	C	2.0
70-72	C-	1.67
67-69	D+	1.33
63-66	D	1.0
60-62	D-	0.67
Below 60	E	0.0

Please be aware that a C- is not an acceptable grade for graduate students. If you obtain a C- in a course, it may be possible for you to retake the course but your C- will remain part of your calculated cumulative GPA. If you are enrolled in either the Biomedical Neuroscience Certificate or MSc programs you must have a cumulative final GPA of 3.00 or higher in order to register for classes in the next term, or to graduate in the case it is in your final term. Failure to maintain a mean GPA of 3.0 or higher as is required to remain in good academic standing during your

tenure in the Online Master's or Certificate program may result in your inability to register for classes and could lead to your removal from the program prior to the fulfillment of your degree requirements.

Additional information on UF grading policy may be found at:
http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades

Exam Policy

Late assignments and tests
I recognize that personal circumstances arise that may interfere with your ability to meet a deadline. If you anticipate missing a deadline, please let me know as soon as possible and I will work with you to resolve the issue. Your emails will be responded to within 2 business days (typically sooner). Please see the UF Attendance Policies concerning absences, religious holidays, and illness. In general, late assignments, quizzes, and tests will not be accepted unless you have obtained a deadline extension from the instructor.

If you encounter technical difficulties with assignments (e.g. LockDown browser malfunction), be sure to include a UF helpdesk ticket number (http://helpdesk.ufl.edu/) in your request for a deadline extension if you plan to request one. The extension request MUST be submitted within 24 hours of the technical difficulty.

Class Attendance Policy

This course is entirely online and is asynchronous. Thus, there is no formal class attendance policy. Requirements for make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Excused absences that lead to missed assignment deadlines must be consistent with university policies in the Graduate Catalog
http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance.

Additional information can be found here:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Expectations Regarding Course Behavior

WHEN DO I CONTACT THE UF HELPDESK?

In the event that you have **technical difficulties with E-learning**, please contact the UF helpdesk at learning-support@ufl.edu, or (352) 392-4357 - select option 2. If your technical difficulties will cause you to miss a due date, you MUST report the problem to E-learning. Include the ticket number that you are given in an e-mail to the instructor to explain the late assignment/quiz/test.

Types of questions that should be directed to the Help Desk:

1. I can't log into E-learning
2. I have clicked on the "submit" button for my quiz and nothing is happening
3. I can't upload an assignment (be sure that you have reviewed the tutorial on how to do this BEFORE you contact the Help Desk)
4. E-learning has given me an error message and I can't submit my assignment.

NOTE: *Late work that involves technical difficulties with E-learning MUST be accompanied by a ticket number from the Help Desk.*

ALSO *- Be sure to be familiar with the hours of operation for the UF help desk since they are oftentimes not available after 10:30pm on workdays and after 8:00 pm on weekends. There hours are posted at* [*http://helpdesk.ufl.edu/about/business-hours/*](http://helpdesk.ufl.edu/about/business-hours/)

WHEN DO I POST QUESTIONS TO THE COURSE QUESTIONS DISCUSSION BOARD?

Questions solicited to other students that deal with course content itself should be submitted to the Course Questions board. Posted questions should NOT be about grades or a private matter. Do not post personal questions or questions about grades on the Course Questions discussion board.

Before posting a question, check those already posted to be sure that you are not duplicating a question. These should be things that other students in the class might have trouble with. For example:

1. I am unable to post comments to VoiceThread.
2. The link to Blendspace or a specific VoiceThread is not working.
3. One of the quiz questions did not display properly.

Posting on the Course questions board is a good way to get answers about issues that have been encountered by other students. Be sure to give it a meaningful heading!

Questions of a private nature, those regarding course content you are struggling to understand and require clarification for, or those involving the content of instructor assessments must be e-mailed to the course instructor DIRECTLY THROUGH CANVAS (see

below on how to e-mail within E-learning). In all cases, please allow 48 hours for a response. Every effort will be made to answer questions posted over the weekend by the following Monday.

WHEN DO I EMAIL MY INSTRUCTOR?
Questions about the course should be e-mailed to the instructor in Canvas through the e-mail tool in E-learning.
Examples of e-mail questions for the instructor to get clear, concise responses:
1. I think there is an error in my grade for question 4 on the first assignment in module 3 (be sure to explain exactly why you think there is an error and provide documentation)
2. I am behind in the course and I would like to know how I may catch up (in such a case, your instructor may ask you to set up a Skype meeting or a time to call on the telephone)

If you have questions about the course itself, please reread the syllabus before asking a question. If the answer is not in the syllabus, check the Course Questions discussion board (this discussion board can be located by clicking on the discussions menu tab on the left of the course home page). If the answer to your question is not there, please post the question on the Course Questions discussion board.

DO NOT e-mail the instructor with general course questions. If your question is of a personal nature, e-mail your instructor from within e-learning system using the instructions below.
Late work that involves technical difficulties with E-learning MUST be accompanied by a ticket number from the Help Desk.

HOW TO EMAIL YOUR INSTRUCTOR
When emailing your instructor, do so through Canvas to guarantee delivery and ensure the fastest response.
To send an e-mail from the course:
1. Click on the mail icon that is located the left side of your screen.
2. Click the "Compose Message" button.
3. "To: window" will display.
4. Locate your instructor's name.
5. Always include a description in your subject line. Include relevant information such as the name and number of the assignment and module. Include the number of the question you are addressing.
6. Type your message and add any necessary attachments. Be sure that your subject line is meaningful.
7. Click "send."

ACADEMIC INTEGRITY

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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.**"

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

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

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:
https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/
http://gradschool.ufl.edu/students/introduction.html

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

PLAGIARISM
Students must understand what plagiarism is and must not engage in this behavior when completing assignments and tests in this course. The University of Florida Student Honor Code states that plagiarism includes but is not limited to:
- Quoting oral or written materials including but not limited to those found on the internet, whether published or unpublished, without proper attribution.
- Submitting a document or assignment that in whole or in part is identical or substantially identical to a document or assignment not authored by the student.

Student whose assignments/tests exhibit evidence of plagiarism will receive zeros for those assignments and tests for the first offense and will receive a warning. Students who continue to engage in this behavior after the warning will be reported to the UF Dean of Students Office.

PROHIBITED COLLABORATION OR CONSULTATION

Student found to be involved in sharing answers and/or collaborating on exams or assignments will receive zeros for those exams and assignments. Students who continue to engage in this behavior after the warning will be reported to the UF Dean of Students Office.

Online Faculty Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/ . Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Support Services

Accommodations for Students with Disabilities:
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting https://disability.ufl.edu/students/get-started/ . It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.

- You Matter We Care website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.

- If you live in Gainesville or the immediate surrounding areas, the Student Health Care Center at UF Health is a satellite clinic of the main Student Health Care Center that is located on Fletcher Drive on campus is available to you. Student Health at UF Health offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/

- If you live in Gainesville or the immediate surrounding areas, the UF Health Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32698, ufhealth.org/emergency-room-trauma-center.

- University Police Department: Visit police.ufl.edu/ or call 352-392-1111 (or 9-1-1 for emergencies).

- Crisis intervention is always available 24/7 from:

  Alachua County Crisis Center:
  (352) 264-6789
  http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx
  Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services career.ufl.edu/.

Library Support: cms.uflib.ufl.edu/ ask various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall 352-392-2010 or to make an appointment 352 392-6420. General study skills and tutoring. teachingcenter.ufl.edu/

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. writing.ufl.edu/writing-studio/

Student Complaints On-Campus: sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

On-Line Students Complaints: distance.ufl.edu/student-complaint-process

Course|New for request 20131

Info

Request: PHA 6XXX Drug Development Strategies
Description of request: Request for approval and assigned course number to course "Drug Development Strategies" for the MS in Pharmaceutical Chemistry.
Submitter: Meghan Lopez meghanlopez@ufl.edu
Created: 7/15/2024 3:16:39 PM
Form version: 1

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

Response:
PHA

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

Response:
6

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

Response:
XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

Response:
None

Category of Instruction
*Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment. *

Response:

Intermediate

• *1000 level = Introductory undergraduate*
• *2000 level = Introductory undergraduate*
• *3000 level = Intermediate undergraduate*
• *4000 level = Advanced undergraduate*
• *5000 level = Introductory graduate*
• *6000 level = Intermediate graduate*
• *7000 level = Advanced graduate*
• *4000/5000= Joint undergraduate/graduate*
• *4000/6000= Joint undergraduate/graduate*

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Drug Development Strategies

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Drug Development Strategies

Degree Type
Select the type of degree program for which this course is intended.

Response:
Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term

Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year

Select the requested year that the course will first be offered. See preceding item for further information.

Response:
Earliest Available

Rotating Topic

Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?

Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit

Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?

Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type

Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type

*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours

Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
3

Course Description

Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
Provides a strong conceptual foundation of the diverse molecular and cellular processes involved in cancer development and the multiple strategies to fight the disease. The focus will be on colon cancer development. Students will learn to analyze data from high throughput screenings of colon cancer patients, and acquire an understanding of how to use this information to plan and carry out a project in applied research and product development in the field of anti-cancer drug development.

Co-requisites

Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

> Response:
> N/A

Prerequisites
Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

> Response:
> PHA6432

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

> Response:
> This course has previously been offered as a PHA6935 special topics elective course in the Pharmaceutical Chemistry MS program. This request is to get course approved and assigned a course number.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

> Response:
> 1. Knowledge and understanding of eukaryotic cells, function of organelles, cell cycle regulation, DNA repair, signal transduction, protein modification and localization.
> 2. Knowledge and understanding of the molecular mechanisms that contribute to cancer development and can apply this knowledge for the design of cancer diagnostics and anti-cancer

drugs in case of colon cancer.

3. Understand the principle steps in analyzing high- throughput data obtained by –omics approaches

4. Analyze a limited number of high-throughput data.

5. Understand the principle and application of statistical hypotheses, hypothesis test, one- or two-tailed test, p-value, adjustment for multiple testing, is able to choose the appropriate statistical method (e.g. t-test, ANOVA, regression) to analyze data and to interpret Kaplan-Meier plots.

6. Able to choose one type of drug as an active pharmaceutical ingredient depending on the desired biological effect.

7. Able to design appropriate in vitro and in vivo assays to test the efficacy, selectivity and the toxicity of a drug.

8. Able to design and present strategies for applied research and product development and able to design experiments based on the required quality and quantity of the product or result.

9. Be aware of the rights derived from intellectual properties and understand the implications on the production of generics and biosimilars and of the requirements for entering clinical trials as well as market entry.

10. Able to translate his/her project plans in a concise business plan and present project plans and results, describing the key message of the project relevant for patenting, registration, and/or business development.

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Molecular Biology of the Cell
Authors: Bruce Alberts, Alexander Johnson, Julian Lewis, David Morgan, Martin Raff, Keith Roberts, Peter Walter
Publisher: Garland Science; 6th edition (2014); 4th edition is available online for free via PubMed:
http://www.ncbi.nlm.nih.gov/books/NBK21054/
ISBN: 978-0815344322

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
Weeks 1-4 - Module 1
The Cell Biology of Cancer

Weeks 5-8 - Module 2
Bioinformatics, Analysis and Statistics of High Throughput Analysis

Weeks 9-12 - Module 3
The Drug Discovery, Development, and Delivery Strategy

Weeks 13-15 - Module 4
Setting up your Business plan

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and

grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Module 1 - The basics of Cancer and understanding the molecular principles of colon cancer
Assignment 1 - 15 points (4%)
Assignment 2 - 15 ponits (4%)
Quiz 1 - 10 points (3%)
Criteria:
1. Knows the hallmarks of cancer.
2. Knows the molecular principles of the onset of colon cancer.
3. Knows cancer-critical genes and how their protein products contribute to cancer.
4. Understands and applies the definitions of (proto)oncogenes and tumor suppressor genes.

Module 2 - Analysis of High throughput data
Self-Test 1: 1 point (.3%)
Self-Test 2: 2 points (.6%)
Self-Test 3: 3 points (.9%)
Assignment 1: 100 points (29%)
Criteria:
1. Can identify gene/proteins for drug targets.
2. Can identify and analyze relevant data.
3. Can interpret and apply the appropriate statistics on data.

Module 3 - Drug Discovery, Development, and Delivery
Assignment 1: 20 points (6%)
Assignment 2: 80 points (23%)
Criteria:
1. Use at least 10 recent (majority published within the last 5 years) peer-reviewed research articles relevant to the subject are referenced.
2. Describes the molecular and cellular role of the target of the drug.
3. Make conclusions about the desired molecular properties of the drug.
4. Able to give a valid argumentation supported by the literature is given for choosing this drug and mode of delivery to the target tissue.
5. Design a strategy to develop/produce the anticancer drug.
6. Gives a structured and organized presentation.

Module 4 - Bio-business
Assignment 1: 100 points (29%)
1. Can express a bio-business vision.
2. Can describe aims, finances and the result of patent searches.
3. Can describe the expected future market development.
4. Can write a business plan.

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
Remko Bosch
Lecturer
Department of Applied Sciences, Life Science, Master of Molecular Science
HAN University of Applied Sciences, The Netherlands
E-mail: remko.bosch@han.nl

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

    Response:
Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

    Response:
Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

    Response:
Yes

Course Evaluation Policy
Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Response:
Yes

PHAXXX Drug Development Strategies

PHA6XXX Drug Development Strategies (3 Cr Hr.)
Location: Canvas, Asynchronous

Course Coordinator(s):
Oliver Grundmann
Assistant Dean For Lifelong Learning
Clinical Professor
(352) 273-8691
Department of Medicinal Chemistry
University of Florida College of Pharmacy
E-mail: grundmann@ufl.edu

Course Instructor:
Remko Bosch
Lecturer
Department of Applied Sciences, Life Science, Master of Molecular Science
HAN University of Applied Sciences, The Netherlands
E-mail: remko.bosch@han.nl

Office Hours: on request

Pre-Requisites:
Graduate students with a basic knowledge of organic chemistry, biochemistry, and physiology interested in pharmaceutical drug development and design. Successfully completed UF PHA6432 Fundamentals of Pharmaceutical Chemistry.

Co-Requisites:
None

Justification:
There is a wide range of drugs that enter the market, especially effective anticancer drugs are in high demand. Identification of important targets and the development of a potential hit becoming a marketable anticancer drug takes at least 10-12 years. The Drug Development Strategies course provides students a sound understanding of the hallmarks of cancer, the process of finding a potential hit using bioinformatics tools, and the necessary drug development strategy needed before entering the clinical phase.

Course Objectives

Provides a strong conceptual foundation of the diverse molecular and cellular processes involved in cancer development and the multiple strategies to fight the disease. The focus will be on colon cancer development. Students will learn to analyze data from high throughput screenings of colon cancer patients, and acquire an

understanding of how to use this information to plan and carry out a project in applied research and product development in the field of anti-cancer drug development.

Course Objective	Educational Outcomes	Bloom's Taxonomy Category
1. Knowledge and understanding of eukaryotic cells, function of organelles, cell cycle regulation, DNA repair, signal transduction, protein modification and localization.	Understanding Cell biology	Knowledge (I), comprehension (II)
2. Knowledge and understanding of the molecular mechanisms that contribute to cancer development and can apply this knowledge for the design of cancer diagnostics and anti-cancer drugs in case of colon cancer.	Understanding Cell biology	Knowledge (I), comprehension (II)
3. Understand the principle steps in analyzing high- throughput data obtained by –omics approaches	Understanding Bioinformatics	Comprehension (II), application (III)
4. Analyze a limited number of high-throughput data.	Understanding data analysis	Comprehension (II), application (III), analysis (IV), evaluation (VI)
5. Understand the principle and application of statistical hypotheses, hypothesis test, one- or two- tailed test, p-value, adjustment for multiple testing, is able to choose the appropriate statistical method (e.g. t-test, ANOVA, regression) to analyze data and to interpret Kaplan-Meier plots.	Understanding data analysis	Comprehension (II), application (III), analysis (IV), evaluation (VI)
6. Able to choose one type of drug as an active pharmaceutical ingredient depending on the desired biological effect.	Drug Design, Drug Development	Comprehension (II), application (III),
7. Able to design appropriate in vitro and in vivo assays to test the efficacy, selectivity and the toxicity of a drug.	Critical Thinking, Decision Making, Assay Development	Comprehension (II), application (III), analysis (IV), evaluation (VI)
8. Able to design and present strategies for applied research and product development and able to design experiments based on the required quality and quantity of the product or result.	Critical Thinking, Decision Making, Assay Development, Presenting	Comprehension (II), application (III), analysis (IV), evaluation (VI)
9. Be aware of the rights derived from intellectual properties and understand the implications on the production of generics and biosimilars and of	Critical Thinking, Decision Making	Comprehension (II), application (III), analysis (IV)

the requirements for entering clinical trials as well as market entry.		
10. Able to translate his/her project plans in a concise business plan and present project plans and results, describing the key message of the project relevant for patenting, registration, and/or business development.	Critical Thinking, Decision Making, Presenting	Comprehension (II), application (III), analysis (IV), evaluation (VI)

Instructional Method

This course is part of the distance education program at the University of Florida. Instead of a traditional lecture format, the medium for communication between course instructors, teaching assistants and students will be via Canvas, a user-friendly web-based classroom management tool, that utilizes required readings, quizzes (in most courses), completion of written assignments, and participation in a discussion board. Students will independently complete assigned readings and complete online assignments and/or quizzes/projects to assess understanding of and provide their insight to the reading and coursework material. Throughout these learning activities, the instructor and teaching assistant(s) are available via email to assist with questions. There are not times at which the entire class meets at a specific time or zoom sessions (unless indicated by your instructor). Due to the nature and size of our program, individual zoom sessions or phone calls are not routinely utilized by our teaching staff.

Instructors and TAs are always available via the course messaging system and provide a quick turnaround time to messages.

Materials and Supply Fees

Please review the syllabus specific to this class for any required, recommended, or suggested reading materials.

Use UF VPN to access UF Libraries Resources when off-campus. **Please note that students enrolled in our partner universities will not have access to the UF library resources and you need to utilize the library through your home institution.**

The UF HSC library staff can assist you with questions or issues related to accessing online library materials. For assistance contact your College of Pharmacy librarian or visit the HSC Library Website at this URL:http://www.library.health.ufl.edu/

For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - ahc-dess@ufl.edu

Required Materials: Students must comply with the UF Computer and Software Requirement. Please see the website of your respective program for further information.

Course Materials and Technology

Recommended Textbooks and Software
Molecular Biology of the Cell
Authors: Bruce Alberts, Alexander Johnson, Julian Lewis, David Morgan, Martin Raff, Keith Roberts, Peter Walter
Publisher: Garland Science; 6th edition (2014); 4th edition is available online for free via PubMed:
http://www.ncbi.nlm.nih.gov/books/NBK21054/
ISBN: 978-0815344322

For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - ahc-dess@ufl.edu

Course Schedule

Timeline	Reading and Lecture Video Schedule	Assignments/Quizzes
Weeks 1-4 Module 1 *The Cell Biology of Cancer*	**Reading:** Molecular Biology of the Cell (4th edition) Chapters 1-5 (accessible through PubMed) **Lecture Videos:** Molecular Mechanisms in Colecteral Cancer Parts 1-4	Module 1 Assignment 1 Module 1 Assignment 2 Module 1 Quiz
Weeks 5-8 Module 2 *Bioinformatics, Analysis and Statistics of High Throughput Analysis*	**Reading:** Module 2 pages 1-7 **Lecture Videos:** Module 2 lectures 1-7	Module 2 Self-Test 1 Module 2 Self-Test 2 Module 2 Self-Test 3 Module 2 Assignment 1
Weeks 9-12 Module 3 *The Drug Discovery, Development, and Delivery Strategy*	**Reading:** Module 3 Pages 1-2 **Lecture Videos:** none	Module 3 Assignment 1 Module 3 Assignment 2
Weeks 13-15 Module 4 *Setting up your Business plan*	**Reading:** Module 2 pages 1-2 **Lecture Videos:** Module 2 lectures 1-3	Module 4 Assignment 1

Course Assignments

Assignments: Each module includes an assignment that has a due date posted on the Course Calendar. While we understand that our students have other work and personal commitments, we expect every effort to be made to meet these deadlines. If for some reason, because of extenuating circumstances beyond your control, you are unable to meet an assignment deadline, students should message the professor **PRIOR TO THE DATE THE ASSIGNMENT IS DUE** and explain the situation in advance. If no prior communication occurred, the instructor may deduct points for late submission at their discretion or as stated in the course overview and/or communicated via the discussion board. Being consistently late in submitting assignments disrupts the discussion of topics on the bulletin board and will therefore result in loss of marks for that assignment up to a full letter grade. If you message us, we will work with you around the deadline.
If you have outstanding assignments as we near the end of the semester, we will send you a follow up email as a reminder and to determine your plans for completion. If you do not respond to us before the final day of classes, you will be assigned a grade based on the completed assignments.

Getting started:
To get started, briefly introduce yourself via the bulletin board then go to the first module. Read through the course content and any required reading listed in the module introduction. Once you are familiar with the material, complete the assignment and quiz (where applicable). Do not hesitate to contact your teaching assistant (TA) or instructor at any time if you need guidance; if you are unsure about the focus of the assignment; if you have assignment questions or questions relating to the course content or quiz (where applicable). If you do not tell us you need help, we cannot help you.

Assignment	Criteria	Point value
Module 1 *The basics of Cancer and understanding the molecular principles of colon cancer.* Assignment 1 Assignment 2 Quiz 1 & quiz 1	• Knows the hallmarks of cancer. • Knows the molecular principles of the onset of colon cancer. • Knows cancer-critical genes and how their protein products contribute to cancer. • Understands and applies the definitions of (proto)oncogenes and tumor suppressor genes.	Assignment 1: 15 points (4%) Assignment 2: 15 points (4%) Quiz 1: 10 points (3%)
Module 2 *Analysis of High throughput data* Self-Test 1 Self-Test 2 Self-Test 3 Assignment 1	• Can identify gene/proteins for drug targets. • Can identify and analyze relevant data. • Can interpret and apply the appropriate statistics on data.	Self-Test 1: 1 point (.3%) Self-Test 2: 2 points (.6%) Self-Test 3: 3 points (.9%) Assignment 1: 100 points (29%)

Module 3 *Drug Discovery, Development, and Delivery* Assignment 1 Assignment 2	• Use at least 10 recent (majority published within the last 5 years) peer-reviewed research articles relevant to the subject are referenced. • Describes the molecular and cellular role of the target of the drug. • make conclusions about the desired molecular properties of the drug. • Able to give a valid argumentation supported by the literature is given for choosing this drug and mode of delivery to the target tissue. • Design a strategy to develop/produce the anticancer drug. • Gives a structured and organized presentation.	Assignment 1: 20 points (6%) Assignment 2: 80 points (23%)
Module 4 *Bio-business* Assignment 1	• Can express a bio-business vision. • Can describe aims, finances and the result of patent searches. • Can describe the expected future market development. • Can write a business plan.	Assignment 1: 100 points (29%)

Retaining Course Materials

As you go through the semester, keep copies of important emails, discussion bulletins and assignments you may use for revision as these will be purged from the course at the end of the semester. We recommend you make a copy of the course modules since this will be the only access you will get to these materials. We will not be able to provide you with copies of course content once the course is removed from your account. If this class is a core-class for your MS program (one that you will be tested on in the cumulative final exam given in special topics) it is especially important that you keep the notes for review later.

Academic Requirements and Grading

Grading Policy
For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at:https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Most courses do not have a midterm or final exam, although this course may incorporate one, so be sure to review the specific requirements for this class. Students are evaluated continuously throughout the semester

and graded according to their performance in the assignments and quizzes/exam (if quizzes/exam are present). All modules have a written assignment, and some classes have timed quizzes that must be completed by the assignment deadline for the corresponding module. **Please review the portion of this syllabus specific to this class (found on the homepage of your class within Canvas) to review the requirements of your class, as it may differ from the above.**

All written assignments must be completed in your own words. Cutting and pasting from the internet is not acceptable and may be plagiarism. Failure to complete an assignment in your own words may result in you receiving a score of zero for the written assignment. All assignments should be written in your own words and referenced appropriately. This class may have a Plagiarism module associated with it, and this module must be viewed prior to opening module 1.

For courses that have timed quizzes: if you lose your internet connection during your quiz and scores are not recorded simply email us and we can help you.
Assignments should be submitted using the assignment submission tool. If you have difficulty submitting an assignment, message your instructor and teaching assistant - we will work with you to troubleshoot the problem. Assignment feedback will also be provided via the assignment tool, so students should check back to the appropriate module to receive feedback and the assignment grade.

Always keep a copy of your course assignments in case you need to resend it. Also, you may want it for revision purposes later.

For Assignment deadlines - see the course calendar.
For other important dates, consult the UF Calendar of Critical Dates and http://www.registrar.ufl.edu

Evaluation of Grades
Students will be graded on written assignments and module quizzes (when included in the course). The final grade will be based on the student's cumulative number of points earned divided by the total number of available points. The resulting percentage will be converted to a letter grade based on the grading scale below this section. If a final exam is included for the class, that score will also be incorporated into your final grade.

Students will receive individual feedback on points lost on the assignments. The comments of the TA or professor can be viewed on the assignment submission page for the corresponding module. Assignments are not able to be resubmitted for a re-grade after receiving feedback; the feedback is given for learning purposes and not so that students can re-do and re-submit assignments.
Students can check their progress in the course by viewing their grade records via the course interface. Internationally registered student grades will be assigned as per the policies and procedures within your university.
<u>Note</u>: **For students enrolled through WSU, the overall percentage mark for the unit will be converted to a WSU grade in accordance with the information provided on the course WSU site**

Grades will be assigned as follows:

Grade	Percent	Dutch (55% or more is sufficient)	Grade Points
A	90% or Above	90% or Above	4.0
A-	88-89%	80 - 89%	3.76
B+	85-87%	72 - 79%	3.33
B	80-84%	67 - 71%	3.00
B-	78-79%	63 - 66%	2.76
C+	75-77%	59 - 62%	2.33
C	70-74%	55 - 58%	2.00
C-	68-69%	50 - 55 %	1.67
D+	65-67%	45 - 49%	1.33
D	60-64%	40 - 44%	1.00
D-	58-59%	35 - 39%	0.67
E	< 58%	< 35	0.00

Assignments: Each module includes an assignment that has a due date posted on the Course Calendar. While we understand that our students may have work and other personal commitments, we expect every effort to be made to meet these deadlines. If for some reason, because of extenuating circumstances beyond your control, you are unable to meet an assignment deadline, students should message the professor **PRIOR TO THE DATE THE ASSIGNMENT IS DUE** and explain the situation in advance; it is then at the discretion of the instructor as to if they will grant the extension with no penalty marks added. If you have an emergency where you cannot email the instructor prior to the deadline, you must contact the instructor as soon as you are able to explain your situation.

If no extension was requested or if the extension request is not granted, the instructor will deduct points as follows:

Amount of time past the deadline	Amount to be deducted for late submissions (in addition to grading point deductions)	Notes
12 am – 8 am (EST)	0.5 points	This deduction will incur if the assignment is past the posted deadline of 11:59 pm EST, regardless of the time zone in which you are located
1 day (from 8 am EST– 11:59 pm)	5% deduction	% deductions are a % of the total number of points for which the assignment is worth (for example, 5% of a 30-point assignment would be 1.5 points deducted.
2 days to 1 week late	10% deduction	
1 week to 2 weeks late	20% deduction	
2 weeks to 3 weeks late	30% deduction	
3 weeks to 4 weeks late	40% deduction	
4 weeks to 5 weeks late	50% deduction***	*** this is the maximum deduction regardless of when it is submitted, from 4 weeks past the due date to the last day for submissions in the semester.

Being consistently late in submitting assignments disrupts the course. If you have outstanding assignments as we near the end of the semester, we will send you a follow up email as a reminder and to determine your plans for completion. If you do not respond to us before the final day of classes, you will be assigned a grade based on the completed assignments.

Makeup Policy: Assignments submitted late may be accepted depending on circumstances (see UF official attendance policy above). Note that some assignments are time limited because there is release of an answer to all after the deadline. In this case, no late assignment can be accepted unless the absence is excused. Points may be deducted for consistently late submissions but we would be very keen to ensure we have a discussion with you to explore why the problem has arisen. Make up assignments are not usually given, but may be at the discretion of the course instructor after evaluation of the circumstances leading to the request.

Grade Changes: Grades will be changed only when a grading error has been made. If you think an error has been made, you should message the instructor or TA as soon as possible. Your entire assignment will then be re-graded if the instructor determines that an error has been made.

Incomplete grades: Under special circumstances, if a student is unable to finish a course before the end of the semester, we may be able to assign an incomplete grade. An incomplete grade is a non-punitive grade assigned at the discretion of the course instructor. In this course an incomplete grade may be assigned if a third or more of the course assignments have been completed and if the student has remained in communication with TA's and instructors throughout the course and has made an effort to request an incomplete grade. If an incomplete grade is assigned, outstanding assignments and quizzes must be completed by the end of the next semester that the course is offered. If the assignments are not completed in the next term that the course runs, you will be assigned a grade based on the completed assignments. If you are scheduled to graduate the term after this semester, you are not eligible for an incomplete. Please email your instructor for more information. Students in our partner universities are not eligible for an incomplete and should contact their home institution to see the options available to them.

Instructional Policies
This course is part of the distance education program at the University of Florida. Instead of traditional lecture format, the medium for communication between course instructors, teaching assistants and students will be via Canvas, a user-friendly web-based classroom management tool, by utilizing the course functions. There are not times at which the entire class meets at a specific time or zoom sessions (unless indicated by your instructor). Due to the nature and size of our program, individual zoom sessions or phone calls are not routinely utilized by our teaching staff. Instructors and TAs are always available via the course messaging system and provide a quick turnaround time to messages.

Policy Related to Required Course Participation
Students are expected to constructively join in discussions, with appropriate preparation; to post interesting and relevant information on the class discussion board when indicated, and to interact professionally and respectfully with their classmates. Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar. Students must not assume they will be automatically dropped if they fail to participate in the course learning activities.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Attendance: There is no formal process for taking attendance in this online course. This course is 100% asynchronous and there are no live meeting times. Once a topic module is released students can login and work on their course assignments, readings and quizzes as they require to meet the required assignment and quiz deadlines. However, students are expected to check the discussion boards and messaging system daily to make sure they keep up to date with any course or deadline changes, or instructor/TA direct messages.

Students are responsible for meeting all academic assignment due dates and objectives as defined by the instructor.   In general, acceptable reasons for not meeting objectives from class include illness, serious family emergencies, special curricular requirements, military obligation, severe weather conditions, religious holidays, and participation in official University activities.   Excused absences must be consistent with university policies in the Graduate Catalog and require appropriate documentation. Additional information can be found in Attendance Policies.

Class Participation: Students are expected to constructively join in discussions, with appropriate preparation; to post interesting and relevant information on the class discussion board when indicated, and to interact professionally and respectfully with their classmates.

Performance Expectations: Students are expected to produce quality work of a standard comparable to any graduate level didactic course. Discussion postings and discussions must be legible, constructive, and appropriate. Students will be expected to complete assignments that require the application of logic and reasoning skills and appropriate research when the answer may not be found in a book or the course notes. Students should expect to perform research outside of the material presented in the class (utilizing either e-journals or the internet) to assist them with completing assignments. If a text is required for this class, students are expected to have access to it for successful completion of assignments.

Dropping a Course: UF Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar (Consult the UF Calendar of Critical Dates at UF Calendar of Critical Dates). Students must not assume they will be automatically dropped if they fail to participate in the course learning activities. Deleting yourself from the course roster does not officially withdraw you from a course. Please email DESS at ahc-dess@ufl.edu if you wish to withdraw from your class.

Students from partner universities must contact their school to determine how/if they can drop a class.

Communication

Communication Guidelines: In all course communications including emails and treaded discussions, students are expected to follow Netiquette Guidelines. These guidelines promote an environment that encourages everyone to ask questions and learn from each other. Discussion board posts that are not respectful of other opinions discourage a positive learning environment. The following link provides these guidelines:
https://teach.ufl.edu/wp-content/uploads/2020/04/NetiquetteGuideforOnlineCourses.docx

Communication is a central part of all our courses. Please take advantage of the in-course email messaging system (Inbox) and Discussion board. You should message us with private questions and concerns as well as assignment questions and information; additionally, be sure to check the discussion board daily for class-wide updates and topic discussions. We want to provide all our students with the best opportunity to learn and are always available to answer your questions.

EMAIL

The course Inbox feature (found on the left-hand side of your screen when you log in), not the discussion board, should always be used to contact the faculty or teaching assistant if you have a problem of a personal nature. It is your responsibility to know who the instructor and/or teaching assistant(s) are for your class. **Do not choose the option of sending your email within the class to "all" instructors**, as there are staff members from our administrative team listed that cannot assist you with course questions (and are only listed there for administrative purposes).

If you are having technical problems with the course content (downloads, etc.) or you are unable to access your course interface, please contact us directly via the "Inbox" email, and do not spend hours trying to get something to work as this will only lead to frustration. We do not want any of you to be offline for any length of time. Contact us as soon as you can so we can check it out and help you. If you are having trouble with your access to your course and cannot access the inbox course messaging system, <u>please email your course instructor directly via regular email. In that email, make sure you give your name and the name of your course. External instructor email addresses are listed for each course separately on the homepage of the course.</u>

Please respond to all messages from your instructor or TA. We are usually contacting you because we want to help you.

DISCUSSION FORUM

The course Discussion board can be used to post content related questions and assignment materials when requested. Please do not use the discussion forum to ask specific questions about your current course assignments.

It is VERY important that you read all the discussion bulletins that have been posted. We will use this site to post important information relating to content or quiz changes, deadlines etc. Since postings can accumulate quickly, please login each day to stay on top of these postings or you may miss important information. Some instructors may also use the announcement feature, so be sure to read all announcements as well.

If, as part of an assignment you are asked to make a discussion posting, you do not need to submit the same assignment via the assignment submission tool.

Please be aware that as you read the discussions for this course that there may be sensitive topics covered that could be emotionally triggering. Please remember that our students are a diverse population and that your responses should be crafted with respect and consideration for all audiences. We are aware that some of these topics can be considered controversial and ask that your respond to the subject matter in a thoughtful manner. If you have any questions or concerns, please reach out to your course instructor or advisor.

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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**." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."** It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/, https://graduateschool.ufl.edu/. Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Plagiarism: Plagiarism includes any attempt to take credit for another person's work. This includes quoting directly from a book or web site without crediting the source. Sources should always be referenced or a link to the website added and, where direct quotes have been used, quotation marks must be placed around the quoted material. However, we expect more than simply cutting and pasting in a graduate level course. Students are expected to review, evaluate, and comment on material they research, rather than simply copying relevant material. Your work will be graded accordingly. Extensive quoting of literature, even if references are provided, is not considered your own work, and will hence incur point deductions up to assigning zero points.
Use of Chatbots and Artificial Intelligence (ChatGPT)
Please note that students are not permitted to submit work that has been written using chatbots unless specifically indicated by the course instructor.
"Submission of Academic Work Purchased or Obtained from an Outside Source. A student must not submit as their own work any academic work in any form that the student purchased or otherwise obtained from an outside source, including but not limited to: academic materials in any form prepared by a commercial or individual vendor of academic materials; a collection of research papers, tests, or academic materials maintained by a Student Organization or other entity or person, or any other sources of academic work."
Students who submit work, be it an entire paper or even parts of an assignment using Artificial Intelligence technology to formulate their answers will be considered as an honor code violation unless the course instructor specifically allows such uses. If an instructor determines that you have violated the honor code, an official student conduct report may be filed.

PHAXXX Drug Development Strategies

Online Faculty Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

In-Class Recoding Policy

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

SUPPORT SERVICES

Accommodations for Students with Disabilities
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.
- University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).
- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/
- Crisis intervention is always available 24/7 from:
  Alachua County Crisis Center: (352) 264-6789
  http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:

http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio*: 2215 Turlington Hall*, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints: View the Distance Learning Student Complaint Process.

Course|New for request 20226

Info

Request: PHA 6XXX Personal Genomics and Your Health
Description of request: Request for new Elective course, Personal Genomics and Your Health, for Clinical Pharmacogenomics and Precision Medicine program.
Submitter: Meghan Lopez meghanlopez@ufl.edu
Created: 8/2/2024 3:37:02 PM
Form version: 1

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

> Response:
> PHA

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

> Response:
> 6

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

> Response:
> XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

> Response:
> None

Category of Instruction
*Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment. *

> Response:

Intermediate

• *1000 level = Introductory undergraduate*
• *2000 level = Introductory undergraduate*
• *3000 level = Intermediate undergraduate*
• *4000 level = Advanced undergraduate*
• *5000 level = Introductory graduate*
• *6000 level = Intermediate graduate*
• *7000 level = Advanced graduate*
• *4000/5000= Joint undergraduate/graduate*
• *4000/6000= Joint undergraduate/graduate*

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Personal Genomics and Your Health

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Personal Genomics

Degree Type
Select the type of degree program for which this course is intended.

Response:
Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
Online

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term

Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Earliest Available

Effective Year

Select the requested year that the course will first be offered. See preceding item for further information.

Response:
2025

Rotating Topic

Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?

Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit

Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?

Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• *Regularly Scheduled [base hr]*
• *Thesis/Dissertation Supervision [1.0 headcount hr]*
• *Clinical Instruction [1.0 headcount hr]*
• *Directed Individual Studies [0.5 headcount hr]*
• *Supervision of Student Interns [0.8 headcount hr]*
• *Supervision of Teaching/Research [0.5 headcount hr]*
• *Supervision of Cooperative Education [0.8 headcount hr]*

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
3

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
Provide a comprehensive learning experience that mimics real-life situations involving the decision-making process of ordering pharmacogenetic testing, deciphering results, and applying them to inform pharmacotherapy choices. Students will incorporate their personal pharmacogenetic test outcomes into the diverse case studies provided.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
n/a

Prerequisites

Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
none

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum

Explain the rationale for offering the course and its place in the curriculum.

Response:
This course is a new elective offering for the Clinical Pharmacogenomics and Precision Medicine program, and provides practical and highly relevant training in pharmacogenomic testing decision making, analysis, and communication.

Course Objectives

Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
?   Identify which patients would benefit from pharmacogenomic testing
?   Demonstrate the major components in patient counseling pre and post pharmacogenomics testing
?   Evaluate laboratories pharmacogenomic testing offerings and identify laboratories that align with your patient population
?   Analyze and interpret an individual's pharmacogenomics test results to identify relevant pharmacogenomic variations in various clinical settings.
?   Demonstrate a comprehensive understanding of the pharmacogenomic result's impact on drug metabolism, drug response, and adverse reactions.

?   Apply pharmacogenomic knowledge to develop personalized pharmacotherapy recommendations using yours or a mock patient result.
?   Develop effective communication skills to explain the pharmacogenomic results to patients using appropriate patient-friendly language.
?   Demonstrate proficiency in pharmacogenomics through written case assignments, quizzes, and a practical examination.

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Assigned readings will be provided via the Canvas course

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
Week 1: Course Introduction
Week 2: PGx Testing: Benefits, limitations, and setting expectations
Week 3: Components of pre-test counseling and consent
Week 4: The importance of performing a medication reconciliation and history for pharmacogenomics
Week 5: Lab selection: How to select which lab is best for you
Week 6: Lab selection: prior authorization process and billing logistics
Week 7: Interpreting the patients pharmacogenomic results
Week 8: Counseling on pharmacogenomic results: health literacy and patient population consideration
Week 9: Clopidogrel and Statins
Week 10: Psychiatry Lecture
Week 11: Post-test counseling points
Week 12: SBAR: The art of conveying your recommendation
Week 13: Creating a consult note to aid in medical necessity
Week 14: Provider and patient engagement: How to keep the initial interest going
Week 15: Capstone Lecture
Week 16: Captsone Project

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Assessment Items - For Final Grade
Weekly Module Quizzes   35%
Assignments/Participation in Discussion Board   35%
Final Capstone Project Assignment 30%

Grading Cut-Offs
Percent   Grade   Grade Points
92.5 - 100.0   A   4.00
89.5 – 92.49   A-   3.67

86.5 – 89.49	B+	3.33
82.5 – 86.49	B	3.00
79.5 – 82.49	B-	2.67
76.5 – 79.49	C+	2.33
72.5 – 76.49	C	2.00
69.5 – 72.49	C-	1.67
66.5 – 69.49	D+	1.33
62.5 – 66.49	D	1.00
59.5 - 62.49	D-	0.67
< 59.50	E	0.00

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
Amanda Elchynski, PharmD, BCPS

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:
Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Response:
Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Response:
Yes

Course Evaluation Policy

Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

PHA 6XXX: Personal Genomics and Your Health (3 credit hours)
Spring 2025
Delivery Format: Online Course

Course Coordinator:
Amanda Elchynski, PharmD, BCPS
ElchynskiA@archildrens.org

Office Hours: Vary by week and available upon request

Pre-Requisites/Required Courses:
- PHA 6134 Foundations in Precision Medicine: Genomic Technologies (1 credit hour)
- GMS 6224 Foundations in Precision Medicine: Medical Molecular Genetics (1 credit hour)
- PHA 6138 Foundations in Precision Medicine: Genetic Epidemiology (1 credit hour)
- PHA 6120 Foundations of Precision Medicine: Pharmacogenomics (3 credit hours)
- PHA 6443 Case Studies in Clinical Pharmacogenomics (3 credit hours)
- PHA 6137 Clinical Pharmacogenomics Implementation (3 credit hours)

Co-Requisites:
None

PURPOSE and OUTCOME
Provide a comprehensive learning experience that mimics real-life situations involving the decision-making process of ordering pharmacogenetic testing, deciphering results, and applying them to inform pharmacotherapy choices. Students will incorporate their personal pharmacogenetic test outcomes into the diverse case studies provided.

Course Objectives
Upon completion of this course, the student will be able to:
- Identify which patients would benefit from pharmacogenomic testing
- Demonstrate the major components in patient counseling pre and post pharmacogenomics testing
- Evaluate laboratories pharmacogenomic testing offerings and identify laboratories that align with your patient population
- Analyze and interpret an individual's pharmacogenomics test results to identify relevant pharmacogenomic variations in various clinical settings.
- Demonstrate a comprehensive understanding of the pharmacogenomic result's impact on drug metabolism, drug response, and adverse reactions.
- Apply pharmacogenomic knowledge to develop personalized pharmacotherapy recommendations using yours or a mock patient result.
- Develop effective communication skills to explain the pharmacogenomic results to patients using appropriate patient-friendly language.
- Demonstrate proficiency in pharmacogenomics through written case assignments, quizzes, and a practical examination.

Instructional Methods
Students will learn from viewing recorded lectures, participating in discussion boards, quizzes and a partner project. The course duration is 16 weeks (see Course Schedule). For each week, students will independently view recorded lectures and complete required readings. Students will complete online assignments to assess understanding of and provide their insight to the reading and coursework materials. Students will complete a capstone project report (divided with several assignments) using an AI/ML method and final presentation. The instructors are available throughout the course to clarify information via discussion board postings.

Materials and Supply Fees
There is no required textbook.

Pharmacogenomic testing: as part of this course you can have your pharmacogenomic testing completed through the UF Center for Pharmacogenomics and Precision Medicine and use it as part of your course to help complete assignments. This is entirely optional, and if you choose not to complete this you will be assigned a mock patient result.

Process for obtaining your personal Pharmacogenomic profile:
- Must register for the course at least 2 weeks prior to the start of classes
- The UF Center for Pharmacogenomics and Precision Medicine will mail you a swab kit with instructions.
- Mail your swab sample back immediately – all samples for this class must be tested in a batch, so it is important that all swabs are received in a timely fashion so they can be processed!
- Your genetic profile will be emailed to you within 6 weeks for use in the class.
- Cost of $140 will be included in Materials and Supplies Fee included in your tuition

Course Materials and Technology
Canvas Learning Management System. For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - dess@ahc.ufl.edu

Required Textbooks and Software
- For each lecture, students will have access to handouts and other resources that are made available on Canvas. If any textbooks are required, students are not required to purchase textbooks, as they are available online or through the UF library.
- Journal articles, class notes developed by the instructor, or other required reading/resources will be provided to students through the course website.
- Video Camera and Zoom will be required to record counseling interviews to be uploaded into Canvas.

Week/Date	Activity/Instructors/Assessment	
Week 1	*Introduction to course and PGx Results*	
08/23/23-08/29/23	**Lecture**	Course Introduction • Dr. Amanda Elchynski
	Discussion Board	Introduce yourself to the class • Introduce your education background, why you are taking the course, and what your plans are after taking the course
	Lecture	Overview of patient care process: identification, interpretation, and application
	Readings	Pasternak AL, Ward KM, Ateya MB, Choe HM, Thompson AN, Clark JS, Ellingrod V. Establishment of a Pharmacogenetics Service Focused on Optimizing Existing Pharmacogenetic Testing at a Large Academic Health Center. J Pers Med. 2020 Oct 3;10(4):154. doi: 10.3390/jpm10040154. PMID: 33023029; PMCID: PMC7711716.
Week 2	*Pre-test patient care: patient identification*	
08/30/23-09/05/23	**Lecture**	PGx Testing: Benefits, limitations, and setting expectations • Lecturer TBD
	Assignment	Patient Identification *Description: Review 2-3 patient cases to identify which patients would be ideal to undergo testing and why.*
	Readings	● TBD
	Quiz 1	Week 1 and Week 2 (5-10 questions)
Week 3	*Pre-test patient care: patient counseling*	
09/06/23-09/12/23	**Lecture**	Components of pre-test counseling and consent (include state-specifics) • Dr. Maddie Norris
	Readings	● TBD
	Assignment	Pre-test patient counseling *Description: The students will be given 2-3 patient scenarios and identify unique pre-test counseling questions.*
Week 4	*Pre-test patient care: medication history*	
09/13/23-09/19/23	**Lecture**	The importance of performing a medication reconciliation and history for pharmacogenomics • Dr. Maddie Norris
	Assignment	Medication history *Description: The students will be given 2-3 patient scenarios and identify unique pre-test counseling questions surrounding the patients current medications and medication history*
	Readings	TBD
	Quiz 2	Week 3 and Week 4 (5 -10 questions)
Week 5	*PGx Lab testing part 1*	
09/20/23-09/26/23	**Lecture**	Lab selection: How to select which lab is best for you (topics include internal testing options, testing methodology, and outsourcing pgx testing) • Lecturer TBD
	Readings	• Tayeh MK, Gaedigk A, Goetz MP, et al. Clinical pharmacogenomic testing and reporting: A technical standard of the American College of Medical Genetics and Genomics (ACMG). Genet Med. 2022;24(4):759-768. doi:10.1016/j.gim.2021.12.009 • Pratt VM, Cavallari LH, Del Tredici AL, et al. Recommendations for Clinical CYP2D6 Genotyping Allele Selection: A Joint Consensus Recommendation of the Association for Molecular Pathology, College

		of American Pathologists, Dutch Pharmacogenetics Working Group of the Royal Dutch Pharmacists Association, and the European Society for Pharmacogenomics and Personalized Therapy. J Mol Diagn. 2021;23(9):1047-1064. doi:10.1016/j.jmoldx.2021.05.013
	Assignments	Selecting a PGx lab *Description: The students will be assigned patient cases 2-3 and possible lab options and students must select which lab, and explain why they selected it.*
Week 6		*PGx Lab Testing part 2*
	Lecture	Lab selection: prior authorization process and billing logistics • Lecturer TBD
	Lecture	Creating clinical medical necessity letters for pharmacogenomic testing • Lecturer TBD
	Readings	TBD
	Assignment	Letter of medical necessity *Description: Students will be assigned a gene-drug pair and will complete a medical necessity letter for insurance to help increase the odds of the test being covered by the health insurance*
	Quiz 3	Week 5 and week 6 (5-10 questions)
Week 7		*Post-test patient care*
09/27/23-10/03/23	**Lecture**	Interpreting the patients pharmacogenomic results • Lecturer TBD
	Lecture	Developing patient friendly materials • Lecturer TBD
	Assignment	Develop patient friendly handout *Description: Using your own pharmacogenomics results create a handout in patient friendly language describing the genetic results and relevant medications.*
	Readings	● TBD
Week 8		*PGx result interpretation and application*
10/04/23-10/10/23	**Lecture**	Counseling on pharmacogenomic results: health literacy and patient population consideration • Lecturer TBD
	Readings	● TBD
	Discussion Board	Patient population considerations *Description: Explain the different considerations you will need consider when counseling pediatrics all the way to adults. What are techniques you will need to employ to ensure comprehension?*
	Quiz 4	Week 7 and week 8 (5-10 Questions)
Week 9		*PGx result interpretation and application – disease state 1 (cardio)*
10/11/23-10/17/23	**Lecture**	Clopidogrel *Description: The students at this point would have already been introduced to clopidogrel and CYP2C19. This lecture will touch base on the gene-drug pair briefly, but this lecture will also describe additional considerations on when to consider alternative P2Y12 therapy, the use of PRU testing, and special populations (elderly, pediatrics)* • Lecturer TBD
	Lecture	Statins *Description: The students at this points should have already been introduced to statins and pharmacogenomics. This lecture will touch briefly on the gene-drug pair briefly, but this lecture will also describe hyperlipidemia and alternative agents.* • Lecturer TBD
	Assignment	Clinical Patient Cases

		Description: Using your own pharmacogenomics results provide a clinical interpretation SOAP note for a patient post-PCI.
	Readings	• Lee CR, Luzum JA, Sangkuhl K, et al. Clinical Pharmacogenetics Implementation Consortium Guideline for CYP2C19 Genotype and Clopidogrel Therapy: 2022 Update. Clin Pharmacol Ther. 2022;112(5):959-967. doi:10.1002/cpt.2526 • Cooper-DeHoff RM, Niemi M, Ramsey LB, et al. The Clinical Pharmacogenetics Implementation Consortium Guideline for SLCO1B1, ABCG2, and CYP2C9 genotypes and Statin-Associated Musculoskeletal Symptoms. Clin Pharmacol Ther. 2022;111(5):1007-1021. doi:10.1002/cpt.2557
Week 10	*PGx result interpretation and application – disease state 2 (psych)*	
10/18/23-10/24/23	**Lecture**	Psychiatry Lecture *Description: The students at this point should have already been introduced to psychotropic medications and pharmacogenomics. This lecture will briefly touch on the gene-drug pair but will discuss diagnosis and assessing the efficacy of the medication therapy. Discuss hard to treat psychiatric conditions and controversial genes. Include lectures from previous course as a review. Do not need new lecture.* • Lecturer: TBD
	Assignment	Patient Case – Psych *Description: Using your own pharmacogenomics results provide a clinical interpretation SOAP note for a patient with generalized depression in a pediatric patient and one in a geriatric patient.*
	Readings	● Bousman CA, Stevenson JM, Ramsey LB, et al. Clinical Pharmacogenetics Implementation Consortium (CPIC) Guideline for CYP2D6, CYP2C19, CYP2B6, SLC6A4, and HTR2A Genotypes and Serotonin Reuptake Inhibitor Antidepressants. Clin Pharmacol Ther. 2023;114(1):51-68. doi:10.1002/cpt.2903
Week 11	*Patient counseling*	
10/25/23-10/31/23	**Assignment**	Counsel patients from previous 2 weeks – a visit via zoom / recording *Description: In a zoom recording select one of the patient cases you completed and record yourself explaining the results in patient friendly language*
	Lecture	Post-test counseling points – video on how to complete the assignment • Lecturer TBD
	Readings	TBD
Week 12	*Provider interpretation*	
11/01/23-11/07/23	**Lecture**	SBAR: The art of conveying your recommendation Description: Will describe what the role of SBAR is in the healthcare setting and explain step by step on how to complete it. • Lecturer TBD
	Readings	TBD
	Assignment	Oral plan presentation *Description: In a zoom recording select another patient case not used in week 11 and describe your clinical recommendation to the ordering healthcare provider.*
	Assignment	DI question Description: A gene drug pair with low level of evidence is being requested by a healthcare provider. Complete a DI question describing the available evidence and if using the pharmacogneomic results obtained would be appropriate to provide a gene-drug recommendation.
Week 13	*Appealing drug denials*	

11/15/23-11/21/23	Lecture	Creating a consult note to aid in medical necessity *Description: Required components in consult note to aid with billing / reimbursement. Discuss Medicare requirements.* • Lecturer TBD
	Readings	● TBD
	Assignment	Drug Denial Letter *Description: Based on the pharamacogenomic results the patient's first line therapy is not ideal. The provider would like to switch them to a more expensive agent not metabolized by the gene. The insurance does not believe it is indicate. Write a letter to the insurance to help explain the gene-drug pair and why the alternative agent is more appropriate.*
Week 14		*Sustainability / provider education / keeping referrals up*
11/22/23-1128/23	Lecture	Provider and patient engagement: How to keep the initial interest going • Lecturer TBD
	Assignment	Create one handout for providers and one handout for patients describing the service
	Readings	Arwood MJ, Dietrich EA, Duong BQ, et al. Design and Early Implementation Successes and Challenges of a Pharmacogenetics Consult Clinic. *J Clin Med.* 2020;9(7):2274. Published 2020 Jul 17. doi:10.3390/jcm9072274
	Exam	All weeks (would drop this week but have till the end of the course to take it)
Week 15-16		*Final Capstone Project*
11/29/23-12/12/23	Assignment	Capstone project-Final project Video describing the final project will also be provided • Lecturer TBD *Description: This will require the student to use all of the lessons learned into one capstone project. The student will be given a mock scenario and they will use their own results to interpret and counsel the patient on the results. The student will also need to provide a SBAR to the prescribing providers. This project will require the use of Zoom.*

For technical support for this class, please contact the UF Help Desk at:
   Learning-support@ufl.eduget
● (352) 392-HELP - select option 2
● https://lss.at.ufl.edu/help.shtml

Attendance Policy, Class Expectations, and Make-Up Policy
This is an online course. Attendance means you are expected to complete the course learning activities so that you meet the established deadlines. Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar. Students must not assume they will be automatically dropped if they fail to participate in the course learning activities.

Students will be allowed to make-up quizzes, assignments, and discussion board activities for acceptable reasons as described in the Graduate Catalog. See: http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail me within 24 hours of the technical difficulty if you wish to request a make-up.

ACADEMIC REQUIREMENTS AND GRADING
Grading:
Evaluation Methods and How Grades are calculated.

[The Canvas© gradebook will be set-up using the percentages below to compute the grade.]

Assessment Item	Grade Percentage
Weekly Module Quizzes	35%
Assignments/Participation in Discussion Board	35%
Final Capstone Project Assignment	30%
Total	**100%**

Course Assignments:
Module Quizzes
Most weeks, students will be required to complete a brief quiz (Weeks 2,4,6,8). All quizzes include 5 to 10 multiple-choices questions. Any content covered in lectures or required readings may be included on the quiz. All quizzes will be open-material and will have a 30-minute time limit to complete.

Discussion Board and Assignments
Students will be required to complete Discussion Board and Assignments throughout the course. Students will be asked to answer a question based on the topics covered in that week's lecture and readings. Students should use primary literature to support their arguments and should interpret the information available to synthesize an opinion prior to posting their answer. Students will also be required to interact with each other's posts and provide thoughtful questions and re-interpretation of their classmates' opinions and analysis. A grading rubric is provided in **Appendix A**. Each individual assignment will have a grading rubric located in the assignment for the students to reference.

Capstone Project
In the final two weeks of the course, students will be assigned a patient case that will required them to apply everything they learned this semester. The Capstone Project will require the students to use multiple resources and tools to complete. See grading rubric in **Appendix B**.

Rounding of grades

Final grades in Canvas will be rounded to the 2nd decimal place. If the decimal is X.495 or higher, Canvas will round the grade to X.50. The above scale depicts this policy and grades are determined accordingly. Grade assignment is made using this policy and NO EXCEPTIONS will be made in situations where a student's grade is "close."

Grading Policy

Percent	Grade	Grade Points
92.5 - 100.0	A	4.00
89.5 – 92.49	A-	3.67
86.5 – 89.49	B+	3.33
82.5 – 86.49	B	3.00
79.5 – 82.49	B-	2.67
76.5 – 79.49	C+	2.33
72.5 – 76.49	C	2.00
69.5 – 72.49	C-	1.67
66.5 – 69.49	D+	1.33
62.5 – 66.49	D	1.00
59.5 - 62.49	D-	0.67
< 59.50	E	0.00

Letter grade to grade point conversions are fixed by UF and cannot be changed.

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG	S-U
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

More information on UF grading policy may be found at:
UF Graduate Catalog
Grades and Grading Policies

Policies
Policy Related to Quizzes, Assignment submissions, and Discussion Board Participation
Make-Up Policy: Students will be allowed to make-up quizzes, assignments, and discussion board activities for acceptable reasons as described in the Graduate Catalog. See:
http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail me within 24 hours of the technical difficulty if you wish to request a make-up.

Policy Related to Required Course Participation
This is an online course therefore, attendance means you are expected to complete the course learning activities so that you meet the established deadlines. Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar. Students must not assume they will be automatically dropped if they fail to participate in the course learning activities.

Policy Related to Late Assignments
Students are expected to submit assignments on time. If a student has an emergency, they must communicate with the instructor in a timely manner (more than one day prior to the deadline, if possible). It is at the

instructor's discretion to provide assignment extensions. For the final project, 10 points will be deducted for each day from the deadline.

Students Requiring Accommodations
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

University Honesty Policy
UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

Campus Resources:
Health and Wellness

> **U Matter, We Care:**
> If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.
>
> **Counseling and Wellness Center:** counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.
>
> **Sexual Assault Recovery Services (SARS)**
> Student Health Care Center, 392-1161.
>
> **University Police Department** at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

Academic Resources

> **E-learning technical support**, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.
>
> **Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling.

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints Campus

On-Line Students Complaints

Appendix A. Rubric for Assessing Student Participation in Discussion Board Activities Grade Determination

Total Points – 10 points = 100%, 9 points = 90%, 8 points = 80%, 7 points = 70%, 6 points = 60%, 5 points = 50%, 4 points = 40%, 3 points = 30%, 2 points = 20%, 1 point = 10%, 0 points = 0%

Proficiency Level	Below Expectations (0-6 Points)	Meets Expectations (7-8 Points)	Above Expectations (9-10 Points)
Content	Information is plagiarized or directly copied from reference material, or no reference material is used. No citations are referenced. Reflections are descriptive: a reiteration of what was presented by instructor or in the assigned readings. Serious misinterpretations or not interpretation of the information is evident.	Information is summarized and not a reiteration of information provided by the instructor or in readings. Some references are sometimes made to readings or experiences. Provides less than full citations for works referenced.	Cites multiple readings and prior experiences and explains how these references extend and refine insights. Provides full citations for works referenced.
Interpretation	Presents information without any interpretations. Reflection is shallow and egocentric.	Interpretations of information are clear but lack insight into application or meaning.	Interprets information in accurate and insightful ways.
Organization	Information is disorganized.	Most information is logically presented and well organized.	All information is logically presented and well organized.
Mechanics	Three or more grammatical, spelling or punctuation errors.	1-2 grammatical, spelling or punctuation errors.	No grammatical, spelling or punctuation errors.
Quality of Information	Comments are uninformative, lacking in appropriate terminology. Heavy reliance on opinion and personal taste, e.g., "I love it", "I hate it", "It's bad" etc.	Comments are sometimes constructive, with occasional signs of insight. Student does not use appropriate terminology; comments not always relevant to the discussion.	Comments always insightful and constructive; uses appropriate terminology. Comments balanced between general impressions, opinions and specific, thoughtful criticisms or contributions.

Appendix B. Rubric for Capstone Project

Students will be graded on the quality of information, interpretation, and organization of information presented. Students are expected to interpret information in an accurate and insightful way using logically presented and well-organized thought. Students should not plagiarize any content from published works or reuse video recordings previously submitted. Large sections of quoted text will also be considered unacceptable. Plagiarism will result in a 0 grade for the capstone assignment. Please be sure to cite sources throughout the report.

Total Points – 100 points = 100%, 90 points = 90%, 80 points = 80%, 70 points = 70%, 60 points = 60%, 50 points = 50%, 40 points = 40%, 30 points = 30%, 20 points = 20%, 10 point = 10%, 0 points = 0%

Rubric for Written Capstone Assignment			
	Proficiency Level		
Domain	**Below Expectations (0-60)**	**Meets Expectations (61-79)**	**Above Expectations (80-100)**
Quality of Information	Information is plagiarized or directly copied from reference material, or no reference material is used. No citations are referenced. Reflections are descriptive: a reiteration of what was presented by instructor or in pre-readings read. Serious misinterpretations or not interpretation of the information is evident. Video recordings provided were previously submitted during the course.	Information is summarized and not a reiteration of information provided by the instructor or in readings. Some references are sometimes made to readings or experiences. Provides less than full citations for works referenced. Recorded information is clear, but information presented not at an appropriate health literacy level.	Cites multiple readings and prior experiences and explains how these references extend and refine insights. Provides full citations for works referenced. Recorded information is clear and concise, and at the appropriate health literacy level.
Interpretation	Presents information without any interpretations. Reflection is shallow and egocentric.	Interpretations of information are clear, but lack insight into application or meaning	Interprets information in accurate and insightful ways.
Organization	Information is disorganized.	Most information is logically presented and well organized.	All information is logically presented and well organized.
Mechanics	Three or more grammatical, spelling or punctuation errors.	1-2 grammatical, spelling or punctuation errors.	No grammatical, spelling or punctuation errors.

Course|New for request 20140

Info

Request: PHC 6XXX Artificial Intelligence in Environmental and Global Health
Description of request: Request to create a new course.
Submitter: April Oneal apriloneal3@ufl.edu
Created: 7/19/2024 9:03:59 AM
Form version: 1

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

    Response:
    PHC

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

    Response:
    6

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

    Response:
    XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

    Response:
    None

Category of Instruction
*Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment. *

    Response:
    Intermediate

- *1000 level = Introductory undergraduate*
- *2000 level = Introductory undergraduate*
- *3000 level = Intermediate undergraduate*
- *4000 level = Advanced undergraduate*
- *5000 level = Introductory graduate*
- *6000 level = Intermediate graduate*
- *7000 level = Advanced graduate*
- *4000/5000= Joint undergraduate/graduate*
- *4000/6000= Joint undergraduate/graduate*

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Artificial Intelligence in Environmental and Global Health

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
AI in Env. and Global Health

Degree Type
Select the type of degree program for which this course is intended.

Response:
Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
On-Campus

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term
Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the

department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Spring

Effective Year
Select the requested year that the course will first be offered. See preceding item for further information.

Response:
2025

Rotating Topic
Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?
Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit
Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?
Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type
Select the best option to describe course contact type. This selection determines whether base hours or

headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type
*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Lecture

Weekly Contact Hours
Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
3

Course Description
Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
This course will discuss fundamental principles, methodology and applications of machine learning and artificial intelligence approaches in environmental and global health, including physiologically based pharmacokinetic (PBPK) modeling, quantitative structure-activity relationship (QSAR) modeling for toxicity prediction, air pollution, water pollution, human biomonitoring, infectious disease, antimicrobial resistance, and big data.

Co-requisites
Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
N/A

Prerequisites

Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
PHC 6304 Environmental Toxicology Applications in Public Health or with permission from the instructor

Completing Prerequisites:

• *Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.*
• *Use parentheses to specify groupings in multiple requirements.*
• *Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.*
• *Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).*
• *"Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.*
• *If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)*

*Example: *
<ol>
• *Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.*
• *Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
This course will allow eventually be placed in all graduate curriculums (MHS and PhD) for the department of environmental and global health. With the emergence of AI and machine learning in environmental and global health research we feel that all students in our programs should receive instruction in this area.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
1. Describe different environmental and global health research topics that can be studied with machine learning and artificial intelligence approaches.
2. Compare and contrast different machine learning and artificial intelligence approaches in studying a specific environmental and global health research question and identify an optimal approach.
3. Critically evaluate the strengths and limitations of studies that apply machine learning and artificial intelligence approaches to investigate environmental and global health research problems.
4. Design and conduct a study that uses appropriate machine learning, artificial intelligence, environmental and global health approaches to study the exposure, toxicokinetic, toxicity, risk, and impact of environmental chemicals on human health.

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Adedeji IC, Ahmadisharaf E, Sun Y. Predicting in-stream water quality constituents at the watershed scale using machine learning. J Contam Hydrol. 2022, 251:104078.
Carwile JL, Seshasayee SM, Ahrens KA, Hauser R, Driban JB, Rosen CJ, Gordon CM, Fleisch AF. Serum PFAS and Urinary Phthalate Biomarker Concentrations and Bone Mineral Density in 12-19 Year Olds: 2011-2016 NHANES. J Clin Endocrinol Metab. 2022, 107(8):e3343-e3352.
Chou WC, Chen Q, Yuan L, Cheng YH, He C, Monteiro-Riviere NA, Riviere JE, Lin Z. An artificial intelligence-assisted physiologically-based pharmacokinetic model to predict nanoparticle delivery to tumors in mice. J Control Release. 2023, 361:53-63.
Chou WC, Lin Z. Machine learning and artificial intelligence in physiologically based pharmacokinetic modeling. Toxicological Sciences. 2023, 191(1):1-14.
Ekins S. Computational Toxicology: Risk Assessment for Chemicals. 2nd Edition. Wiley Series on Technologies for the Pharmaceutical Industry Ser. 2018. Pages: 1-425.
Coker ES, Buralli R, Manrique AF, Kanai CM, Amegah AK, Gouveia N. Association between PM2.5 and respiratory hospitalization in Rio Branco, Brazil: Demonstrating the potential of low-cost air quality sensor for epidemiologic research. Environ Res. 2022, 214(Pt 1):113738.
Geron A. Hands-on machine learning with Scikit-Learn, Keras & TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems. Second Edition. 2019, 1-484
Lee ES, Kim JY, Yoon YH, Kim SB, Kahng H, Park J, Kim J, Lee M, Hwang H, Park SJ. 2022. A Machine Learning-Based Study of the Effects of Air Pollution and Weather in Respiratory Disease Patients Visiting Emergency Departments. Emergency Medicine International. 2022, 2022:4462018.
Lin Z, Chou WC. Machine learning and artificial intelligence in toxicological sciences. Toxicological Sciences. 2022, 189(1):7-19.
Nicolotti O. Computational Toxicology: Methods and Protocols. 1st Edition. Springer Nature. 2018. Pages: 1-587.
OECD (2014), Guidance Document on the Validation of (Quantitative) Structure-Activity Relationship [(Q)SAR] Models, OECD Series on Testing and Assessment, No. 69, OECD Publishing, Paris, https://doi.org/10.1787/9789264085442-en.
Prosperi M, Boucher C, Bian J, Marini S. Assessing putative bias in prediction of anti-microbial resistance from real-world genotyping data under explicit causal assumptions. Artif Intell Med. 2022, 130:102326.
Xu M, Yang H, Liu G, Tang Y, Li W. In silico prediction of chemical aquatic toxicity by multiple machine learning and deep learning approaches. J Appl Toxicol., 2022, 42(11):1766-1776.
Xu T, Ngan DK, Ye L, Xia M, Xie HQ, Zhao B, Simeonov A, Huang R. Predictive Models for Human Organ Toxicity Based on In Vitro Bioactivity Data and Chemical Structure. Chem Res Toxicol. 2020, 33(3):731-741.

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
Week Date(s) Topic(s) Readings
1 01/13/25-01/19/25 Overview and Introduction
• Course Overview and Expectations
• Introduction of Machine Learning and Artificial Intelligence in Environmental and Global Health
• Fundamental Concepts of Machine Learning and Artificial Intelligence
• Basic Python coding using Google Colab Lin and Chou (2022)
Chapter 1 in Geron (2019)
2 01/20/25-01/26/25 Intuitive Explanation with Minimal/Simple Math of Artificial Intelligence (AI) Methods – Part 1
• Commonly Used Machine Learning Approaches in Environmental and Global Health – Part 1

(Linear regression, Support
Vector Machine, and k-Nearest Neighbors)
• Basic Python Coding Exercise – Part 1
• Student Presentation Chapter 5 in Nicolotti (2018)
Chapter 5 in Geron (2019)
Chapter 1 in Ekins (2018) (optional)
3 01/27/25-02/02/25 Intuitive Explanation with Minimal/Simple Math of Artificial Intelligence (AI)
Methods – Part 2
• Commonly Used Machine Learning Approaches in Environmental and Global Health – Part 2
(Decision Tree, Random Forest,
Ensemble Learning, and Gradient Descent)
• Basic Python Coding Exercise - Part 2
• Student Presentation Chapter 5 in Nicolotti (2018)
Chapters 6 and 7 in Geron (2019)
4 02/03/25-02/09/25 Intuitive Explanation with Minimal/Simple Math of Artificial Intelligence (AI)
Methods – Part 3
• Commonly Used Machine Learning Approaches in Environmental and Global Health – Part 3
(Neural Network)
• End_to_End_Machine learning project_Part I Theory
• End_to_End_Machine_learning project_Part I Lab Demo
• Student Presentation Chapters 10 and 11 in Geron (2019)
Chapter 2 in Geron (2019)
5 02/10/25-02/16/25 Quantitative Structure-Activity Relationship (QSAR)
• Molecular Descriptors for Quantitative Structure-Activity Relationship (QSAR) Modeling
• OECD Guidance on Validation of QSAR Models
• OECD QSAR Toolbox
• QSAR and REACH Requirements
• End_to_End_Machine learning project_Part II
• End_to_End_Machine learning project_Part II - Code_Demo
• Student Presentation Chapters 1 and 2 in Nicolotti (2018)
OECD (2014)
6 02/17/25-02/23/25 AI in Absorption, Distribution, Metabolism, and Excretion (ADME)
• Roles of Machine Learning and Artificial Intelligence for ADMET Profiling
• Build a Simple QSAR Model to Predict the Plasma Half-life of Chemicals
• Build a Simple QSAR Model to Predict Protein-Drug interaction
• Lab demo to build a QSAR model
• Student Presentation Chapter 8 in Ekins (2018)
7 02/24/25-03/02/25 AI in Physiologically Based Pharmacokinetic (PBPK) Modeling
• Roles of Machine Learning and Artificial Intelligence in PBPK Modeling
• Build an AI-based PBPK for nanoparticles
• Student Presentation Chou and Lin (2023)
Chou et al. (2023)
8 03/03/25-03/09/25 AI in Toxicity Prediction
• Roles of Machine Learning and Artificial Intelligence in the Prediction of Human Toxicity and
Aquatic Toxicity
• Build a QSAR Model to Predict Organ Toxicity
• Student Presentation Lin et al. (2022)
Xu et al. (2020)
Xu et al. (2022)
9 03/10/25-03/16/25 • Mid-Term Exam Part 1 (Friday 03/14/2025)
• No lectures this week
10 03/17/25-03/23/25 Spring Break (SOT Annual Meeting)
11 03/24/25-03/30/25 Mid-Term Exam Part 2 and Part 3 due at 11:59 pm Thursday 03/21/2025
AI in Air Pollution
• Roles of Machine Learning and Artificial Intelligence in Air Pollution (Guest Lecturer: Dr. Eric
Coker (to be confirmed for Spring
2025), British Columbia Centre for Disease Control)
• Build a Simple Machine Learning Model to Predict Air Pollution
• Student Presentation Coker et al. (2022)
12 03/31/25-04/06/25 AI in Health Outcome of Air Pollution
• Roles of Machine Learning and Artificial Intelligence in Predicting Health Outcomes of Air
Pollution

• Build a Simple Machine Learning Model to Predict Health Outcome of Air Pollution
• Student Presentation Lee et al. (2022)
13 04/07/25-04/13/25 AI in Water Pollution
• Roles of Machine Learning and Artificial Intelligence in Water Pollution (Guest Lecturer: Dr. Ebrahim Ahmadisharaf (to be
confirmed for Spring 2025), FAMU)
• Build a Simple Machine Learning Model to Predict Water Pollution
• Student Presentation Adedeji et al. (2022)
14 04/14/25-04/20/25 AI in Infectious Disease and Antimicrobial Resistance
• Roles of Machine Learning and Artificial Intelligence in Infectious Disease and Antimicrobial Resistance (Guest Lecturer: Dr.
Simone Marini (to be confirmed for Spring 2025), Department of Epidemiology, UF)
• Build a Simple Machine Learning Model to Predict Antimicrobial Resistance
• Roles of Machine Learning and Artificial Intelligence in Toxicogenomics
• Student Presentation Prosperi et al. (2022)
15 04/21/25-04/27/25 AI in Omics, Big Data, and Human Biomonitoring Studies
• Roles of Machine Learning and Artificial Intelligence in Omics and Big Data (Guest Lecturer: Dr. Sai Zhang (to be confirmed for
Spring 2025), Department of Epidemiology, UF)
• AI in Predicting Health Outcomes Based on Human Biomonitoring Data (NHANES)
• Build a Machine Learning Model to Predict Health Outcome based on Human Biomonitoring Data
• Student Presentation Carwile et al. (2022)
16 04/28/25-05/04/25 • Final Exam due at 11:59pm on Monday 04/28/25

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
Requirement Due date Points or % of final grade (% must sum to 100%)
Weekly Journal Reviews and Journal Presentations 11:59 pm EST every Thursday (the day before the journal presentation) except the first week, Spring break, and the midterm or final exam week 25%
Lab assignments 11:59 pm EST every Thursday (the day before the journal presentation) except the first week, Spring break, and the midterm or final exam week 25%
Mid-term Exam 11:59 pm EST on Friday of 03/21/2025 25%
Final Exam 11:59 pm EST on Monday of 04/28/2025 25%

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
Zhoumeng Lin

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• *Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:*

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:
Yes

Accomodations

Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Response:
Yes

UF Grading Policies for assigning Grade Points

Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Response:
Yes

Course Evaluation Policy

Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

University of Florida
College of Public Health & Health Professions Syllabus
PHC 6XXX: Artificial Intelligence in Environmental and Global Health (3 credit hours)
Semester: Spring 2025
Delivery Format: On-Campus
Location: CEHT Conference Room
Time: 9:35am to 12:30pm every Friday

Instructor Name: Zhoumeng Lin, BMed, PhD, DABT, CPH, ERT
Room Number: Room 119, CEHT Building 470
Phone Number: 352-273-5680
Email Address: linzhoumeng@ufl.edu
Office Hours: Friday, 2:00 pm to 3:00 pm
Teaching Assistant: to be named
Preferred Course Communications (e.g., email, office phone): Discussion Board on Canvas and Office hours (in-person and/or via Zoom)

Prerequisites: PHC 6304 Environmental Toxicology Applications in Public Health, PHC 6313 Environmental Health Concepts in Public Health, PHC 6326 Environment and One Health, or with permission from the instructor

PURPOSE AND OUTCOME

Course Overview
This course will discuss fundamental principles, methodology and applications of machine learning and artificial intelligence approaches in environmental and global health, including physiologically based pharmacokinetic (PBPK) modeling, quantitative structure-activity relationship (QSAR) modeling for toxicity prediction, air pollution, water pollution, human biomonitoring, infectious disease, antimicrobial resistance, and big data.

Relation to Program Outcomes
This course fits to the MS and PhD programs of study in environmental health, one health and toxicology because students will benefit from this course by learning quantitative modeling and analysis skills and advanced machine learning and artificial intelligence approaches to study the impact of environmental chemicals on human health, environmental health, and animal health. This course will also be beneficial to students in the graduate certificate program of "Artificial Intelligence in Public Health and Healthcare" because the course content is within the scope of this certificate program. This course is unique relative to other course offerings because the application of machine learning and artificial intelligence approaches in environmental and global health is an emerging field and has not been thoroughly discussed in existing courses.

Course Objectives and/or Goals
Upon successful completion of this course, students will be able to:

1. Describe different environmental and global health research topics that can be studied with machine learning and artificial intelligence approaches.
2. Compare and contrast different machine learning and artificial intelligence approaches in studying a specific environmental and global health research question and identify an optimal approach.
3. Critically evaluate the strengths and limitations of studies that apply machine learning and artificial intelligence approaches to investigate environmental and global health research problems.
4. Design and conduct a study that uses appropriate machine learning, artificial intelligence, environmental and global health approaches to study the exposure, toxicokinetic, toxicity, risk, and impact of environmental chemicals on human health.

Instructional Methods

This course is offered weekly, in-person. The instructional methods will include assigned readings, lectures, computational modeling and analysis demo using a recent publication as a case study, student presentations, class discussions, and assignments that include written critique and oral presentation formats.

1. Relevant reading materials will be assigned prior to the start of each week.
2. Each week there will be a lecture to introduce the principles of applying different machine learning and artificial intelligence approaches to different environmental and global health research questions.
3. There will also be a lecture to demo how to perform computational modeling and analysis to a case study or to reproduce the results of a recent publication.
4. Each week one student is assigned to present a selected recent publication, including the strengths, limitations, applications of machine learning and artificial intelligence approaches, as well as major findings. Other students will write paper critiques on the selected publication each week.
5. Each week the class will be concluded with class discussions to make sure all students are engaged and students' questions are answered by the end of the class.

DESCRIPTION OF COURSE CONTENT

Topical Outline/Course Schedule

Week	Date(s)	Topic(s)	Readings
1	01/13/25- 01/19/25	Overview and Introduction • Course Overview and Expectations • Introduction of Machine Learning and Artificial Intelligence in Environmental and Global Health • Fundamental Concepts of Machine Learning and Artificial Intelligence • Basic Python coding using Google Colab	Lin and Chou (2022) Chapter 1 in Geron (2019)

Week	Date(s)	Topic(s)	Readings
2	01/20/25-01/26/25	Intuitive Explanation with Minimal/Simple Math of Artificial Intelligence (AI) Methods – Part 1 • Commonly Used Machine Learning Approaches in Environmental and Global Health – Part 1 (Linear regression, Support Vector Machine, and k-Nearest Neighbors) • Basic Python Coding Exercise – Part 1 • Student Presentation	Chapter 5 in Nicolotti (2018) Chapter 5 in Geron (2019) Chapter 1 in Ekins (2018) (optional)
3	01/27/25-02/02/25	Intuitive Explanation with Minimal/Simple Math of Artificial Intelligence (AI) Methods – Part 2 • Commonly Used Machine Learning Approaches in Environmental and Global Health – Part 2 (Decision Tree, Random Forest, Ensemble Learning, and Gradient Descent) • Basic Python Coding Exercise - Part 2 • Student Presentation	Chapter 5 in Nicolotti (2018) Chapters 6 and 7 in Geron (2019)
4	02/03/25-02/09/25	Intuitive Explanation with Minimal/Simple Math of Artificial Intelligence (AI) Methods – Part 3 • Commonly Used Machine Learning Approaches in Environmental and Global Health – Part 3 (Neural Network) • End_to_End_Machine learning project_Part I Theory • End_to_End_Machine_learning project_Part I Lab Demo • Student Presentation	Chapters 10 and 11 in Geron (2019) Chapter 2 in Geron (2019)
5	02/10/25-02/16/25	Quantitative Structure-Activity Relationship (QSAR) • Molecular Descriptors for Quantitative Structure-Activity Relationship (QSAR) Modeling • OECD Guidance on Validation of QSAR Models • OECD QSAR Toolbox • QSAR and REACH Requirements • End_to_End_Machine learning project_Part II • End_to_End_Machine learning project_Part II - Code_Demo • Student Presentation	Chapters 1 and 2 in Nicolotti (2018) OECD (2014)

Week	Date(s)	Topic(s)	Readings
6	02/17/25-02/23/25	AI in Absorption, Distribution, Metabolism, and Excretion (ADME) • Roles of Machine Learning and Artificial Intelligence for ADMET Profiling • Build a Simple QSAR Model to Predict the Plasma Half-life of Chemicals • Build a Simple QSAR Model to Predict Protein-Drug interaction • Lab demo to build a QSAR model • Student Presentation	Chapter 8 in Ekins (2018)
7	02/24/25-03/02/25	AI in Physiologically Based Pharmacokinetic (PBPK) Modeling • Roles of Machine Learning and Artificial Intelligence in PBPK Modeling • Build an AI-based PBPK for nanoparticles • Student Presentation	Chou and Lin (2023) Chou et al. (2023)
8	03/03/25-03/09/25	AI in Toxicity Prediction • Roles of Machine Learning and Artificial Intelligence in the Prediction of Human Toxicity and Aquatic Toxicity • Build a QSAR Model to Predict Organ Toxicity • Student Presentation	Lin et al. (2022) Xu et al. (2020) Xu et al. (2022)
9	03/10/25-03/16/25	• Mid-Term Exam Part 1 (Friday 03/14/2025) • No lectures this week	
10	03/17/25-03/23/25	Spring Break (SOT Annual Meeting)	
11	03/24/25-03/30/25	Mid-Term Exam Part 2 and Part 3 due at 11:59 pm Thursday 03/21/2025 AI in Air Pollution • Roles of Machine Learning and Artificial Intelligence in Air Pollution (Guest Lecturer: Dr. Eric Coker (to be confirmed for Spring 2025), British Columbia Centre for Disease Control) • Build a Simple Machine Learning Model to Predict Air Pollution • Student Presentation	Coker et al. (2022)
12	03/31/25-04/06/25	AI in Health Outcome of Air Pollution • Roles of Machine Learning and Artificial Intelligence in Predicting Health Outcomes of Air Pollution • Build a Simple Machine Learning Model to Predict Health Outcome of Air Pollution • Student Presentation	Lee et al. (2022)

Week	Date(s)	Topic(s)	Readings
13	04/07/25-04/13/25	AI in Water Pollution • Roles of Machine Learning and Artificial Intelligence in Water Pollution (Guest Lecturer: Dr. Ebrahim Ahmadisharaf (to be confirmed for Spring 2025), FAMU) • Build a Simple Machine Learning Model to Predict Water Pollution • Student Presentation	Adedeji et al. (2022)
14	04/14/25-04/20/25	AI in Infectious Disease and Antimicrobial Resistance • Roles of Machine Learning and Artificial Intelligence in Infectious Disease and Antimicrobial Resistance (Guest Lecturer: Dr. Simone Marini (to be confirmed for Spring 2025), Department of Epidemiology, UF) • Build a Simple Machine Learning Model to Predict Antimicrobial Resistance • Roles of Machine Learning and Artificial Intelligence in Toxicogenomics • Student Presentation	Prosperi et al. (2022)
15	04/21/25-04/27/25	AI in Omics, Big Data, and Human Biomonitoring Studies • Roles of Machine Learning and Artificial Intelligence in Omics and Big Data (Guest Lecturer: Dr. Sai Zhang (to be confirmed for Spring 2025), Department of Epidemiology, UF) • AI in Predicting Health Outcomes Based on Human Biomonitoring Data (NHANES) • Build a Machine Learning Model to Predict Health Outcome based on Human Biomonitoring Data • Student Presentation	Carwile et al. (2022)
16	04/28/25-05/04/25	• Final Exam due at 11:59pm on Monday 04/28/25	

Course Materials and Technology

Note: all the following course materials will be freely available to students in CANVAS.

Adedeji IC, Ahmadisharaf E, Sun Y. Predicting in-stream water quality constituents at the watershed scale using machine learning. J Contam Hydrol. 2022, 251:104078.

Carwile JL, Seshasayee SM, Ahrens KA, Hauser R, Driban JB, Rosen CJ, Gordon CM, Fleisch AF. Serum PFAS and Urinary Phthalate Biomarker Concentrations and Bone Mineral Density in 12-19 Year Olds: 2011-2016 NHANES. J Clin Endocrinol Metab. 2022, 107(8):e3343-e3352.

Chou WC, Chen Q, Yuan L, Cheng YH, He C, Monteiro-Riviere NA, Riviere JE, Lin Z. An artificial intelligence-assisted physiologically-based pharmacokinetic model to predict nanoparticle delivery to tumors in mice. J Control Release. 2023, 361:53-63.

Chou WC, Lin Z. Machine learning and artificial intelligence in physiologically based pharmacokinetic modeling. Toxicological Sciences. 2023, 191(1):1-14.

Ekins S. Computational Toxicology: Risk Assessment for Chemicals. 2nd Edition. Wiley Series on Technologies for the Pharmaceutical Industry Ser. 2018. Pages: 1-425.

Coker ES, Buralli R, Manrique AF, Kanai CM, Amegah AK, Gouveia N. Association between PM2.5 and respiratory hospitalization in Rio Branco, Brazil: Demonstrating the potential of low-cost air quality sensor for epidemiologic research. Environ Res. 2022, 214(Pt 1):113738.

Geron A. Hands-on machine learning with Scikit-Learn, Keras & TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems. Second Edition. 2019, 1-484

Lee ES, Kim JY, Yoon YH, Kim SB, Kahng H, Park J, Kim J, Lee M, Hwang H, Park SJ. 2022. A Machine Learning-Based Study of the Effects of Air Pollution and Weather in Respiratory Disease Patients Visiting Emergency Departments. Emergency Medicine International. 2022, 2022:4462018.

Lin Z, Chou WC. Machine learning and artificial intelligence in toxicological sciences. Toxicological Sciences. 2022, 189(1):7-19.

Nicolotti O. Computational Toxicology: Methods and Protocols. 1st Edition. Springer Nature. 2018. Pages: 1-587.

OECD (2014), Guidance Document on the Validation of (Quantitative) Structure-Activity Relationship [(Q)SAR] Models, OECD Series on Testing and Assessment, No. 69, OECD Publishing, Paris, https://doi.org/10.1787/9789264085442-en.

Prosperi M, Boucher C, Bian J, Marini S. Assessing putative bias in prediction of anti-microbial resistance from real-world genotyping data under explicit causal assumptions. Artif Intell Med. 2022, 130:102326.

Xu M, Yang H, Liu G, Tang Y, Li W. In silico prediction of chemical aquatic toxicity by multiple machine learning and deep learning approaches. J Appl Toxicol., 2022, 42(11):1766-1776.

Xu T, Ngan DK, Ye L, Xia M, Xie HQ, Zhao B, Simeonov A, Huang R. Predictive Models for Human Organ Toxicity Based on In Vitro Bioactivity Data and Chemical Structure. Chem Res Toxicol. 2020, 33(3):731-741.

For technical support for this class, please contact the UF Help Desk at:
- helpdesk@ufl.edu
- (352) 392-HELP - select option 2
- https://helpdesk.ufl.edu/

Additional Academic Resources

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: <u>Visit the Student Honor Code and Student Conduct Code webpage for more information</u>.

On-Line Students Complaints: <u>View the Distance Learning Student Complaint Process</u>.

ACADEMIC REQUIREMENTS AND GRADING

Learning assessment methods: Students will be graded with the following learning assessment methods. All assignments should be submitted to Canvas by clicking the "Submit" button of each specific assignment.

1. **Weekly Journal Critiques and Journal Presentations (100 points, 25% of total points, due at 11:59 pm EST the day before the journal presentation)**: Except the first week and the Spring Break week and the midterm and final exam weeks, there will be one or two weekly student-led journal presentations depending on the number of students. The presenter(s) will be assigned by the instructors each week. The instructors will pick up the journal papers and inform students one week before the presentation date. The presenter(s) will submit a presentation PowerPoint file, and all other students need to submit a written critique before 11:59 pm EST the day before the journal presentation date. Each weekly journal review or presentation will account for 10 points. It is expected that each student will do journal presentations twice and write ~8 critiques throughout the semester. Each critique or presentation will be 10 points. A total of 100 points for this group of assignments.

2. **Lab Assignment (100 points, 25% of total points, due at 11:59 pm EST the day before the class meeting day)**: Except the first week and the Spring Break week and the midterm and final exam weeks, there will be a lab assignment each week. Basically, students will complete a computational modeling and analysis assignment, which will be based on the skills that they learned from the previous week's lab demo. Each lab assignment is 10 points. It is expected that there will be ~10 lab assignments, so a total of 100 points for this group of assignments. Note that students need to bring their laptops to the classroom every week, but students do not need to install any software program on their laptops. We will use Google Colab (an online programming environment) to complete the lab coding exercises.

3. **Mid-Term and Final Exams (100 points for the mid-term exam and 100 points for the final exam)**: The mid-term exam and final exam each will include three parts. Part 1 contains 30 multiple choice questions that are worth 30 points. Part 1 is to test students' understanding of the theoretical knowledge. Part 1 exam will take place in the classroom during regular class time and proctored by the instructor or TA. Part 2 is similar to a lab assignment, in which students are assigned a dataset and a question, and are required to complete a model to analyze the dataset. Part 2 has 20 points. Part 3 is to write a course paper that is 50 points. Part 3 requires a student to choose a relevant topic to write a review article on the application of machine learning and artificial intelligence approaches on a selected topic related to environmental and global health. In mid-term exam,

students need to decide the topic, complete the outline and the introduction section. In the final exam, students are required to complete the full draft of the course paper. The mid-term exam is due at 11:59 pm EST on Friday of 03/21/2025. The final exam is due at 11:59 pm EST on Monday of 04/28/2025.

Grading

Requirement	Due date	Points or % of final grade (% must sum to 100%)
Weekly Journal Reviews and Journal Presentations	11:59 pm EST every Thursday (the day before the journal presentation) except the first week, Spring break, and the midterm or final exam week	25%
Lab assignments	11:59 pm EST every Thursday (the day before the journal presentation) except the first week, Spring break, and the midterm or final exam week	25%
Mid-term Exam	11:59 pm EST on Friday of 03/21/2025	25%
Final Exam	11:59 pm EST on Monday of 04/28/2025	25%

Note: All grading rubrics, additional assignment instructions and requirements, will be posted on Canvas for each specific assignment. For example, for the 50 points of the Part 3 of the final exam, it will be graded by completeness (10 points), length (10 points), clarity (10 points), in-depth insight (10 points), and Turnitin similarity score (10 points).

Point system used (i.e., how do course points translate into letter grades).

Example:

Total Points Earned	Percentage Earned	Letter Grade
372-400	93-100	A
360-368	90-92	A-
348-356	87-89	B+
332-344	83-86	B
320-328	80-82	B-
308-316	77-79	C+
292-304	73-76	C
280-288	70-72	C-
268-276	67-69	D+
252-264	63-66	D
240-248	60-62	D-
<240	Below 60	E

Please be aware that a C- is not an acceptable grade for graduate students. The GPA for graduate students must be 3.0 based on 5000 level courses and above to graduate. A grade of C counts toward a graduate degree only if based on credits in courses numbered 5000 or higher that have been earned with a B+ or higher.

Letter Grade	Grade Points
A	4.0
A-	3.67
B+	3.33
B	3.0
B-	2.67
C+	2.33
C	2.0
C-	1.67
D+	1.33
D	1.0
D-	0.67
E	0.0
WF	0.0
I	0.0
NG	0.0
S-U	0.0

More information on UF grading policy may be found at:
http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades

Exam Policy: Part 1 exam will take place in the classroom during regular class time and proctored by the instructor or TA.

Policy Related to Late Assignment, Make up Exams or Other Work
Assignments turned into Canvas up to 24 hours late will be discounted by 10% of the total points of the assignment. For example, if an assignment is worth 10 points and the assignment is submitted 12 hours late, then the grade would be penalized by lowering the score by 1 point. Assignments turned in more than 24 hours late will not be graded and will contribute zero points toward your total points, unless arrangements have been made and approved in advance by the instructor. Missed assignments will contribute zero points toward your final points.

Special Circumstances. In the event of exceptional circumstances that may interfere with your ability to complete an assignment or meet a deadline, please contact the instructor as soon as possible before the deadline. Such special cases will be dealt on an individual basis, provided that you have sufficient documentation.

Please note: Any requests for make-ups due to technical issues MUST be accompanied by the UF Computing help desk (http://helpdesk.ufl.edu/) correspondence. You MUST e-mail me within 24 hours of the technical difficulty if you wish to request a make-up.

Policy Related to Required Class Attendance

Please note all faculty are bound by the UF policy for excused absences.

Excused absences must be consistent with university policies in the Graduate Catalog (https://catalog.ufl.edu/graduate/regulations/#text). Additional information can be found here: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior
You are expected to maintain a civil tone and respect the opinions of other students. While class discussion is encouraged, aggressive or patronizing tone and language are unacceptable and may result in the loss of your discussion privileges.

Communication Guidelines
You are encouraged to post questions related to course contents to the Discussion Board on Canvas. The instructors will check the Discussion Board daily and will try to answer questions within 24-48 hours. You are also encouraged to join the weekly office hour in-person or by Zoom to make sure your questions are answered in a timely manner. The office hour will be from 2:00 pm to 3:00 pm EST every Friday.

Academic Integrity
Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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**."

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

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

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/

http://gradschool.ufl.edu/students/introduction.html

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Recording Within the Course:
Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Policy Related to Guests Attending Class:
Only registered students are permitted to attend class. However, we recognize that students who are caretakers may face occasional unexpected challenges creating attendance barriers. Therefore, by exception, a department chair or his or her designee (e.g., instructors) may grant a student permission to bring a guest(s) for a total of two class sessions per semester. This is two sessions total across all courses. No further extensions will be granted. Please note that guests are **not** permitted to attend either cadaver or wet labs. Students are responsible for course material regardless of attendance. For additional information, please review the Classroom Guests of Students policy in its entirety. Link to full policy: http://facstaff.phhp.ufl.edu/services/resourceguide/getstarted.htm

Online Faculty Course Evaluation Process
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

SUPPORT SERVICES

Accommodations for Students with Disabilities
If you require classroom accommodation because of a disability, it is strongly recommended you register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class or as soon as you believe you might be eligible for accommodations. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please do this as soon as possible after you receive the letter. Students with disabilities should follow this procedure as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health
Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The **Counseling and Wellness Center** 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.

- **U Matter We Care** website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.

- The **Student Health Care Center** at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/

- Crisis intervention is always available 24/7 from: Alachua County Crisis Center: (352) 264-6789 http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

- **University Police Department**: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

- **UF Health Shands Emergency Room / Trauma Center:** For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Inclusive Learning Environment
Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and

culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. 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 as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: www.multicultural.ufl.edu

Info

Request: SYA 7XXX Sociological Application of Network Science
Description of request: Social network is one of the most important subfields of sociology. This course would give graduate students to enhance their theoretical backgrounds and analytic skills for their dissertation and future research.
Submitter: WonTak Joo wjoo@ufl.edu
Created: 8/15/2024 11:17:35 AM
Form version: 6

Responses

Recommended Prefix
Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, the State Common Numbering System (SCNS) may assign a different prefix.

    Response:
    SYA

Course Level
*Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.). *
* *

    Response:
    7

Course Number
Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.

    Response:
    XXX

Lab Code
Enter the lab code to indicate whether the course is lecture only (None), lab only (L), or a combined lecture and lab (C).

    Response:
    None

Category of Instruction
Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.
* *

    Response:

Advanced

• *1000 level = Introductory undergraduate*
• *2000 level = Introductory undergraduate*
• *3000 level = Intermediate undergraduate*
• *4000 level = Advanced undergraduate*
• *5000 level = Introductory graduate*
• *6000 level = Intermediate graduate*
• *7000 level = Advanced graduate*
• *4000/5000= Joint undergraduate/graduate*
• *4000/6000= Joint undergraduate/graduate*

*Joint undergraduate/graduate courses must be approved by the UCC and the Graduate Committee)

Course Title
*Enter the title of the course as it should appear in the Academic Catalog. There is a 100 character limit for course titles. *

Response:
Sociological Application of Network Science

Transcript Title
Enter the title that will appear in the transcript and the schedule of courses. Note that this must be limited to 30 characters (including spaces and punctuation).

Response:
Sociological App of Net Sci

Degree Type
Select the type of degree program for which this course is intended.

Response:
Graduate

Delivery Method(s)
Indicate all platforms through which the course is <i>currently</i> <i>planned</i> to be delivered.

Response:
On-Campus

Co-Listing
Will this course be jointly taught to undergraduate, graduate, and/or professional students?

Response:
No

Effective Term

Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.

Response:
Spring

Effective Year

Select the requested year that the course will first be offered. See preceding item for further information.

Response:
2025

Rotating Topic

Select "Yes" if the course can have rotating (varying) topics. These course titles can vary by topic in the Schedule of Courses.

Response:
No

Repeatable Credit?

Select "Yes" if the course may be repeated for credit. If the course will also have rotating topics, be sure to indicate this in the question above.

Response:
No

Amount of Credit

Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC. If you select "Variable" for the amount of credit, additional fields will appear in which to indicate the minimum and maximum number of total credits.

Response:
3

S/U Only?

Select "Yes" if all students should be graded as S/U in the course. Note that each course must be entered into the UF curriculum inventory as either letter-graded or S/U. A course may not have both options. However, letter-graded courses allow students to take the course S/U with instructor permission.

Response:
No

Contact Type

Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis.

Response:
Regularly Scheduled

• Regularly Scheduled [base hr]
• Thesis/Dissertation Supervision [1.0 headcount hr]
• Clinical Instruction [1.0 headcount hr]
• Directed Individual Studies [0.5 headcount hr]
• Supervision of Student Interns [0.8 headcount hr]
• Supervision of Teaching/Research [0.5 headcount hr]
• Supervision of Cooperative Education [0.8 headcount hr]

Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.

Course Type

*Please select the type of course being created. These categories are required by the Florida Board of Governors. *

Response:
Seminar

Weekly Contact Hours

Indicate the number of hours instructors will have contact with students each week <i>on average </i>throughout the duration of the course.

Response:
3

Course Description

Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 500 characters or less. See course description guidelines. Please do not start the description with "This course.."

Response:
Sociological theories of emergence, growth, and decay of social networks; social network mechanisms in explaining various social phenomena and socioeconomic outcomes; methods to collect, construct, and analyze social networks.

Co-requisites

Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system. If there are none please enter N/A.

Response:
N/A

Prerequisites

Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
Undergraduate courses level 3000 and above must have a prerequisite.
Please verify that any prerequisite courses listed are active courses.

Response:
N/A

Completing Prerequisites:

• Use "&" and "or" to conjoin multiple requirements; do not used commas, semicolons, etc.
• Use parentheses to specify groupings in multiple requirements.
• Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
• Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
• "Permission of department" is always an option so it should not be included in any prerequisite or co-requisite.
• If the course prerequisite should list a specific major and/or minor, please provide the plan code for that major/minor (e.g., undergraduate Chemistry major = CHY_BS, undergraduate Disabilities in Society minor = DIS_UMN)

*Example: *
<ol>
• Prereq published language: BSC 2010/2010L & BSC 2011/2011L & two additional Science or Math classes.
*• Prereq logic enforced for registration: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and (two additional Science or Math courses = any courses that are BSC 2### or greater, FAS2### or greater, BOT2### or greater, PCB2### or greater, BCH2### or greater, ZOO2### or greater, MCB 2### or greater, CHM 2### or greater, PHY 2### or greater, or STA 2### or greater).
*

Rationale and Placement in Curriculum
Explain the rationale for offering the course and its place in the curriculum.

Response:
To provide a course where students can learn social network theory and method, one of the most important subfields of sociology, and apply them to empirical cases where researchers have to deal with any type of relationship datasets. It gives an opportunity to graduate students who completed introductory courses to cultivate professional attitudes and skills for their concrete research topics.

Course Objectives
Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.

Response:
A student who successfully completes this course will be able to:
• Identify distinctive features of social network approach compared to individual-based approach
• Collect various types of relationship data and convert them to tie-list or matrix format
• Calculate network measures and find network subgroups using R packages

Course Textbook(s) and/or Other Assigned Reading
*Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned. Please provide specific examples to evaluate the course and identify required textbooks. *

Response:
Week 1:   No reading.
Week 2:   Marin, A., & Wellman, B. (2011). Social network analysis: An introduction. The SAGE handbook of social network analysis, 11-25. / Hanneman, R. A., & Riddle, M. (2011). A brief introduction to analyzing social network data. The Sage handbook of social network analysis, 331-339.
Week 3:   Freeman, L. C. (1978). Centrality in social networks: Conceptual clarification. Social networks, 1, 215-239. / Burris, V. (2004). The academic caste system: Prestige hierarchies in PhD exchange networks. American sociological review, 69(2), 239-264.
Week 4:   Coleman, J. S. (1988). Social capital in the creation of human capital. American journal of sociology, 94, S95-S120. / Granovetter, M. S. (1973). The strength of weak ties. American journal of sociology, 78(6), 1360-1380. / Stovel, K., & Shaw, L. (2012). Brokerage. Annual review of sociology, 38, 139-158. / Desmond, M. (2012). Disposable ties and the urban poor. American Journal of Sociology, 117(5), 1295-1335.
Week 5:   Barabási, A. L., & Albert, R. (1999). Emergence of scaling in random networks. science, 286(5439), 509-512. / Watts, D. J., & Strogatz, S. H. (1998). Collective dynamics of 'small-world'networks. nature, 393(6684), 440-442.
Week 6:   Bearman, P. S., Moody, J., & Stovel, K. (2004). Chains of affection: The structure of adolescent romantic and sexual networks. American journal of sociology, 110(1), 44-91. / Siegel, D. A. (2009). Social networks and collective action. American journal of political science, 53(1), 122-138.
Week 7:   Centola, D., & Macy, M. (2007). Complex contagions and the weakness of long ties. American journal of Sociology, 113(3), 702-734.
Week 8:   Moody, J., & White, D. R. (2003). Structural cohesion and embeddedness: A hierarchical concept of social groups. American sociological review, 103-127. / Burt, R. S. (1990). Detecting role equivalence. Social networks, 12(1), 83-97.
Week 9:   McPherson, M., Smith-Lovin, L., & Brashears, M. E. (2006). Social isolation in America: Changes in core discussion networks over two decades. American sociological review, 71(3), 353-375. / Cornwell, B., Laumann, E. O., & Schumm, L. P. (2008). The social connectedness of older adults: A national profile. American sociological review, 73(2), 185-203.
Week 10:   Smith, J. A., McPherson, M., & Smith-Lovin, L. (2014). Social distance in the United States: Sex, race, religion, age, and education homophily among confidants, 1985 to 2004. American Sociological Review, 79(3), 432-456. / Offer, S., & Fischer, C. S. (2018). Difficult people: Who is perceived to be demanding in personal networks and why are they there?. American sociological review, 83(1), 111-142.
Week 11:   Hurlbert, J. S., Haines, V. A., & Beggs, J. J. (2000). Core networks and tie activation: What kinds of routine networks allocate resources in nonroutine situations?. American Sociological Review, 598-618. / Levin, D. Z., Walter, J., & Murnighan, J. K. (2011). Dormant ties: The value of reconnecting. Organization Science, 22(4), 923-939.
Week 12:   Gould, R. V. (1991). Multiple networks and mobilization in the Paris Commune, 1871. American Sociological Review, 716-729. / Gondal, N. (2022). Multiplexity as a lens to investigate the cultural meanings of interpersonal ties. Social Networks, 68, 209-217.
Week 13:   Boutyline, A., & Vaisey, S. (2017). Belief network analysis: A relational approach to understanding the structure of attitudes. American journal of sociology, 122(5), 1371-1447. / DellaPosta, D. (2020). Pluralistic collapse: The "oil spill" model of mass opinion polarization. American Sociological Review, 85(3), 507-536.
Week 14:   Bearman, P. S., & Stovel, K. (2000). Becoming a Nazi: A model for narrative networks. Poetics, 27(2-3), 69-90. / Kozlowski, A. C., Taddy, M., & Evans, J. A. (2019). The geometry of culture: Analyzing the meanings of class through word embeddings. American Sociological Review, 84(5), 905-949.
Week 15:   No reading.

Weekly Schedule of Topics
Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.

Response:
Week1: Introduction
Week2: Type of network data
Week3: Centrality
Week4: Social closure & weak ties
Week5: Preferential attachment
Week6: Diffusion
Week7: Complex contagion
Week8: Subgroups
Week9: Personal networks
Week10: Foci & homophily
Week11: Network activation
Week12: Multiplexity
Week13: Belief network
Week14: Text network
Week15: Final presentation

Grading Scheme
List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity. Include details about the grading rubric and percentage breakdowns for determining grades. If participation and/or attendance are part of the students grade, please provide a rubric or details regarding how those items will be assessed.

Response:
•   Weekly response to papers (20%): =1-page response to the readings (one per week, not per article) / 12pt, single space / summary (several important things you learned from the readings) + questions + research ideas (especially related to your final paper)
•   Empirical research presentation (20%): pick one empirical research paper and present it as if you are an author of this paper / presentation should be focused on social network theory and method
•   Research proposal (20%): =2-page proposal including short theoretical background + data + analytic strategy (+ an extra page for the references) / you should explain what methods you choose and why they are suitable for your study of social networks
•   Final paper (40%): format follows your target journal / the paper includes theoretical background + data + analytic strategy + preliminary results + discussion + references

A   95-100
A- 91-94
B+ 87-90
B   84-86
B- 81-83
C+ 77-80
C   74-76
C- 71-73
D+ 67-70
D   64-66
D- 61-63
E   0-60

Instructor(s)
Enter the name of the planned instructor or instructors, or "to be determined" if instructors are not yet identified.

Response:
Won-tak Joo

Attendance & Make-up
Please confirm that you have read and understand the University of Florida Attendance policy.
A required statement statement related to class attendance, make-up exams and other work will be included in the syllabus and adhered to in the course. Courses may not have any policies which conflict with the University of Florida policy. The following statement may be used directly in the syllabus.

• *Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:*
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Response:
Yes

Accomodations
Please confirm that you have read and understand the University of Florida Accommodations policy.
A statement related to accommodations for students with disabilities will be included in the syllabus and adhered to in the course. The following statement may be used directly in the syllabus:

• *Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.*

Response:
Yes

UF Grading Policies for assigning Grade Points
Please confirm that you have read and understand the University of Florida Grading policies.
Information on current UF grading policies for assigning grade points is require to be included in the course syllabus. The following link may be used directly in the syllabus:

• *https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx*

Response:
Yes

Course Evaluation Policy
Course Evaluation Policy
Please confirm that you have read and understand the University of Florida Course Evaluation Policy.
A statement related to course evaluations will be included in the syllabus. The following statement may be used directly in the syllabus:

• *Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/public-results/. Students will be notified when the evaluation period opens, and can complete evaluations through the*

email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

* *

Response:
Yes

SYA7XXX Sociological Application of Network Science
Spring 2025

Location:
Time:
Course website:
Instructor: Won-tak Joo (3344 Turlington Hall / wjoo@ufl.edu)
Office hours:

COURSE DESCRIPTION

Social networks are the patterned structure of relationships among individuals and/or groups. Sociologists are interested in social forces beyond the individual, and social network analysis provides tools to understand why and how these macro-level forces operate through social interactions among agents at a more micro level. For example, the decision to wear a mask during COVID-19 cannot be fully explained by an individual's knowledge and experience of the pandemic. People are exposed to different environments regarding the risk of infection, access to healthcare services, circulation of information, and exchange of social support during the pandemic. This heterogeneity is largely determined by with whom you are interacting, and through what patterns you are linked to various social actors around yourself. The goal of this course is to learn theories and techniques to systematically understand these interpersonal and/or intergroup dynamics that make a societal-level change possible (e.g., a national increase in mask-wearing). Specifically, we are going to study 1) sociological theories of emergence, growth, and decay of social networks, 2) social network mechanisms in explaining various social phenomena and socioeconomic outcomes, 3) methods to collect and construct social network datasets, and 4) basic and advanced techniques to analyze social networks.

PREREQUISITES

Prior experience with R is recommended.

REQUIRED TEXTS

There is no textbook for this class. Required readings will be uploaded to the course website each week. You are expected to participate in class with your laptop where R is pre-installed. You can download R (https://cran.r-project.org/bin/windows/base/) and Rstudio (https://posit.co/download/rstudio-desktop/) from these websites for free. R is also available through UFApps (https://login.apps.ufl.edu/).

COMMUNICATION

All inquiries concerning the course should be sent to wjoo@ufl.edu. Emails must include SYA7XXX in the subject line. Please allow at least 24 hours during regular business hours (M-F, 9 AM – 5 PM) to respond to your email inquiries.

GRADING POLICY

- **Weekly response to papers (20%)**: one-page response to weakly readings (one per week, not per article) / 12pt, single space / summary (several important things you learned from the readings) + questions + research ideas (especially related to your final paper)
- **Empirical research presentation (20%)**: pick one empirical research paper and present it as if you are an author of this paper / your presentation is focused on the use of social network theory and method in the paper / lead the discussion about the paper

- **Research proposal (20%)**: ≤2-page proposal including short theoretical background + data + analytic strategy (+ one extra page for the references) / explain what methods you choose and why they are suitable for your study of social networks
- **Final paper (40%)**: format follows your target journal / the paper includes theoretical background + data + analytic strategy + preliminary results + discussion + references
- UF grading policies are at: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

COURSE POLICIES
- Any missed or late assignments will receive a score of 0 (zero) unless discussed in advance with the instructor.
- Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

EVALUATION POLICY
Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES
Students requesting accommodation for disabilities must first register at the Disability Resource Center (352-392-8565, https://https://disability.ufl.edu/). The Disability Resource Center will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT
Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/.

GRADING SCALE

A	95-100
A-	91-94
B+	87-90
B	84-86
B-	81-83
C+	77-80
C	74-76
C-	71-73
D+	67-70
D	64-66
D-	61-63
E	0-60

SCHEDULE

Week	Readings	Content	R
W1		Introduction	R installation Vector Matrix
W2	Marin, A., & Wellman, B. (2011). Social network analysis: An introduction. *The SAGE handbook of social network analysis*, 11-25. Hanneman, R. A., & Riddle, M. (2011). A brief introduction to analyzing social network data. *The Sage handbook of social network analysis*, 331-339.	Type of network data	data.table igraph
W3	Freeman, L. C. (1978). Centrality in social networks: Conceptual clarification. *Social networks*, *1*, 215-239. Burris, V. (2004). The academic caste system: Prestige hierarchies in PhD exchange networks. *American sociological review*, 69(2), 239-264.	Centrality	Centrality
W4	Coleman, J. S. (1988). Social capital in the creation of human capital. *American journal of sociology*, *94*, S95-S120. Granovetter, M. S. (1973). The strength of weak ties. *American journal of sociology*, *78*(6), 1360-1380. Stovel, K., & Shaw, L. (2012). Brokerage. *Annual review of sociology*, *38*, 139-158. Desmond, M. (2012). Disposable ties and the urban poor. *American Journal of Sociology*, *117*(5), 1295-1335.	Social closure & weak ties	Social closure Weak ties
W5	Barabási, A. L., & Albert, R. (1999). Emergence of scaling in random networks. *science*, *286*(5439), 509-512. Watts, D. J., & Strogatz, S. H. (1998). Collective dynamics of 'small-world'networks. *nature*, *393*(6684), 440-442.	Preferential attachment	Replication of Barabasi & Albert
W6	Bearman, P. S., Moody, J., & Stovel, K. (2004). Chains of affection: The structure of adolescent romantic and sexual networks. *American journal of sociology*, *110*(1), 44-91. Siegel, D. A. (2009). Social networks and collective action. *American journal of political science*, *53*(1), 122-138.	Diffusion	Replication of Strogatz & Watts
W7	Centola, D., & Macy, M. (2007). Complex contagions and the weakness of long ties. *American journal of Sociology*, *113*(3), 702-734.	Complex contagion	Replication of Centola & Macy
W8	Moody, J., & White, D. R. (2003). Structural cohesion and embeddedness: A hierarchical concept of social groups. *American sociological*	Subgroups	Clique Component K-core

	review, 103-127. Burt, R. S. (1990). Detecting role equivalence. *Social networks*, *12*(1), 83-97.		Community
W9	McPherson, M., Smith-Lovin, L., & Brashears, M. E. (2006). Social isolation in America: Changes in core discussion networks over two decades. *American sociological review*, *71*(3), 353-375. Cornwell, B., Laumann, E. O., & Schumm, L. P. (2008). The social connectedness of older adults: A national profile. *American sociological review*, *73*(2), 185-203.	Personal networks	Personal network analysis (GSS)
W10	Smith, J. A., McPherson, M., & Smith-Lovin, L. (2014). Social distance in the United States: Sex, race, religion, age, and education homophily among confidants, 1985 to 2004. *American Sociological Review*, *79*(3), 432-456. Offer, S., & Fischer, C. S. (2018). Difficult people: Who is perceived to be demanding in personal networks and why are they there?. *American sociological review*, *83*(1), 111-142.	Foci & homophily	Personal network analysis (GSS)
W11	Hurlbert, J. S., Haines, V. A., & Beggs, J. J. (2000). Core networks and tie activation: What kinds of routine networks allocate resources in nonroutine situations?. *American Sociological Review*, 598-618. Levin, D. Z., Walter, J., & Murnighan, J. K. (2011). Dormant ties: The value of reconnecting. *Organization Science*, *22*(4), 923-939.	Network activation	Personal network analysis (UCNets)
W12	Gould, R. V. (1991). Multiple networks and mobilization in the Paris Commune, 1871. *American Sociological Review*, 716-729. Gondal, N. (2022). Multiplexity as a lens to investigate the cultural meanings of interpersonal ties. *Social Networks*, *68*, 209-217.	Multiplexity	Personal network analysis (UCNets)
W13	Boutyline, A., & Vaisey, S. (2017). Belief network analysis: A relational approach to understanding the structure of attitudes. *American journal of sociology*, *122*(5), 1371-1447. DellaPosta, D. (2020). Pluralistic collapse: The "oil spill" model of mass opinion polarization. *American Sociological Review*, *85*(3), 507-536.	Belief network	Belief network (GSS)
W14	Bearman, P. S., & Stovel, K. (2000). Becoming a Nazi: A model for narrative networks. *Poetics*, *27*(2-3), 69-90. Kozlowski, A. C., Taddy, M., & Evans, J. A. (2019). The geometry of culture: Analyzing the	Text network	

	meanings of class through word embeddings. *American Sociological Review, 84*(5), 905-949.		
W15		Final presentation	