Graduate Curriculum Committee Minutes

September 11, 2025 Meeting Materials

Voting Conducted via Zoom

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.

There are no updates to present at this time.

III. Course Change Proposal(s): 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.

MED – General Medicine

1. GMS 6602 Radiological Anatomy
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21696

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

IV. 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 – Agricultural Education and Communication

1. AEC 5XXX Effectively Communicating Agricultural and Natural Resources Policy Issues Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20649

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

PHHP – Health Science

2. CLP 6XXXC Neuroimaging Applications and Analyses with Lab
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21692

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

3. CLP 7XXXC Cognitive and Clinical Approaches to Functional Neuroanatomy
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21686

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

COE – School of Human Development and Organizational Studies in Education

4. EDH 7XXX Designing Problems of Practice Research in Higher Education Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21461

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

ENG – Engineering

5. EGN 6XXX Practical Work in Artificial Intelligence Systems
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21120

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

6. EGN 6XXXL Practical Work in Applied Data Science
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21118

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

ENG – Civil and Coastal Engineering

7. EOC 6XXX Coastal Dynamics and Engineering Applications
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20985

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

8. EOC 6XXX Coastal Resilience and Engineering with Nature
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20987

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

HHP – Health Education and Behavior

9. HSC 6XXX Behavioral Economics and Health I

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21467

The proposal has been approved by the GCC.

10.HSC 6XXX Behavioral Economics and Health II

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21468

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

11.HSC 6XXX Foundations of Behavioral Economics

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21466

The proposal has been approved by the GCC.

JOU – Mass Communication

12.JOU 5XXX Multimedia Editing

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21572

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

13.JOU 5XXX Principles of Journalism

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21356

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

14.JOU 5XXX Reporting and Writing for Digital, Audio, and Video

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21357

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

15.JOU 5XXX Social Media for Journalists

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21573

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

CLAS – Latin American Studies

16.LAS 6XXX Social Movements and Gender: A View from Latin America Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20288

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

JOU - Mass Communication

17.MMC 6XXX Digital Content Creation and Strategy in Sports
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21353

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

18.MMC 6XXX Global Sports Media and Communication
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21163

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

19.MMC 6XXX Sports Media Analytics
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21354

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

20.MMC 6XXX Sports Media Innovation and Entrepreneurship
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21486

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

21.MMC 6XXX The Art of Podcasting
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21355

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

PHHP – Health Science

22.PHC 7XXX Child and Family Treatment in Clinical Psychology
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21685

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

23.PHC 7XXX Python Coding for Epidemiology

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21776

The proposal has been approved by the GCC.

V. Information Items:

- 1. <u>CLP 7428C</u> 18829 Change course title
- 2. GMS 6590 21667 Change course title
- 3. PHC 6931 21494 Transfer of course ownership

Graduate Curriculum Committee Agenda

October 9, 2025 Meeting Materials

Voting Conducted via Zoom

I. Presentation and review of the Minutes from the September 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.

MED – Health Outcomes and Biomedical Informatics

1. GMS 6846 Systematic Review and Meta-Analysis in Clinical, Health Services Research and Public Health

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/20696

GCC requested revisions to the submitted form, course description, course objectives, and schedule. The Committee requested that this proposal be re-reviewed once it has been revised.

III. Course Change Proposal(s): 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.

MED – Neuroscience

1. GMS 6705 Functional Human Neuroanatomy
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21703

This is a request to change the course title to "Functional Human Neuroanatomy I" and the credit hours from 4 to 3.

IV. 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 – Food and Resource Economics

1. AEB 6XXX Agribusiness Enterprise Development
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21876

Develop a business plan that addresses a specific problem or idea for a targeted market group in the agricultural or rural sector. The final project will be presented to a panel of agricultural and rural entrepreneurs for feedback and refinement. Materials for communicating with potential investors and bankers will be developed.

2. AEB 6XXX Agricultural and Rural Entrepreneurship
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21874

Introduces principles of agricultural and rural entrepreneurship, idea generation, business plans, market research, and challenges associated with business startups in the agricultural and rural sectors. Intended to be a combination of lectures and case studies.

COE – School of Special Education, School Psychology, and Early Childhood Studies

3. EEC 6973 Early Childhood Project in Lieu of Thesis
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21763

Provides students the opportunity to design and implement a comprehensive, self-directed project in early childhood studies related to problems of practice, policy, or other related fields, demonstrating expertise and scholarly rigor, under faculty guidance and mentorship.

ENG – Materials Science and Engineering

4. EMA 6XXX Al for Materials
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21017

Application of machine learning and data science methods for questions and datasets in materials science and engineering.

MED – Pathology, Immunology and Laboratory Medicine

5. GMS 6XXX Genomic Surveillance of Infectious Disease
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/18750

An overview of genomics and phylodynamics of infectious disease. The course will cover the theory and practical sessions focused on genomics of pathogens, icrobiome/metagenomics analyses for infectious disease, tree-building algorithms, natural selection, evolutionary models, molecular clocks, coalescence theory, and finally Bayesian phylogenetic analyses. Students will gain a fundamental understanding of the theory and practice of next generation sequencing, phylogenetics, and phylogeography.

MED – Neuroscience

6. GMS 6XXX Homeostasis and the Brain

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21724

Homeostasis is a fundamental concept in biology and neurobiology, and three of the most-studied themes are Thermoregulation, Body Fluid Balance (including drinking), and Energy Balance (including eating). Major strides have been made in the past few years in going from a description of the behavioral and physiological responses that underlie these mechanisms of homeostasis, to understanding the detailed brain mechanisms involved.

7. GMS 6XXX Neurobiology of Learning and Memory I Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21553

To understand how the brain learns and remembers requires an integration of psychological concepts and behavioral methods with mechanisms of synaptic plasticity and systems neuroscience. The Neurobiology of Learning and Memory, Third Edition, provides a synthesis of this interdisciplinary field. Each chapter makes the key concepts transparent and accessible to a reader with minimal background in either neurobiology or psychology and is extensively illustrated with fullcolor photographs and figu

8. GMS 6XXX Neurobiology of Learning and Memory II Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21554

To understand how the brain learns and remembers requires an integration of psychological concepts and behavioral methods with mechanisms of synaptic plasticity and systems neuroscience. The Neurobiology of Learning and Memory, Third Edition, provides a synthesis of this interdisciplinary field. Each chapter makes the key concepts transparent and accessible to a reader with minimal background in either neurobiology or psychology and is extensively illustrated with full-color photographs and figu

9. GMS 6XXX Neuroimaging II Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21786

Students with a keen interest in learning about the specific signal and contrast characteristics that allow for visualization of the nervous system will find a great deal of informative content in the Neuroimaging II course offering. During the course, students will learn what types of signals are used to produce neuroimages and how research scientists and clinicians manipulate the contrast characteristics of samples in order to highlight and visualize features of interest.

MED – Physiology and Aging

10.GMS 6XXX Nutrition, Metabolism, and Human Aging
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21691

Nutrition, Metabolism, and Human Aging" explores how diet and metabolism affect aging. The course covers changing nutritional needs, evidence-based strategies like caloric restriction and protein optimization, and emerging approaches such as nutraceuticals and microbiome modulation. Students will study the science and practical applications of nutrition to support healthy aging, disease prevention, cognitive health, and longevity.

MED – Neuroscience

11.GMS 6XXX Rigor and Experimental Design

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21552

This course has 2 intertwined modes of instruction. The course will start with several lectures on pitfalls in neuroscience research related statistics. Then, once per week a student will present a paper focusing on the methods, results, and interpretation of the data by the author. The student is expected to critique how effectively the author tested their hypothesis. Once per week there will be experimental designs from the textbook presented with practical examples of the advantages and disad

12.GMS 6706 Functional Human Neuroanatomy II

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21770

This semester online course is organized into six modules, each of which covers a key human neuroanatomical system in the forebrain. The primary focus of this course is mastery of human neuroanatomy and understanding how the various structures in the brain are connected to form functional neural systems. For all modules in this course, you will work through a new Focus Case Study. Each Focus Case Study describes a patient exhibiting symptoms characteristic of disruption of the neural system bein

CLAS – Latin American Studies

13.LAS 6XXX Reproduction and Reproductive Justice in the Americas
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21878

In this seminar, we examine the history of reproduction as a political and social phenomenon in the Americas, including North, South, and Central America as well as the Caribbean. We cover topics such as eugenics, reproduction under slavery, population control, reproductive rights activism, adoption, surrogacy, and reproductive technologies as a means of understanding how societies and governments regulate belonging, citizenship, physical and moral fitness, and gendered behaviors.

CALS – Microbiology and Cell Science

14.MCB 5XXX Clinical Mycology

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21764

The study of human pathogenic fungi, focusing on their identification, virulence factors, host interactions, and clinical significance. It reviews traditional and current lab techniques for pathogen isolation, identification, and susceptibility testing, along with integrating lab results with clinical observations to improve patient care.

15.MCB 5XXX Clinical Parasitology

Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21765

The study of human pathogenic parasites, focusing on their identification, virulence factors, host interactions, and clinical significance. It reviews traditional and current lab techniques for pathogen isolation, identification, and susceptibility testing, along with integrating lab results with clinical observations to improve patient care.

PHHP – Environmental and Global Health

16.PHC 6XXX Grant Writing and Evaluation in Multidisciplinary Sciences
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21911

Students engage in activities to cover grant funding mechanisms offered through multiple federal agencies germane to their respective fields of interest (e.g., NSF, USDA, NIH, EPA, Sea Grant). Students choose relevant funding opportunities and, throughout the course, develop all sections of a full proposal based on agency guidelines. Proposal products are evaluated through a series of student-led mock review panels.

VM – Large Animal Clinical Sciences

17.VME 6XXX Animal Reproduction and Population Health
Link to proposal: https://secure.aa.ufl.edu/Approval/reports/21510

This seminar series is a forum for UF graduate students and faculty to exchange information that can advance reproduction and population health in livestock and other animal populations.

v. Information Items:

- 1. <u>BCN 5729</u> 21662 Close course
- 2. BCN 5776 21661 Close course
- 3. BCN 5874 21663 Close course
- 4. BCN 5885 21664 Close course
- 5. BCN 5957 21660 Close course
- 6. BCN 6558C 21658 Close course
- 7. <u>BCN 6580</u> 21659 Close course

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8. <u>BCN 6586</u> – 21657 – Close course
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- 9. <u>EDA 6948</u> 21632 Change prerequisite
- 10. EDA 6971 21605 Change prerequisite
- 11. EDA 7945 21606 Change prerequisite
- 12. EDA 7979 21607 Change prerequisite
- 13. <u>EDA 7980</u> 21608 Change prerequisite
- 14. <u>EDF 6400</u> 21840 Change prerequisite
- 15. <u>EDF 6403</u> 21841 Change prerequisite
- 16. <u>EDF 6910</u> 21631 Change prerequisite
- 17. <u>EDF 6938</u> 21630 Change prerequisite
- 18. <u>EDF 6971</u> 21633 Change prerequisite
- 19. EDF 6973 21634 Change prerequisite
- 20. EDF 7979 21627 Change prerequisite
- 21. EDF 7980 21624 Change prerequisite
- 22. EDH 6051 21643 Change prerequisite
- 23. EDH 6935 21635 Change prerequisite
- 24. EDH 6947 21636 Change prerequisite and contact/course type
- 25. EDH 6973 21637 Change prerequisite and contact/course type
- 26. <u>EDH 7645</u> 21638 Change prerequisite
- 27. <u>EDH 7910</u> 21639 Change prerequisite
- 28. EDH 7916 21644 Change prerequisite
- 29. <u>EDH 7934</u> 21640 Change prerequisite
- 30. <u>EDH 7942</u> 21641 Change prerequisite
- 31. EDH 7948 21642 Change prerequisite
- 32. <u>EDH 7979</u> 21628 Change prerequisite
- 33. EDH 7980 21625 Change prerequisite
- 34. EME 6480 21722 Change prerequisite
- 35. FAS 6905 21277 Change maximum repeatable credit
- 36. FIN 6425 21758 Change course title
- 37. FIN 6427 21707 Change prerequisite
- 38. FIN 6429 21708 Change prerequisite
- 39. FIN 6438 21709 Change prerequisite
- 40. FIN 6465 21710 Change prerequisite
- 41. FIN 6496 21711 Change prerequisite
- 42. <u>FIN 6528</u> 21712 Change prerequisite
- 43. FIN 6537 21713 Change prerequisite
- 44. <u>FIN 6545</u> 21714 Change prerequisite
- 45. FIN 6575 21715 Change prerequisite
- 46. FIN 6638 21716 Change prerequisite
- 47. FIN 6728 21717 Change prerequisite
- 48. FIN 6936 21718 Change prerequisite
- 49. FNR 6905 21278 Change maximum repeatable credit
- 50. <u>GMS 6812</u> 21834 Change prerequisite
- 51. <u>GMS 6848</u> 21836 Change prerequisite
- 52. <u>GMS 6885</u> 21814 Change prerequisite

- 53. <u>ICM 5905</u> 21737 Close course
- 54. ICM 6420 21738 Close course
- 55. ICM 6440 21739 Close course
- 56. <u>ICM 6680</u> 21648 Close course
- 57. ICM 6682 21646 Close course
- 58. ICM 6684 21647 Close course
- 59. <u>ICM 6710</u> 21740 Close course
- 60. ICM 6716 21655 Close course
- 61. ICM 6750 21741 Close course
- 62. ICM 6761 21742 Close course
- 63. <u>ICM 6762</u> 21652 Close course
- 64. <u>ICM 6770</u> 21653 Close course
- 65. <u>ICM 6775</u> 21654 Close course
- 66. ICM 6905 21656 Close course
- 67. ICM 6934 21649 Close course
- 68. <u>ICM 6930</u> 21650 Close course
- 69. ICM 6910 21651 Close course
- 70. MHS 7979 21629 Change prerequisite
- 71. MHS 7980 21626 Change prerequisite
- 72. PHC 6971 21891 Change maximum repeatable credit
- 73. SPS 7931 21793 Change maximum repeatable credit
- 74. SUR 6905 21804 Change maximum repeatable credit

GMS 6846 Systematic Review and Meta-Analysis in Clinical, Health Services Research and Public Health (20696)

Please address the following concerns expressed by the Graduate Curriculum Committee after their complete review of this course modification 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 Submitted Form shows you did not select to update the course description, but there is updated text on the syllabus. You should update the form to include this change.
 - a) The current course description in the catalog is:

 Systematic overviews and meta-analysis techniques. Lectures and laboratory work. Develop and conduct a meta-analysis in small groups.
 - b) Ensure that the course description on the submitted form and syllabus match.
- 2) On the syllabus:
 - a) "Course Overview" should be "Course Description"
 - b) "Course Goals" should be changed to "Course Objectives"
- 3) Consider more diverse and precise verbs for objectives. The course goals are broad and not specific.
- 4) The course schedule is missing. Needs more precise specifications regarding weekly topics/modules and timeline. This should also include the readings and assignments in alignment with the schedule.

Course|Modify for request 20696

Info

Request: GMS 6846 - change from 2 to 3 credits

Description of request: This course was initially designed with a focus on meta-analysis but had not been offered for several years. When we resumed it in 2023, the new co-instructors decided to incorporate systematic review methods as these are essential for conducting meta-analyses. Additionally, systematic review is a robust analytic method on its own. To cover both methods thoroughly within a single semester, we require more class time each week due to the extensive hands-on instruction and in-class activities involved. In the prior offering (2 credit hours), we were only largely able to offer didactic instruction with only minimal practice, as the 2 credit hours did not allow for sufficient time for students to conduct their own review and meta-analysis, an important skill for graduate students to be able to do independently. Therefore, we propose increasing the course credit from 2 to 3 hours.

Submitter: Matthew Mitterko mmitterko@aa.ufl.edu

Created: 8/26/2025 9:05:38 AM

Form version: 2

Responses

Current Prefix GMS Course Level 6 Lab Code None Number 846

Course Title Systematic Review and Meta-Analysis in Clinical, Health Services Research and Public Health

Effective Term Spring Effective Year 2025

Requested Action Other (selecting this option opens additional form fields below)

Change Course Prefix? No

Change Course Level? No

Change Course Number? No

Change Lab Code? No

Change Course Title? No

Change Transcript Title? No

Change Credit Hours? Yes Current Credit Hours 2 Proposed Credit Hours 3 Change Variable Credit? No

Change S/U Only? No

Change Contact Type? No

Course Type Lecture

Change Rotating Topic Designation? No

Change Repeatable Credit? No

Multiple Offerings in a Single Semester No

Change Course Description? Yes

Current Course Description In this course, we will examine and practice the science and rigorous methodology of conducting a systematic review and meta-analysis, using the PRISMA guidelines. Systematic reviews and meta-analyses are considered to be among the highest levels of evidence quality and are important studies in their own right. Each of you will finish the course 1) as a critical consumer of systematic reviews and meta-analyses; and 2) equipped with the skills and experience necessary to produce your own systematic review and meta-analysis. The final product of the course will be your own systematic review and meta-analysis PROSPERO protocol with a timeline and plan for completion.

Proposed Course Description (500 characters max) In this course, we will examine and practice the science and methodology of conducting a systematic review and meta-analysis, using PRISMA guidelines. These two tools are considered to be among the highest levels of evidence quality and are important studies in their own right. Students will end the course: 1) as a critical consumer of systematic reviews and meta-analyses; and 2) equipped with the skills and experience necessary to produce your own systematic review and meta-analysis.

Change Course Objectives Yes

Current Course Objectives The course has two overlapping goals. For the first part, we will work on coming up with a research question, defining inclusion/exclusion criteria, conducting a systematic literature search, and coding the data. The second part of the course will involve learning different ways of synthesizing the data to conduct a systematic review or meta-analysis. These goals will be accomplished through reading chapters of the textbooks and reading and critiquing published systematic reviews and meta-analyses. The course will be very hands-on, resulting in you being able to develop your own systematic review and meta-analysis. You will work on producing your own PROSPERO protocol. Many students have taken their protocols and used them as a part of their dissertation.

Proposed Course Objectives The course has two overlapping goals. For the first part, we will work on developing with a research question for biomedical research, defining inclusion/exclusion criteria, conducting a systematic literature search, and coding the data. The second part of the course will involve learning different ways of synthesizing the data to conduct a systematic review or meta-analysis. These goals will be accomplished through reading chapters of the textbooks and reading and critiquing published systematic reviews and meta-analyses. The course will be very hands-on, resulting in you being able to develop your own systematic review and meta-analysis. You will work on producing your own PROSPERO protocol. Many students have taken their protocols and used them as a part of their dissertation.

Change Prerequisites? No

Change Co-requisites? No

Rationale This course was initially designed with a focus on meta-analysis but had not been offered for several years. When we resumed it in 2023, the new co-instructors decided to incorporate systematic review methods as these are essential for conducting meta-analyses. Additionally, systematic review is a robust analytic method on its own. To cover both methods thoroughly within a single semester, we require more class time each week due to the extensive hands-on instruction and in-class activities involved. In the prior offering (2 credit hours), we were only largely able to offer didactic instruction with only minimal practice, as the 2 credit hours did not allow for sufficient time for students to conduct their own review and meta-analysis, an important skill for graduate students to be able to do independently. Therefore, we propose increasing the course credit from 2 to 3 hours.

Systematic Review & Meta Analysis in Clinical, Health Services Research and Public Health

GMS 6846 Spring 2025 Tuesdays 1:55-3:55pm Malachowsky Hall 7126

Professors:

Megan Gregory, PhD

Associate Professor, Department of Health Outcomes and Biomedical Informatics College of Medicine
Malachowsky Hall 7017
megan.gregory@ufl.edu
Office hours by appointment

Easton Wollney, PhD

Research Assistant Professor, Department of Health Outcomes and Biomedical Informatics College of Medicine
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Office hours by appointment

COURSE DESCRIPTION

In this course, we will examine and practice the science and methodology of conducting a systematic review and meta-analysis, using PRISMA guidelines. These two tools are considered to be among the highest levels of evidence quality and are important studies in their own right. Students will end the course: 1) as a critical consumer of systematic reviews and meta-analyses; and 2) equipped with the skills and experience necessary to produce your own systematic review and meta-analysis.

COURSE OBJECTIVES

The course has two overlapping goals. For the first part, we will work on developing with a research question for biomedical research, defining inclusion/exclusion criteria, conducting a systematic literature search, and coding the data. The second part of the course will involve learning different ways of synthesizing the data to conduct a systematic review or meta-analysis. These goals will be accomplished through reading chapters of the textbooks and reading and critiquing published systematic reviews and meta-analyses. The course will be very

hands-on, resulting in you being able to develop your own systematic review and meta-analysis. You will work on producing your own PROSPERO protocol. Many students have taken their protocols and used them as a part of their dissertation.

ASSIGNMENTS AND WEIGHTING

Readings Discussion: 15% of final grade

Each week you will have class readings (chapters, papers, or published reviews/metas). We will discuss these in class, so we expect you to come to class having read these. In preparing for these discussions, be prepared to speak to three things: what you learned, what surprised you, and what questions you still have.

Worked Example: 35% of final grade

As part of the course, we will have in-class worked examples of the steps to conducting a systematic review and meta-analysis. You should bring a laptop to class each week to participate. You will follow along on your own computer and submit your work on Canvas each week, which you will be graded on.

Critique Presentations and Peer Review Write Up: 20% of final grade

Each of you will need to choose a "systematic review <u>and</u> meta-analysis" (i.e., one paper that presents both) to read, critique, and present to the class. You will do a presentation in class and submit a copy of the presentation via Canvas. You will also write up your peer review and submit it via Canvas.

Final Paper: 30% of final grade

As the final product of the class, each of you will write your own protocol for a systematic review, according to the structure on PROSPERO. Depending on the content of the review and when you are starting the review, you may also decide to post the review protocol on Prospero. As part of this process, you will each participate in a roundtable discussion to get feedback on your ideas and subsequently give a short presentation of your protocol to the class. We will share more specific details about the grading when the assignment is explained in class.

GRADING SCALE

A 93-100%

A- 90-92%

B+ 87-89%

B 83-86%

B- 80-82%

C+ 77-79%

C 73-76%

C- 70-72%

D+ 67-69%

D 63-66%

CLASS STRUCTURE

Generally, we will start each class period with a discussion of the assigned readings. Each week we will also engage in some sort of practical activity for our in-class worked example or work on our PROSPERO protocols. We've outlined the readings, activities, and tasks for each week below. However, the activities on the course schedule are subject to change as needed given the direction of the class.

COURSE MATERIALS

There are three books for our class readings:

Gough, Oliver & Thomas (2017). *An Introduction to Systematic Reviews, 2nd Edition. London: Sage.* This is abbreviated on the course schedule as "ISR."

Borenstein, Hedges, Higgins, & Rothstein (2021). *Introduction to meta*-analysis (2nd ed). Hoboken, NJ: Wiley. This is abbreviated on the course schedule as "IMA."

(Optional) Boland, Cherry and Dickson, Editors. (2017). *Doing a Systematic Review: A Student's Guide. London: Sage.* This is abbreviated on the course schedule as "DSR." As this is an optional text, all assignments for it in the course schedule are bracketed.

There will also be some additional readings posted on the course Canvas site.

OTHER INFORMATION

Attendance

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/UGRD/academic-regulations/attendance-policies/

This course is in person with limited support for virtual and hybrid options. Occasional exceptions may be made on a case-by-case basis in consultation with the instructors. Please contact the instructors at least one business day in advance of class (unless an emergency) if you have an extenuating circumstance that prohibits you from being able to attend class in person on a given date.

Accommodations

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.

Course Evaluations

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/.

Diversity and Inclusivity

We consider this classroom to be a place where you will be treated with respect, and we welcome individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, ability – and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming and inclusive environment for every other member of the class.

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 Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. If you have any questions or concerns, please consult with the instructors.

In-Class Recording 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 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.

Course Schedule (Subject to Change)

Week	In Class	Due (to be read BEFORE class)
l I I I I I	siass	[Brackets] indicate optional
		readings
1 – January	TOPIC: Intro to Class and Overview of	N/A
14	Systematic Reviews and Meta-Analyses	11/7
17	Systematic Neviews and Weta Analyses	
	Discuss your research questions and the study	
	designs used in your field	
	designs asea in your neta	
	Discuss Final PROSPERO Protocol Assignment	
	<u>Practical Session:</u> The Anatomy of a Systematic	
	Review (Peterson et al.) and Meta-Analysis	
	(Durand et al.)	
2 – January	TOPIC: Defining Research Question &	ISR Chapters 1-4
21	Inclusion/Exclusion Criteria	IMA Chapters 1-2, 45, 48
		[DSR Chapters 1-3]
	Readings Discussion	Page et al., 2021
		Thomas et al., 2017
	<u>Practical Session</u> : Discovering PROSPERO	[Wollney et al., 2023]
		[Ho et al., 2021]
	Worked Example 1: Developing the research	
	question, coming up with inclusion/exclusion	
	criteria	
3 – January	TOPIC: Developing a Search Strategy and	ISR 5 (to p. 119)
28	Conducting the Search	[DSR 4]
	Guest Speaker: UF Health Librarian Chloe	Tool: M&G Template 4 (search
	Hough	syntax)
		, ,
	Readings Discussion	
	Worked Example 2: Developing search terms,	
	using Boolean operators, choosing databases,	
	conducting the search	
L	1	

4 – February 4	TOPIC: Screening and selecting articles for inclusion Readings Discussion Practical Session: Covidence, PRISMA diagrams	ISR 5 (p. 119-122) [DSR 5] Bylund et al., 2022 Tools: M&G Template 2 (Search flow diagram)
	Worked Example 3: Abstract Coding in Covidence and Full-Text Screening in Covidence Presentation Assignment	(Joseph Grand)
5 –	TOPIC: Data extraction and coding study	ISR 6
February 11	details	[DSR 6]
	Reading Discussion	Tools: Covidence codesheets, Bylund example codesheets
	Worked example 4: Data Extraction for study information	
6 – February 18	TOPIC: Coding effect sizes for meta-analysis, converting among effect sizes	ISR 9 (pp. 211-223, 236-240, 241-242 on dependent effect sizes)
	Reading discussion	IMA 3-7 (*these are short, 30 pgs total)
	Worked example 5: Selecting an effect size metric and coding effect sizes	[Optional: IMA 27-30, 39; Shadish et al., 2014 if you have single-case designs; Morris & DeShon, 2002 if you need to combine independent groups and repeated measures designs; Zelinsky & Shadish, 2018 if you need to combine single-case and between- groups designs; Lopez-Lopez et al., 2018 if you have multiple effect sizes per study; Wan et al., 2014 if you need mean and SD but only have n, median and range/IQR; Riley et al., 2008; Ranganathan et al.,

		2045 7 2007 11 1 1
		2015; Zou, 2007; Hedges et al.
		1981]
		Tools: M&G Template 8,
		"ES_Calculator" Excel doc, esc
		R package;
		campbellcollaboration.org
		/calculator
7 –	TOPIC: PART 1: Fixed vs random effects	IMA 9- 14 (*these are short),
February 25	metas, weighting studies, pooling effect sizes	IMA 42, IMA 46 forest plot
,	and running the meta-analysis, forest plots	subsection only
	, , ,	ISR 9 (pp. 223-226)
	Reading Discussion	Viechtbauer, 2010
	R primer	Torfs & Brauer, 2014 (skip this
		one if you are comfortable
	Worked example 6: Artifact distributions,	with R)
	computing summary effects, variance,	With Ny
		[Ontional: IMAN 9, 26: Hodges
	confidence intervals, create forest plot	[Optional: IMA 8, 26; Hedges
		& Olkin, 1985; Dersimonian &
		Laird, 1986; IMA 43 if you are
		doing a Hunter and Schmidt
		meta; Tanner-Smith et al. if
		you have complex data
		structures; Hall & Brannick,
		2002 if using artifact
		distributions; Schmidt &
		Hunter, 2015 book if doing
		psychometric corrections]
		Tools: FixedvsRandom Word
		docs, pacman R syntax,
		metafor R syntax , weighted
		mean Excel file
		*Come to class with R and
		RStudio already downloaded
		and pacman, tidyverse, and
		metafor packages installed
		and loaded!
8 – March 4	TOPIC: PART 2: Fixed vs random effects	IMA 9- 14 (*these are short),
	metas, weighting studies, applying	IMA 42, IMA 46 forest plot
	psychometric corrections, pooling effect sizes	subsection only
	and running the meta-analysis, forest plots	ISR 9 (pp. 223-226)
<u> </u>	•	•

	Worked example 6: Artifact distributions, computing summary effects, variance, confidence intervals, create forest plot	Viechtbauer, 2010 Torfs & Brauer, 2014 (skip this one if you are comfortable with R) [Optional: IMA 8, 26; Hedges & Olkin, 1985; Dersimonian & Laird, 1986; IMA 43 if you are doing a Hunter and Schmidt meta; Tanner-Smith et al. if you have complex data structures; Hall & Brannick, 2002 if using artifact distributions; Schmidt & Hunter, 2015 book if doing psychometric corrections] Tools: FixedvsRandom Word docs, pacman R syntax, metafor R syntax, weighted mean Excel file *Come to class with R and RStudio already downloaded and pacman, tidyverse, and metafor packages installed
9 – March	No class (Spring break)	and loaded! N/A
11 10 – March	TODIC: Hotorogonoity and moderators in	IMAA 15 17 10 21 22
10 – March 18	TOPIC: Heterogeneity and moderators in meta-analysis	IMA 15-17, 19, 21-23 ISR 9 (pp. 226-228)
	Reading Discussion	[Optional: IMA 18, 20; ISR 9 pp. 229-232; Cortina, 2003]
	Worked example 7: Computing heterogeneity	_ ,
	statistics and prediction intervals, running	Tools: pacman and metafor R
11 – March	moderator analyses TOPIC: Sensitivity analysis/outliers,	syntax IMA 35, 46 (sensitivity analysis
25	publication bias/trim and fill for meta-analysis	section only), 47
	Reading Discussion	ISR 9 (pp. 232-235) [Optional: Duval & Tweedie, 2000; Begg & Mazumdar, 1994; Egger et al., 1997]

	Worked example 8: Do outlier analysis, create funnel plot and do publication bias/trim and fill analysis	Tools: M&G Templates 5 & 6; Funnel plot template Excel file, pacman and metafor R syntax
12 – April 1	TOPIC: Primary study quality assessment for systematic review and meta-analysis Reading Discussion Worked example 9: Doing quality Assessments, adding quality ratings to code sheet	ISR 10 [DSR 7]
13 – April 8	TOPIC: Synthesizing for systematic reviews and meta-analysis Reading Discussion Worked example 10: Writing results and discussion sections	ISR 8 IMA 33, 46 ("introduction" and "computational model" sections only), & 50 Shen et al. 2018 Hughes et al. 2016 [DSR 9,11] [Optional: IMA 41, ISR 9 pp. 242-249; Muka et al., 2020; Jackson & Turner, 2017]
14 – April 15	Student Critique Presentations	N/A
15 – April 22	Roundtable discussion for final protocol	N/A
16 – Final exam day	FINAL EXAM PERIOD – Turn in final written PROSPERO protocol and systematic review/meta-analysis write up	PROSPERO protocol and systematic review/meta-analysis write up

By Final exam day 5pm:

Individual final written PROSPERO protocol due (on Canvas) and systematic review/meta-analysis write up

Other Course Readings

Bylund CL, Vasquez T, Peterson EB, Ansell M, Bylund KC, Ditton-Phare P, Hines A, Manna R, Singh Ospina N, Wells R, Rosenbaum ME. Effect of experiential communication skills education on graduate medical education trainees' communication behaviors: a systematic review. *Acad Med.* 2022 Dec 1;97(12):1854-1866.

Durand MA, Carpenter L, Dolan H, Bravo P, Mann M, Bunn F, Elwyn G. Do interventions designed to support shared decision-making reduce health inequalities? A systematic review and meta-analysis. *PLoS ONE*. 2014 Apr;9(4):e94670.

Hughes AM, Gregory ME, Joseph DL, Sonesh SC, Marlow SL, Lacerenza CN, Benishek LE, King HB, Salas E. Saving lives: A meta-analysis of team training in healthcare. *J Appl Psychol*. 2016 Sep;101(9):1266-1306.

Page MJ et al. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *PLoS Med*. 2021 Mar 29;18(3):e1003583.

Peterson EB, Ostroff JS, DuHamel KN, D'Agostino TA, Hernandez M, Canzona MR, Bylund CL. Impact of provider-patient communication on cancer screening adherence: A systematic review. *Prev Med*. 2016 Dec;93:96-105.

Shen MJ, Peterson EB, Costas-Muñiz R, Hernandez MH, Jewell ST, Matsoukas K, Bylund CL. The effects of race and racial concordance on patient-physician communication: a systematic review of the literature. *J Racial Ethn Health Disparities*. 2018 Feb;5(1):117-140.

Thomas A, Lubarsky S, Durning SJ, Young ME. Knowledge syntheses in medical education: demystifying scoping reviews. *Acad Med*. 2017 Feb;92(2):161-166.

Torfs P, Brauer C. A (very) short introduction to R. 2014. Available from https://cran.r-project.org/doc/contrib/Torfs+Brauer-Short-R-Intro.pdf.

Viechtbauer W. Conducting Meta-Analyses in R with the metafor Package. *J Stat Softw.* 2010;36(3):1-48. doi:10.18637/jss.v036.i03

OPTIONAL:

Begg CB, Mazumdar M. Operating characteristics of a rank correlation test for publication bias. *Biometrics.* 1994;50(4):1088-1101.

Cortina JM. Apples and oranges (and pears, oh my!): The search for moderators in meta-analysis. *Organ Res Methods*. 2003;6(4):415-439. doi:10.1177/1094428103257358

DerSimonian R, Laird N. Meta-analysis in clinical trials. *Control Clin Trials*. 1986;7(3):177-188. doi:10.1016/0197-2456(86)90046-2

Duval S, Tweedie R. Trim and fill: a simple funnel-plot-based method of testing and adjusting for publication bias in meta-analysis. *Biometrics*. 2000;56(2):455–463.

Egger M, Davey Smith G, Schneider M, Minder C. Bias in meta-analysis detected by a simple, graphical test. *BMJ*. 1997;315(7109):629-634.

Hall SM, Brannick MT. Comparison of two random-effects methods of meta-analysis. *J Appl Psychol*. 2002 Apr;87(2):377-389.

Hedges LV. Distribution theory for Glass's estimator of effect size and related estimators. J Educ Stat. 1981;6(2):107-128.

Hedges L, Olkin I. Statistical Models for Meta-Analysis. New York, NY: Academic Press.; 1985.

Ho EY, Bylund CL, Wollney EN, Peterson EB, Wong H-N, Koenig CJ. A systematic review of communication about Complementary and Integrative Health (CIH) in global biomedical settings. *Patient Education and Counseling*. 2021; 104(12): 2900-11.

Jackson D, Turner R. Power analysis for random-effects meta-analysis. *Res Synth Methods*. 2017;8(3):290-302. doi:10.1002/jrsm.1240

Schmidt FL, Hunter JE. *Methods of Meta-Analysis: Correcting Error and Bias in Research Findings* (3rd ed). 2015. London: SAGE. doi:10.4135/9781483398105

López-López JA, Page MJ, Lipsey MW, Higgins JP. Dealing with effect size multiplicity in systematic reviews and meta-analyses. *Research Synthesis Methods*. 2018 Sep;9(3):336-51.

Morris SB, DeShon RP. Combining effect size estimates in meta-analysis with repeated measures and independent-groups designs. *Psychol Methods*. 2002 Mar;7(1):105-125.

Muka T, Glisic M, Milic J, Verhoog S, Bohlius J, Bramer W, Chowdhury R, Franco OH. A 24-step guide on how to design, conduct, and successfully publish a systematic review and meta-analysis in medical research. *European Journal of Epidemiology*. 2020 Jan;35:49-60.

Ranganathan P, Aggarwal R, Pramesh CS. Common pitfalls in statistical analysis: Odds versus risk. *Perspectives in Clinical Research*. 2015;6(4):222-4.

Riley RD, Thompson JR, Abrams KR. An alternative model for bivariate random-effects metaanalysis when the within-study correlations are unknown. *Biostatistics*. 2008 Jan 1;9(1):172-86.

Shadish WR, Hedges LV, Pustejovsky JE. Analysis and meta-analysis of single-case designs with a standardized mean difference statistic: A primer and applications. J Sch Psychol. 2014;52(2):123-147. doi:10.1016/j.jsp.2013.11.005

Tanner-Smith EE, Tipton E, Polanin JR. Handling complex meta-analytic data structures using robust variance estimates: A tutorial in R. *Journal of Developmental and Life-Course Criminology*. 2016 Mar;2:85-112.

Wan X, Wang W, Liu J, Tong T. Estimating the sample mean and standard deviation from the sample size, median, range and/or interquartile range. *BMC Medical Research Methodology*. 2014;14:1-3.

Wollney EN, Vasquez TS, Fisher CL, Armstrong MJ, Paige SR, Alpert J, Bylund CL. A systematic scoping review of patient and caregiver self-report measures of satisfaction with clinicians' communication. *Patient Education and Counseling*. 2023; 117: 107976.

Zelinsky NAM, Shadish W. A demonstration of how to do a meta-analysis that combines single-case designs with between-groups experiments: The effects of choice making on challenging behaviors performed by people with disabilities. *Dev Neurorehabilitation*. 2018;21(4):266-278.

Zou GY. One relative risk versus two odds ratios: implications for meta-analyses involving paired and unpaired binary data. *Clinical Trials*. 2007 Feb;4(1):25-31.

Course|Modify for request 21703

Info

Request: GMS 6705 - Change title and credit amount

Description of request: Change title and number of credits for GMS 6705 Functional Human

Neuroanatomy (4cr)

Submitter: Melissa Naidu michie@phhp.ufl.edu

Created: 7/1/2024 1:18:02 PM

Form version: 1

Responses

Current Prefix GMS
Course Level 6
Lab Code None
Number 705
Course Title Functional Human Neuroanatomy
Effective Term Spring
Effective Year 2026
Requested Action Other (selecting this option opens additional form fields below)
Change Course Prefix? No

Change Course Level? No

Change Course Number? No

Change Lab Code? No

Change Course Title? Yes
Current Course Title Functional Human Neuroanatomy
Proposed Course Title Functional Human Neuroanatomy I
Change Transcript Title? Yes
Current Transcript Title Functional Human Neuroanatomy
Proposed Transcript Title (30 char. max) Function Human Neuroanatomy I
Change Credit Hours? Yes
Current Credit Hours 4
Proposed Credit Hours 3
Change Variable Credit? No

Change S/U Only? No

Change Contact Type? No

Course Type Lecture

Change Rotating Topic Designation? No

Change Repeatable Credit? No

Multiple Offerings in a Single Semester No Change Course Description? No

Change Course Objectives Yes

Current Course Objectives COURSE DESCRIPTION

This semester online course is organized into thirteen modules, each of which covers a key human neuroanatomical system. The primary focus of this course is mastery of human neuroanatomy and understanding how the various structures in the brain are connected to form functional neural systems. Beginning with Module 3 and moving forward you will work through a new Focus Case Study that will be associated with each module. Each Focus Case Study describes a patient exhibiting symptoms characteristic of disruption of the neural system being studied that week. Over the course of the week, you will "solve" the multi-assignment case study using the information presented in the module and in previous modules. These case studies have been designed to help you master the neuroanatomy and functions of the primary neural system under study. At the end of this course you will not only have a working knowledge of human neuroanatomy, but you will also be able to use this knowledge to explain how disruption of brain structure leads to changes in human behavior and cognition.

COURSE GOALS / LEARNING OUTCOMES

Functional Human Neuroanatomy is a complex but rewarding field of study. The driving force behind studies of the human brain continues to be our desire to explain normal human behavior and cognition and the changes in behavior and cognition that often result from injury and disease. In this course we will cover the anatomy and functions of key neural systems including motor and somatosensory systems, the cranial nerves, the visual system, the auditory and vestibular systems, the basal ganglia and cerebellum, the hypothalamus, the limbic system, and higher cortical systems. At the end of this course, you will not only have a working knowledge of human neuroanatomy, but you will also be able to use this knowledge to explain how disruption of brain structure leads to changes in human behavior and cognition.

Proposed Course Objectives COURSE DESCRIPTION

This semester online course is organized into seven modules, each of which covers a key human neuroanatomical system in the brain stem. The primary focus of this course is mastery of human neuroanatomy and understanding how the various structures in the brain are connected to form functional neural systems. Beginning with Module 3 and moving forward you will work through a new Focus Case Study that will be associated with each module. Each Focus Case Study describes a patient exhibiting symptoms characteristic of disruption of the neural system being studied that week. Over the course of the week, you will "solve" the multi-assignment case study using the information presented in the module and in previous modules. These case studies have been designed to help you master the neuroanatomy and functions of the primary neural system under study. At the end of this course you will not only have a working knowledge of brain stem human neuroanatomy, but you will also be able to use this knowledge to explain how disruption of brain structure leads to changes in human behavior.

COURSE GOALS / LEARNING OUTCOMES

Functional Human Neuroanatomy is a complex but rewarding field of study. The driving force behind studies of the human brain continues to be our desire to explain normal human behavior and cognition and the changes in behavior that often result from injury and disease. In this course we will cover the anatomy and functions of key neural systems including motor and somatosensory systems, the cranial nerves, and control of eye movements.

At the end of this course, you will not only have a working knowledge of human neuroanatomy, but you will also be able to use this knowledge to explain how disruption of brain structure leads to changes in human behavior.

Change Prerequisites? No

Change Co-requisites? No

Rationale We are proposing to revise our existing 4-credit Functional Human Neuroanatomy course by dividing it into two separate courses: Functional Human Neuroanatomy I (3 credits) and Functional Human Neuroanatomy II (2 credits), to be taken in consecutive semesters.

The current 4-credit course, which spans 13 modules, requires approximately 30 hours of work per week according to the instructor. While this rigor is appropriate for the content, the time commitment is substantial, particularly for our online students, many of whom are balancing full-time employment, caregiving responsibilities, or other obligations. This workload often forces students to take the course in isolation, which in turn delays their progress through the program and can extend their time to graduation.

By splitting the course into two parts, we aim to maintain the academic integrity and depth of the original content while making the course structure more manageable. Functional Human Neuroanatomy I will cover 7 modules and carry 3 credits, while Functional Human Neuroanatomy II will include the remaining 6 modules and be worth 2 credits. This adjustment will allow students more flexibility to pair these courses with others if desired and better manage their workload.

In addition, breaking the course into two parts provides natural pedagogical checkpoints, allowing students to demonstrate mastery of foundational concepts before progressing to more complex material. This structure supports both student success and retention.

We believe this change will better serve the needs of our student population while preserving the academic rigor and learning outcomes of the original 4-credit offering.

A request to create Functional Human Neuroanatomy II (2 credits) as a new course will be submitted shortly.

Functional Human Neuroanatomy Course Handbook for GMS6705

Table of contents

Course Description

Course Goals / Learning Outcomes

Course Format

Target Audience

Prerequisites

Course Director and Instructor

Schedule

Learning Resources

Assignments and Examinations

Grading Scale

Grading Policy

Required Technology

Notifications

Course Conduct

Academic Honesty

When do I contact the UF Helpdesk?

When do I post questions to the Course Questions Discussion Board?

When do I email my instructor?

How to email your instructor

Student Support Services

COURSE NUMBER GMS6705

CREDIT HOURS 3 credit hours

COURSE DESCRIPTION

This semester online course is organized into seven modules, each of which covers a key human neuroanatomical system in the brain stem. The primary focus of this course is mastery of human neuroanatomy and understanding how the various structures in the brain are connected to form functional neural systems. Beginning with Module 3 and moving forward you will work through a new Focus Case Study that will be associated with each module. Each Focus Case Study describes a patient exhibiting symptoms characteristic of disruption of the neural system being studied that week. Over the course of the week, you will "solve" the multi-assignment case study using the information presented in the module and in previous modules. These case studies have been designed to help you master the neuroanatomy and functions of the primary neural system under study. At the end of this course you will not only have a working knowledge of brain stem human neuroanatomy, but you will also be able to use this knowledge to explain how disruption of brain structure leads to changes in human behavior.

COURSE GOALS / LEARNING OUTCOMES

Functional Human Neuroanatomy is a complex but rewarding field of study. The driving force behind studies of the human brain continues to be our desire to explain normal human behavior and

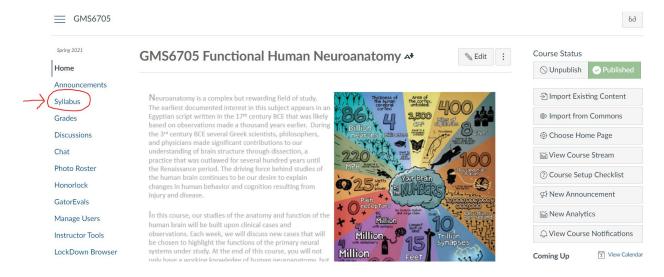
cognition and the changes in behavior that often result from injury and disease. In this course we will cover the anatomy and functions of key neural systems including motor and somatosensory systems, the cranial nerves, and control of eye movements.

At the end of this course, you will not only have a working knowledge of human neuroanatomy, but you will also be able to use this knowledge to explain how disruption of brain structure leads to changes in human behavior.

COURSE FORMAT

The Syllabus

We call the current document the course handbook and this document contains most of the information that is normally found in a typical syllabus. The reason this document is not officially a "syllabus", is, that there is no precise schedule herein. The precise class schedule is found in Canvas and is dynamically updated automatically if a change in the schedule is instituted. You can find the syllabus as shown below.



Course Modules

This course is divided into 7 Modules. Most Modules will be completed in 1-3 weeks – longer modules are covered in 3 weeks. Each Module covers a specific neural system and is broken down into 3-7 Units that contain the core material. You must complete the 7 Modules sequentially, and each Module will be considered complete when you have <u>submitted the Case Study assignments</u>, and completed the Module tests for that module. The flow of the class is strictly controlled. If you do not complete the Case studies or Module tests on time, you will be automatically locked out of the Identification tests, Case Studies, and Module test for the following module which required that item as a prerequisite.

Focus Case Studies

In addition to the units that contain the core material, beginning in Module 3, each Module contains a Focus Case Study that you will "solve" over the course of the week using the information presented in the Module under study and in the previous Modules. Each Case Study contains 2-5 assignments that you will be required to complete sequentially and submit prior to taking the Module tests that accompany each Module.

Units

Each Module is broken down into 3-7 Units that have been designed to improve your ability to access and understand the material presented on the neural system covered in each module. Each Unit contains a reading assignment, a video lecture(s) in VoiceThread format, and a self-check quiz that will allow you to determine how well you have understood the material presented in the unit. Each VoiceThread lecture is ~20-40 min in duration and can easily be viewed slide-by-slide allowing you to view the lectures on your schedule.

Weighting of Quizzes and Assignments

The self-check quizzes will constitute 15% of your final grade and the module tests will constitute 50% of your final grade. The remaining 35% of the final grade will be derived from the Case Study assignments you complete for each module. The content and quality of the Case Study assignments will be evaluated by both instructors.

Unit Self-check quizzes 15% Grade
Module tests 50% Grade
Case Study Assignments 35% Grade

TARGET AUDIENCE

This semester course has been specifically designed for students enrolled in the UF Biomedical Neuroscience Certificate Program. This course is designed to provide a working understanding of Functional Human Neuroanatomy.

PREREQUISITES

If you are an Online Certificate student or an Online Master's student, GMS 6007 is an absolute prerequisite for taking this course. <u>If you are enrolled somehow without having taken GMS 6007</u> course, please drop the course immediately.

COURSE DIRECTOR AND INSTRUCTOR

Nick Musselwhite, Ph.D Lecturer Biomedical Neuroscience Online

Ron Mandel, Ph.D. Instructor
Professor of Neuroscience
Assistant Director of Biomedical Neuroscience Online

Email – see directions below

GENERAL COURSE SCHEDULE

This is a semester course that is offered during the spring semester each year. One course module will be completed each week unless otherwise indicated. In addition to reading assignments, quizzes and tests, students will complete one Focus Case Study each module starting in Module 3.

Start Module (0-1/2 week)

Unit 1 The Course Handbook, Syllabus, and Deadlines

Unit 2 Introduction to VoiceThread and LockDown Browser

Unit 3 Course Textbooks and Neuroanatomy Websites and Apps

Module 1 Overview of Neuroanatomy (up to 1 week)

Unit 1 Macroscopic Organization of the nervous system

Unit 2 Basic Cell Types and Neural Signalling

Module 2 Cerebral Cortex and Environs (1 week)

Unit 1 Subdivisions of the cerebral cortex

Unit 2 Skull, Ventricles, Meninges, and Blood Brain Barrier

Unit 3 Introduction to Differential Diagnosis of Neurological Pathology

Module 3 Motor Pathways (2 weeks)

Unit 1 The lateral Corticospinal Tract

Unit 2 Additional Long Motor Tracts - Rubrospinal, Tectospinal, Vestibulospinal, and Reticulospinal tracts

Unit 3 Clinical Correlations of Motor Pathway Lesions

Module 4 Somatosensory Pathways (2 weeks)

Unit 1 Dorsal column medial lemniscal system: Fine touch and proprioception for the body

Unit 2 Anterolateral system: pain and temperature for the body

Unit 3 Clinical Correlations of Somatosensory Pathway Lesions

Module 5 Brainstem Surface Anatomy and Cranial Nerves (4 weeks including Spring Break)

Unit 1 Brain stem Surface Anatomy

Unit 2a Brain Stem Internal Anatomy

Unit 2b Brain Stem Internal Anatomy

Unit 3 Corticobulbar Tract

Unit 4 Trigeminal Sensory Systems

Unit 5 Other Sensory Nerves

Unit 6 Clinical Correlations of Cranial Nerve Lesions

Module 6 CNS Vascular Supply (2 weeks)

Unit 1 Arteries

Unit 2 Veins

Unit 3 Clinical Correlations of Cerebrovascular lesions

Module 7 Eye Movements and Pupillary Reflexes (2 Weeks)

Unit 1 Eye Movements

Unit 2 Pupillary Reflexes

Unit 3 Clinical Correlations of Extraocular Eye Movements and Pupillary Reflexes

LEARNING RESOURCES

• The following two textbooks are REQUIRED for this course:

1. Neuroanatomy through Clinical Cases, 3rd Edition. Author: Hal Blumenfeld. Sinauer Associates, Inc. 2021. I recommend you buy the hardcopy from a friend or a vendor like Amazon because I do not like the eBook interface. However, if you are interested in the eBook the link is below (if you have any trouble obtaining this book please notify me immediately).

3rd Edition: https://www.vitalsource.com/products/neuroanatomy-through-clinical-cases-hal-blumenfeld-v9781605359632

2. Neuroanatomy in Clinical Context: An Atlas of structures, Sections, Systems, and Syndromes. Haines, D.E. 11th edition., ISBN/ISSN 9781496387936, https://shop.lww.com/Neuroanatomy-Atlas-in-Clinical-Context/p/9781496387936

The following book is recommended:

 Sylvius 4 Online: An interactive atlas and visual glossary of human neuroanatomy. Authors: S. Mark Williams and Leonard E. White. Sinauer Associates, Inc. ISBN 978-0-87893-969-5 https://global.oup.com/academic/product/sylvius-4-online-9780878939695?cc=us&lang=en&

There are images taken from this online atlas in some of the VoiceThreads early in the course, so this resource is recommended but you should be able to complete the course without using this atlas. There are numerous other free online atlases that could also replace this resource.

- We will also be providing you with specific relevant Chapters from Medical Neuroscience Authors: Stephen E. Nadeau, Tanya S. Ferguson, Edward Valentstein, Charles J. Vierk, Jeffrey C. Petruska, Wolfgang J. Streit and Louis A. Ritz, Saundars 2004, ISBN 0-7216-0249-5 (out of print) as supplementary reading.
- All VoiceThread lectures are accessed directly through the Canvas course website.
 VoiceThread is an asynchronous interaction platform that allows you to post questions
 about the material directly within the lectures using the text, audio, or video + audio
 commenting feature of VoiceThread. VoiceThread is easy to use and you will become familiar
 with it as you work through the Start Module of the course.
- Each unit contains a self-check online quiz that is designed to reinforce the materials covered in each unit. These quizzes contain questions that will serve as examples of those comprising the module tests.
- Discussion boards for each Module are available for posting questions about the course materials covered in that Module.
- Online or face-to-face meetings with instructors are available upon request.

Assignments and Examinations

SELF-CHECK QUIZZES, MODULE TESTS, and FOCUS CASE STUDIES

For each of the 7 modules, students will complete 3-7 self-check unit quizzes and two module tests (identification, chapter fact test). For modules 3-7, you will need to display competency in the identification of neuroanatomical structures in order to progress to the in a fact-based chapter test and the focus case studies (competency = an average of 70% within up to 4 attempts). For modules 3-7 students will also complete a multi-part case study. Most Modules are covered in 2 weeks. All self-check quizzes for the modules are due on the Thursday or Friday of that week at 11:59 pm.

SELF-CHECK QUIZZES

Each unit is accompanied by a self-check quiz that is designed to allow you to determine how well you know the material in that unit. These quizzes will be taken under the same conditions as the identification and module tests – that is they will be taken using Honorlock without intrusive proctoring, they will be timed, and <u>once a question is answered and submitted, you will not be able to return to that question. You must answer each question to view the next question.</u> You will be given 1 min to answer each question on average.

You must complete all self-check quizzes for a specific Module by 11:59 pm on the Thursday or Friday (as indicated on the dynamic syllabus in Canvas or on the quiz itself) before the Module tests are due. You will see which questions you missed immediately. Self-check quizzes are intended to help you study by focusing extra study on the questions that you missed.

The reasons for completing these guizzes by this deadline are:

- 1. You will not be able to access the quizzes after 11:59 on Thursday and will receive zero points for quizzes not completed by the deadline.
- 2. Taking these low stakes quizzes by 11:59 on Thursday will enable you to determine what materials you don't understand and will give you an opportunity to obtain help with this material on Friday-Saturday before taking the module tests on Sunday. The instructor will have limited availability for answering questions on Sunday.
- 3. The answers for the self-check quizzes taken each week will be made available to you automatically. You must have submitted the quiz to see the answers. The correct answers may not be shown (many questions are accompanied by explanations) because you are expected to figure out the correct answer as a study method for the final module test.

IDENTIFICATION TEST (using Honorlock)

The first weekly quiz will consist of **neuroanatomical identification** questions that are mainly multiple choice but some do contain some fill-in-the-blank. The ID test is due at 11:59 pm on every Friday starting with module 3 (Mod 1-2 on Saturday). In the identification module test, the <u>questions will be randomized and will be presented one-at-a-time. Once a question is answered and submitted, you will not be able to return to that question. You must answer each question to view the next <u>question.</u> You will be given an average of 20 sec to answer each question. You must achieve an average of 70% correct answers on this module test to be allowed to matriculate to the chapter test due on Sunday. Canvas is set to keep your average score and it doesn't matter how many attempts you use of the 4, you must meet the 70% average benchmark or above. You may take the ID test as many as 4 times to achieve the 70% benchmark. If you fail to reach the 70% benchmark for an ID test, you must contact one of the course directors to allow an additional attempt. Five points will be deducted from the ID test score for each additional attempt. Due to the way Canvas operates, the points will be deducted just prior to calculation of the final grades for the course. **Therefore, it is imperative that you leave yourself enough time on Friday to take this test multiple times or you may be locked out of the next module test. This then locks you out of the following**</u>

module tests for the rest of the class (this is a Canvas feature that cannot be defeated by the Instructor). See below for excused absence policy.

We allow 4 attempts for ID tests because achieving a 70% average or above can be difficult. Because teaching 3 dimensional neuroanatomy on a 2 dimensional screen can be challenging, we intend for you to study for the ID test and do your best on each attempt, studying your hopefully few misses until you meet the 70% benchmark. Keeping the average score makes each ID test attempt equally valuable and makes achieving the 70% potentially difficult especially if you score low on any of your early attempts.

CHAPTER TEST (using LockDown Browser)

The module tests will consist of T/F, multiple choice, matching, fill-in-the-blank, and multiple answer questions. All sections will be timed and taken using LockDown Browser.

The questions will be randomized and will be presented one-at-a-time. Once a question is answered and submitted, you will not be able to return to that question. You must answer each question to view the next question. You will be given an average of 1 min per total points on this module test. Also, in some of these quizzes, there are multiple answer choice questions. Canvas grades these multiple answer questions as follows: Canvas gives proportional points for each correct selection but removes points for each incorrect answer (there are not negative total points for an individual question). For example, if the question is worth 3 points and there are 6 correct choices, and a student answers 4 correct choices and 2 incorrect choices, the student receives +2 points for the correct choices but -1 for the incorrect choices. Therefore, even though 4 choices were correct, the student only receives 1 point total. This is a feature of Canvas and cannot be changed. Therefore, on multiple answer choice questions, it is best not to guess.

We highly recommend that you take the online tests during UF Help Desk hours whenever possible so that you can obtain assistance if needed. Moreover, remember that the Canvas server does not have unlimited bandwidth. Therefore, if you wait until 11pm on Sunday night to begin your assignments, many other people around the UF campus are doing the same thing. This stresses the server on our end which may slow loading of test pictures and take away from your time. Taking assessments at the last minute also does not allow for unexpected problems that may occur.

Importantly, the time limit for completing the exam starts when you start the exam but ends at 11:59pm on the Sunday unless otherwise stated. For example, if you begin a 40 min exam 20 minutes before it is due, you will be given only 20 min to complete the exam because it automatically submits your exam when it is due.

If you attempt to take a quiz and you are asked for an access code, this indicates something wrong with either the HonorLock Chrome extension or Lockdown browser. THERE ARE NO ACCESS CODES REQUIRED TO TAKE QUIZZES IN THIS COURSE.

FOCUS CASE STUDIES

Case study assignments accompany modules 3-7. They consist of 2-5 assignments, each of which must be completed and submitted before the next module is the study is available to you. You must complete and submit the case study assignments for each module before you will be allowed to take

the module tests. Focus case studies are open book and are untimed and unproctored. Although the focus case studies are open book, they are to be completed alone, **they are not group projects**.

For both the module test and the focus case studies, you will eventually be able to see the answers. Because grading can take variable amount of time, the available time to view the results may be variable. That being said, the instructor's goal is to finish grading by each Monday afternoon and if this is achieved, the answers will be available for 24 hours after the grades are posted.

OUTSIDE SOURCES

The field of Neuroscience is among the fastest moving fields of research. In addition, there is far more yet to be known about brain function than we already know. Therefore, it is possible, using outside sources to dispute most, if not all of the questions on each type of assessment by using outside sources that might be seen to contest a presented fact. We can only ask questions that are derived from the learning resources listed in this handbook. There is no question that there are controversies and unknowns in the field of functional human neuroanatomy but you will be tested only on the information presented in this course. For the purposes of this course, the information presented is considered to be solid even if some of the information could legitimately be disputed. Therefore, we can only assess your answers to any assessment type based on the information presented from within this course. While we would never discourage anyone to do outside reading, you will not be awarded points based on some outside source that disputes the answer to any particular question.

This policy may be one of the most important in the course because without this

Assignments, quizzes and tests will not be accepted late.

policy, we could not assess grades at all.

As a rule, unless you have a medical excuse or a confirmed family emergency with appropriate documentation, late assignments, quizzes, and tests will not be accepted. 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. We will not be receptive to retrospective requests for deadline extensions. Your emails will be responded to within 24 business hours (typically sooner). Our strict rules on accepting late assignments is due to the rapid and dense nature of the course structure. This strict late assignment policy makes it imperative that you try not to wait until the last minute prior to the due date to complete an assignment. By not waiting to the last moment to submit an assignment, you mitigate the potential for unexcused circumstances from preventing you from submitting an assignment.

Cumulative nature of the class

Each module is cumulative, i.e., you will be expected to remember and have mastered the material for past modules. You <u>will</u> be asked questions that require knowledge of previous modules on ID tests, module test and especially focus case studies. Once a learning objective is introduced, you will be expected to know that subject matter from there on out in the course.

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 created within a few minutes of the technical difficulty and submitted as soon as possible (see below).

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.

If the class average reaches 85% or above the following scale for letter grades will apply:

93-100% = A 90-92.9% = A-87-89.9% = B+ 83-86.9% = B 80-82.9% = B-77-79.9% = C+ 73-76.9% = C 70-72.9% = C-67-69.9% = D+ 63-66.9% = D <63% =E

If the class average is < 85% everyone's score will be scaled to a class average of 85% automatically (emailing doesn't accelerate the curving process) and then the above scale will apply. There is no rounding of curved grades. Because final scores are not final until after the last test is completed, it is impossible to answer questions about an individual person's grade prior to the calculation of the final curve. Therefore, emailing the course director prior to the end of the course to ask about your final grade is futile.

GRADING POLICY

There is a lot of material covered in this course. Thus, it is **VERY IMPORTANT** that you set aside sufficient time each week to complete the required work. Students will be expected to complete <u>all requirements for one module each week</u>. There will be no deadline extensions for completion of a module unless granted by the course directors prior to the scheduled completion date. Failure to submit a module assignment, self-check quiz, or module test by the course deadlines will be recorded as a zero. Once final grades are published, there are no alterations allowed. If a student has an issue with an individual graded assignment, they must address that concern the week of the assignment. Therefore, individual assignment grade changes will not be considered at the end of the course.

REQUIRED TECHNOLOGY

- Laptop or desktop computer equipped with microphone and video camera. A microphone and video camera will be used for video conferencing with instructors if you choose to do this. You must have stable internet of > 100 Mbps at your disposal. A computer with at least 16 Mb of internal RAM, running a CPU of at least 1.8 GHz, and a separate graphics card are recommended.
- All the images in this course were created with a PC using Windows. While everything should work on a Mac OS system, if there are sometimes problems with images, PC to Mac OS encoding difficulties are probably at fault and it is certain that you will not get to retake questions where images don't appear. We have gone through the course and reduced the resolution of each image in the chapter tests to 150 dpi which is the screen resolution to try to reduce the problem of images not appearing in tests but this still happens. If this happens to you, you will not receive points but we strongly recommend taking steps to assure your

computer hardware meets the requirements listed above. This issue can also be mitigated by not taking tests during peak server hours which is any time close to 11:59pm on any given day.

- There is a Canvas app that can be used to access the course using your portable devices. The app is not as good as laptop or desktop computers. <u>Under no</u> <u>circumstances should you take any quiz using a portable device.</u>
- 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 laptop or desktop computers when working on this course. (While I often use the iOS VT app myself, I have found it to be terribly unreliable. VT often fixes issues rapidly and please feel free to contact their support which is very responsive).
- This is an online course. Therefore, travel during the course is the student's choice but because this course is extremely challenging with many time sensitive assignments due every week, optional travel is strongly discouraged. The requirements for high-speed internet and appropriate level computer with a modern operating system are still absolute requirements during travel and are the students' responsibility. Unexpected emergency travel to areas with poor infrastructure can be an excused absence but the course instructors must be advised either prior to or as soon as possible during the emergency travel. Optional travel cannot be disallowed but, again, it is the student's responsibility to ensure the availability of reliable high-speed internet and appropriate computer equipment. Internet failure during optional travel may not be deemed an excused absence.
- Installation of LockDown Browser installation instructions and a practice quiz are under Task 3 of Unit 2 in the Start Module. Prior to starting LockDown Browser, quit all other programs on your computer.
- High speed, broad band internet connection such as DSL or cable. When using LockDown
 Browser your computer should be directly connected to the internet rather than
 accessing using WiFi. A broadband Internet connection is strongly recommended. Slower
 connections should still be able to access e-Learning, but will take longer to load.
- Install Honorlock as an add on to Chrome
 - 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.
- It is highly recommended that you work with Canvas and VT using either the Firefox or Chrome Browsers. Only Chrome can be used for Honorlock on a majority of the assessments in this course.
- 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.

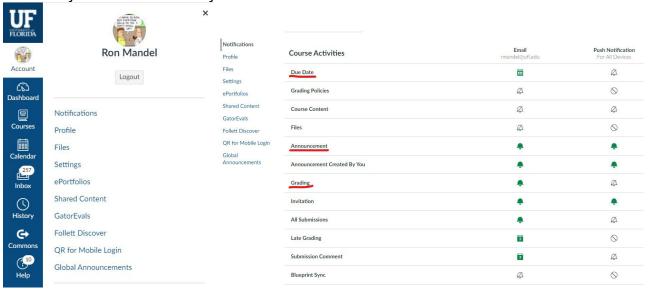
Software Use

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.

NOTIFICATIONS

The complicated nature of this course in Canvas necessitates the liberal use of announcements. Moreover, after tests are graded and released, you can get notifications of the test opening. Without these notifications, you may miss important course information or your chance to go over your test results in detail. Therefore, it is critical that you set up your notifications in Canvas under your account to your own specifications. Below are 2 figures showing you the location of your notifications in Canvas and suggested settings. Choose 'Notifications' from the 'Account' tab, set which notifications and how you wish to receive your chosen notifications as shown.



COURSE CONDUCT (What is expected of you)

In all course related activities, students are expected to respect one another and use proper language. Students need to be aware that online learning can present significant challenges, particularly to individuals who are not 'self-starters' or those who do not possess good time management skills.

The online classroom is available to you 24 hours a day. Unlike traditional instructional settings in which each student gets the same class, the online setting means that every student gets a different class, the class of his or her choosing. In theory, this type of instruction should be more adaptable to a variety of learning styles. The reality is, however, that some students seem unwilling (we believe all are able) to create their own virtual classroom. This results in procrastination and low quality performance. Recognizing that everyone learns differently, it is impractical to prescribe a 'best way' to approach this course.

You are expected to adhere to the class calendar. If you have a calendar app that you prefer to use, it is recommended that you put the due dates in your app as reminders. The assignments, quizzes and tests associated with the Modules are due on the days and times stipulated on the syllabus and in the also shown in the 'To Do' section on the right side of the course home page. While class interaction

and group study are encouraged (it is a very effective way to learn in this course), there are no group projects and all assignments must be prepared and completed individually.

ACADEMIC HONESTY

As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

We fully support the intent of the above statement and will not tolerate academic dishonesty.

All students enrolled in GMS 6705 are expected to follow the University of Florida Honor Code (excerpt above). The full text can be found at: http://regulations.ufl.edu/chapter4/4041-2008.pdf

Student guidelines for ethical behavior can be found at: http://www.registrar.ufl.edu/catalog/policies/students.html.

Please also review the use of copyrighted materials, which can be found on the Health Science Center Library's web page:

http://www.library.health.ufl.edu/services/copyright.htm

Additional Conduct Policy for this online course PLEASE READ THIS SECTION CAREFULLY

It is strictly forbidden to use a second device such as a cellphone camera to take images of assessments. A first violation of this rule will result in the student receiving a zero for that assessment. A second violation of this rule will result in the student failing the course and this violation being reported to the University. This rule applies in all situations and even applies to taking a screenshot of a completed assignment in order to send to the instructor a dispute about a question. To avoid the need to take screenshots, you must use the "add a comment" feature within the test while viewing your results. In the comment, include the assessment title, question number, and issue at hand. Again, this policy is absolute. We do not respond to emails disputing test results, only comments within the test are accepted. There are no exceptions.

Attendance and Make-up Policy

This is an asynchronous 100% online course so attendance is never required. However, as indicated above, various assessments have hard deadlines. In order to make up an assessment, you must have an excused absence. In general, we want all our students to succeed and are willing to allow well documented excused absences. In the spirit of fairness to all classmates, we must have some reasonable form of documentation. Pre-clearance of an absence with the approval of the instructor is the best way to deal with obtaining an excused absence. Technical difficulties must be documented by a Help Desk ticket (see below). In the absolute best case, the Help Desk Ticket should be documented prior to the due deadline of the assignment. However, if you waited until the last minute (which, while being your right, is not advisable), and the technical problem occurs during the assignment, the timestamp of the Help Desk Ticket must be very close to the closing deadline of the assignment. If you have an excused absence, extensions will be granted.

Potential excused absences:

- Medical emergencies require documentation.
- Family emergencies require some sort of documentation.
- Intervention of work or military deployment: We extremely value our students who also have careers, therefore, sometimes the students' career can intervene. In this case, it is critical that prior approval for an extension be obtained from the instructor with some form of documentation. Most times, finishing assignments well prior to their deadline ameliorates this type of problem.
- Internet outages: internet outages in your town or neighborhood can be an excused absence.
 However, a copy of a chat with your ISP or some other strict form of documentation must be provided. Again, finishing assignments early reduces the chances of internet outages affecting your ability to submit assignments.
- Power outages: severe storms occur especially in the spring. Paying attention to weather
 reports indicating potential severe storms should allow you to plan in advance so that a power
 outage does not derail your on-time completion of assignments. However, if a power outage
 does affect your submission deadline, some form of proof from your provider, the internet, or a
 newspaper must be provided. See also travel policy above.
- This list is not completely inclusive and other types of absences can be considered with documentation on a case by case basis.

Excused absences must be consistent with university policies in the <u>Graduate Catalog</u> and require appropriate documentation. Additional information can be found in <u>Attendance Policies</u>.

WHEN DO I CONTACT THE UF HELPDESK?

In the event that you have <u>technical difficulties with E-learning</u>, please contact the UF helpdesk at learning-support@ufl.edu, or (352) 392-4357. 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. As of this writing, Help Desk is only available during normal week day business hours. Therefore, taking tests at the last minute or even after business hours eastern time is risky because you cannot get instant help. If you email them with your problem, an automated reply will acknowledge your ticket submission. This ticket acknowledgement is an important time stamp to show you documented your problem in a timely fashion. Late work that involves technical difficulties with E-learning <u>MUST</u> be accompanied by a ticket number from the Help Desk.

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.

<u>NOTE:</u> 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. 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 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 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. 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 with 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 (Canvas).

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 Zoom meeting. PS, don't get behind: this course is nearly impossible to make up time in.
- 3. If you have questions about the course itself, please reread this handbook before asking a question. If the answer is not in the handbook, 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 first, your classmates can be a good source.
- 4. There are usually 40 or more students in this class, this makes it difficult for your course director to need to be required to respond to questions that you can figure out on your own OR the answer to which makes absolutely zero difference to your educational experience in this calls. Therefore, please think long and hard about the value of your question regarding the nuts and bolts of how the class functions prior to emailing the instructor.

DO NOT e-mail the instructor with general course questions (see above), the course is run by a computer application that is designed to function automatically.

DO e-mail the instructor if there is a broken link Canvas or something critical is not working (if it is an emergency try Help Desk).

If your question is of a personal nature, e-mail your instructor from within e-learning system using the instructions below.

DO NOT e-mail the instructor to act as your personal study partner. There are too many students in the class for the instructor to function as your personal study mate and it is not fair to the other students in the class who do not get this attention. All the self-checks and chapter tests show you what you got incorrect specifically so you can go back and learn the correct answers on your own. We provide you with all the resources you need to be able to find the answer to every question in this course. The instructor will not answer "what is the right answer?". If you ask this type of question, you will receive a Socratic-style study prompt question in return (as a teaching tool). We understand that you might find this method frustrating but this method is the best teaching strategy and is in line with the practical fact that there are many students in the class. After a due date, trying to use the discussion board to get clarification on a question could be a good strategy if you really can't find an answer on your own and your classmates choose to answer.

DO NOT e-mail the instructor to ask for extra credit. Extra credit assignments that are not available to everyone are not fair. There are no assignments available in the course to act as extra credit. If they are not available to everyone, then they are not 'extra'. This course contains a plethora of assignments, waiting until the end of the semester to try to increase your grade via extra credit is not a viable strategy.

We write all the questions on the assessments. They have been vetted over greater than a 10 year period (100s of people have read and answered these questions successfully). Please read them very carefully. It is impossible to write the type of clinical questions required in this course so that every single person in the world will interpret them in the way we intend them to be interpreted. Through experience, we have learned that there is a tiny subset of people who consistently interpret questions incorrectly or in the way they want to interpret them. Do not email the instructor with your interpretation of the question, it is your job as a student to figure out what we are asking. This type of complaint or the "I just want to understand" email falls under the category of asking the instructor to be your study partner. Repeated violation of this policy can lead to deduction of points at the instructor's discretion.

HOW TO EMAIL YOUR INSTRUCTOR

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 in the best case this will include the course number, GMS 6705, the module in question (1-13), the unit in question (1-7), and the item such as self check #1. While this subject line may seem overly complicated it will allow the instructor to easily collate and search for specific questions throughout the course.

- 6. Type your message and add any necessary attachments. Be sure that your subject line adheres to the format indicated above.
- 7. Click "send."

STUDENT SUPPORT SERVICES

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/.

For a list of additional student support services links and information please visit: http://www.distance.ufl.edu/student-services.

<u>Special Accommodations</u> - Students requesting disability-related academic accommodations must first register with the Disability Resource Center (http://www.dso.ufl.edu/drc/). This should be cone as early in the semester as possible. The Disability Resource Center will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. The Disability Resource Center is located in 001 Building 0020 (Reid Hall). Their phone number is 352-392-8565.

Course|New for request 21876

Info

Request: AEB 6XXX Agribusiness Enterprise Development **Description of request:** New graduate course proposal

Submitter: Lisa House lahouse@ufl.edu

Created: 9/17/2025 3:07:18 PM

Form version: 2

Responses

Recommended Prefix AEB Course Level 4/6

Co-Listing Explanation This co-listed course will be project-oriented and require all students to develop a business plan that addresses a specific problem or idea for a targeted market group in the agricultural or rural sector. This includes all aspects of conducting market research, communicating a strategic marketing plan, estimating financial needs, and addressing challenges with actionable solutions. The course culminates in a Shark Tank presentation by all students.

All students will complete four business plan reports throughout the semester, a profile on a Gator Agricultural and Rural Entrepreneurship mentor, several mock presentations, and a final Shark Tank presentation of their business plans.

The graduate students will be required to complete additional assignments beyond the undergraduate program requirements. Graduate students will be required to complete two case studies. The case studies will be predetermined by the instructor and students will follow directions to identify the key challenges in the case study, analyze the challenges using course concepts, and propose recommendations or solutions. Each case study will be completed independently, and graduate students will provide a peer review of at least two other students' case studies. Additional credit will be available for graduate students who present their case studies to the class in a synchronous session.

Undergraduates are not required to complete the case studies, but they will be offered extra credit if they attend the graduate student case study presentations in week 10.

Course Number XXX
Lab Code None
Course Title Agribusiness Enterprise Development
Transcript Title Agbus Enterprise Development
Delivery Method AD - All Distance Learning (100% of course content taught outside of classroom)
Effective Term Spring
Effective Year 2027
Rotating Topic No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No Contact Type Regularly Scheduled Course Type Lecture Weekly Contact Hours 3

Course Description Develop a business plan that addresses a specific problem or idea for a targeted market group in the agricultural or rural sector. The final project will be presented to a panel of agricultural and rural entrepreneurs for feedback and refinement. Materials for communicating with potential investors and bankers will be developed.

Prerequisites AEB 6XXX Agricultural and Rural Entrepreneurship (also pending approval and course number)

Co-requisites N/A

Rationale for Placement in the Curriculum This course is intended as an elective mainly for students in the Master of Agribusiness program in the Food and Resource Economics Department Syllabus Content Requirements All Items Included

AEB 6XXX: Agribusiness Enterprise Development

Class Details	Instructor Details	
Spring Semester 2026	Lisa House	
Asynchronous with four	1171 McCarty A	
synchronous sessions during the	352 294-7653	
semester (times TBD).	lahouse@ufl.edu	
One day Shark Tank Event.		

Office Hours: Monday, 2-5 pm, available online at https://ufl.zoom.us/my/drhouse or in office

Required Course Materials:

Textbook: Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2023). *Entrepreneurship* (12th ed.). McGraw-Hill Education.

E-learning: There is an <u>E-Learning Canvas webpage</u> for this course. E-learning can be accessed via http://elearning.ufl.edu using your Gatorlink username and password. If you are having difficulties accessing E-learning, please contact the UF Computing Help Desk by calling (352)-392-HELP or via email helpdesk@ufl.edu.

Course Description:

Develop a business plan that addresses a specific problem or idea for a targeted market group in the agricultural or rural sector. The final project will be presented to a panel of agricultural and rural entrepreneurs for feedback and refinement. Materials for communicating with potential investors and bankers will be developed.

This course is being taught in tandem with the undergraduate level course, AEB 4XXX. This syllabus describes the additional expectations for the graduate-level course.

Pre-requisites: AEB 6XXX (Agricultural and Rural Entrepreneurship).

Course Objectives:

By the end of this course, students will be able to:

- 1. Develop a comprehensive business plan to address a unique agricultural or rural industry issue.
- 2. Conduct market research and analyze data specific to the agricultural or rural industry.
- 3. Compose a presentation of a strategic marketing plan to an audience in the form of a business pitch.
- 4. Calculate financial needs for a new agricultural or rural business and communicate with potential investors and bankers.
- 5. Critique shortfalls in business planning with actionable solutions.

Class Contribution Policy:

The course format is <u>not</u> designed to be a lecture that is void of class participation and student contribution. In fact, student class contributions by <u>everyone</u> are important and vital to maximize success of both the student and the course. All questions are welcomed.

Description of Class Activities:

- Mentor Profile: Students are required to attend the synchronous session in week two to meet the Gator Agricultural and Rural Entrepreneur Mentors and hear presentations about their journeys. Students will choose one of the mentors to profile, and they are encouraged to meet the entrepreneur separately to fill in any gaps. The profile should be two single-spaced pages maximum and cover the following topics:
 - o Background: Who is the entrepreneur and what business did they create?
 - o Motivation for starting their business in the agricultural and rural space.
 - o Key entrepreneurship milestones.
 - O How did this story resonate with you and what lessons will you take with you into this semester?
- Enterprise Product (EP) Ideas Analysis Report: Students will use the 3-5 ideas developed in week
 two's conceptualization class session to complete an analysis of their initial ideas. An outline will
 be provided for students to follow. This report will break down the SWOT analysis and Porter's
 Five Forces for each of their initial ideas with the goal of the student choosing one idea to carry
 through the rest of the class modules.
- <u>EP Business Plan Reports (four)</u>: The business plan reports follow the course content schedule and guide the student through the business plan development.
 - o <u>Plan Report #1 (week 4):</u> Students describe their chosen EP idea based on the analysis report in week three and basic background market research.
 - Plan Report #2 (week 7): Students define their EP pricing systems and basic profit models.
 - O Plan Report #3 (week 8): Students define their go-to-market strategies, building on research in reports #1 and #2.
 - Plan Report #4: Students describe their human resource needs and how this contributes to their success.
- <u>EP Business Plan Presentations:</u> Students present their ideas and business plan progress to the class culminating in a Shark Tank-style presentation to the Gator Agricultural and Rural Entrepreneur Mentors.
 - O Presentation #1 (week 5): Students present their EP Business Plan Report #1 to share their EP idea for the semester, their initial market research and gather feedback from the class and mentors. These should be five minutes or less and will occur in a synchronous session. Mentors will be remote.
 - Presentations #2 and #3 (weeks 11 and 12): Students will complete two presentations prior to the Shark Tank dress rehearsal and final presentation on their own time—one for a peer in the class and one for a Gator Agricultural and Rural Entrepreneur Mentor. These presentations should include a draft pitch deck to be improved before the final presentation. Scoring will be based on pitch deck completion and verbal presentation by the peer and the mentor watching the presentations. These should be at least 5 minutes but no more than 8 minutes.

- Shark Tank Presentation (week 14): Students will present their final EP Plan and pitch deck to the class and the Gator Agricultural and Rural Entrepreneur Mentors in a synchronous session. These should be at least 5 minutes but no more than 8 minutes.
- <u>Peer Reviews and Self-Evaluations:</u> Students will have the following opportunities to gain points through peer and self-evaluations:
 - Week 5: Peer review of EP Business Plan Presentation #1
 - Week 11 or 12: Peer review of one pitch deck and Business Plan Presentation #2 or #3
 - Week 13: Self-evaluation of dress rehearsal
 - Week 15: Peer review of Shark Tank Presentations

Optional Extra Credit: Graduate Case Study presentation in synchronous session.

Graduate Student Case Studies:

Graduate students will complete two case studies. The case studies will be predetermined by the instructor and students will follow directions to identify the key challenges in the case study, analyze the challenges using course concepts, and propose recommendations or solutions. Each case study will be completed independently, and graduate students will provide a peer review of at least two other students' case studies. Extra credit will be available for graduate students who present their case studies to the class in a synchronous session.

Evaluation Procedure:

	Course Assignments	Total Points Available	Percent of Total
Module 1:	Syllabus Agreement	5	1%
	Mentor Profile	25	3%
	Enterprise Product (EP) Ideas Analysis Report	25	3%
Module 2:	EP Business Plan Reports (Four)	200	26%
	Case Study Reports (Two)	200	26%
	EP Business Plan Presentation	15	2%
	#1		
	Peer Review of Presentation #1	10	1%
Module 3:	EP Business Plan Presentation #2 (Peer)	15	2%
	EP Business Plan Presentation #3 (Mentor)	50	7%
Module 4:	Dress Rehearsal Self Evaluation	10	1%
	Final Shark Tank Presentation	200	26%
	Peer Review of Shark Tank Presentations	10	1%
	Total	765	100%
	Extra Credit: Case Study Presentation	15	

Grading Policy

Course grading is consistent with UF grading policies.

Grading Scale:

The scale used will be:

A	93% or above	A-	90-92.9%		
B+	87-89.9%	В	83-86.9%	B-	80-83.9%
C+	77-79.9%	C	73-76.9%	C-	70-73.9%
D+	67-69.9%	D	63-66.9%	D-	60-63.9%
E	Less than 60%				

Academic Policies and Resources

Academic policies for this course are consistent with university policies. See https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Campus Health and Wellness Resources

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Software Use

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Privacy and Accessibility Policies

[required for online courses, list all technology used]

- Instructure (Canvas)
 - o <u>Instructure Privacy Policy</u>
 - o Instructure Accessibility
- Zoom
 - o Zoom Privacy Policy
 - Zoom Accessibility

Module & Topic List:

Module 1:	Agribusiness Product Conceptualization
Module 2:	Agribusiness Plan Development
Module 3:	Agribusiness Plan Refinement
Module 4:	Agribusiness Plan Presentation

Tentative Class Outline:

Date	Format	Topic	Assignment Due By End of Week
	N	Module 1: Agribusiness Produ	ct Conceptualization

Wk 1	Online	Orientation and Project Overview	Syllabus and Deadlines Agreement
Wk 2	Online	Enterprise Product (EP) Conceptualization	List of Enterprise Product Ideas (3-5 ideas to analyze next week)
	Synchronous	Meet Gator Agricultural and Rural Entrepreneur Mentors	Profile one mentor's business and personal story.
Wk 3	Online	Analysis of EP Ideas	EP Ideas Analysis Report (Outline TBD)
		Module 2: Agribusiness Pl	an Development
Wk 4	Online	EP Idea Decision and Approval with Initial Market Research	EP Business Plan Report #1
Wk 5	Online	Specific Considerations in Agribusiness: Legality (IP), Regulations, Supply Chain Access	Case Study #1: Beech-Nut Baby Food, other litigation examples from Gator Alumni
	Synchronous	EP Decision Presentations (5-minute overviews to class; mentors Zoom in)	EP Business Plan Presentation #1; Peer reviews of class presentations
Wk 6	Online	In-depth Market Research, Value Proposition, and Supply Chains in the Agricultural and Rural Sector	N/A
Wk 7	Online	Pricing and Revenue for Agribusinesses; Basic Business Accounting	Business Plan Report #2
Wk 8	Online	Go-To-Market Strategy for Agribusinesses	EP Business Plan Report #3
Wk 9	Online	Marketing and Branding for Agribusinesses	Case Study #2: Marketing and Branding Wins and Losses
Wk 10	Online	Building Your Agribusiness Structure & Team	EP Business Plan Report #4
	Synchronous	Optional Case Study Presentation	

		Module 3: Agribusiness I	Plan Refinement
Wk 11	Online	Building Your Pitch (slide decks, takeaways	Pitch Deck Draft EP Business Plan Presentation #2: To Peers or Mentors (based on Mentor schedule). Must do ONE presentation to a mentor.
Wk 12	Online	Mock Peer Shark Tank Presentations (Office Hours Only)	EP Business Plan Presentation #3: To Peers or Mentors (based on Mentor schedule). Must do ONE presentation to a mentor. Finalize Pitch Deck
		Module 4: Agribusiness P	lan Presentation
Wk 13	Synchronous	Dress Rehearsal	Self-Evaluation of Dress Rehearsal
Wk 14	Synchronous	Shark Tank Presentations	Final Presentation Materials
Wk 15	Online	Wrap Up and Feedback	Peer Reviews of Shark Tank Presentations

Course Differentiation for AEB 4XXX and AEB 6XXX (Agribusiness Enterprise Development)

This co-listed course will be project-oriented and require all students to develop a business plan that addresses a specific problem or idea for a targeted market group in the agricultural or rural sector. This includes all aspects of conducting market research, communicating a strategic marketing plan, estimating financial needs, and addressing challenges with actionable solutions. The course culminates in a Shark Tank presentation by all students.

All students will complete four business plan reports throughout the semester, a profile on a Gator Agricultural and Rural Entrepreneurship mentor, several mock presentations, and a final Shark Tank presentation of their business plans.

The graduate students will be required to complete additional assignments beyond the undergraduate program requirements. Graduate students will be required to complete two case studies. This will help students achieve the 5th course learning objective, "Critique shortfalls in business planning with actionable solutions." The case studies will be predetermined by the instructor and students will follow directions to identify the key challenges in the case study, analyze the challenges using course concepts, and propose recommendations or solutions. Each case study will be completed independently, and graduate students will provide a peer review of at least two other students' case studies. Additional credit will be available for graduate students who present their case studies to the class in a synchronous session. The case studies are worth 200 points (26% of the overall grade).

AEB 4XXX: Agribusiness Enterprise Development

3 credit hours

Class Details	Instructor Details	
Spring Semester 2026	Lisa House	
Asynchronous with four	1171 McCarty A	
synchronous sessions during the	352 294-7653	
semester (times TBD).	lahouse@ufl.edu	
One day Shark Tank Event.		

Office Hours: Monday, 2-5 pm, available online at https://ufl.zoom.us/my/drhouse or in office

Required Course Materials:

Textbook: Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2023). *Entrepreneurship* (12th ed.). McGraw-Hill Education.

Course Description:

Develop a business plan that addresses a specific problem or idea for a targeted market group in the agricultural or rural sector. The final project will be presented to a panel of agricultural and rural entrepreneurs for feedback and refinement. Materials for communicating with potential investors and bankers will be developed.

This course is being taught in tandem with the graduate level course, AEB 6XXX. This syllabus describes only the expectations for the undergraduate-level course.

Pre-requisites: AEB 4XXX (Agricultural and Rural Entrepreneurship)

Course Objectives:

By the end of this course, students will be able to:

- 1. Develop a comprehensive business plan to address a unique agricultural or rural industry issue.
- 2. Conduct market research and analyze data specific to the agricultural or rural industry.
- 3. Compose a presentation of a strategic marketing plan to an audience in the form of a business pitch.
- 4. Calculate financial needs for a new agricultural or rural business and communicate with potential investors and bankers.

Class Contribution Policy:

The course format is <u>not</u> designed to be a lecture that is void of class participation and student contribution. In fact, student class contributions by <u>everyone</u> are important and vital to maximize success of both the student and the course. All questions are welcomed.

Description of Class Activities:

- Mentor Profile: Students are required to attend the synchronous session in week two to meet the Gator Agricultural and Rural Entrepreneur Mentors and hear presentations about their journeys. Students will choose one of the mentors to profile, and they are encouraged to meet the entrepreneur separately to fill in any gaps. The profile should be two single-spaced pages maximum and cover the following topics:
 - o Background: Who is the entrepreneur and what business did they create?
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 - o Key entrepreneurship milestones.
 - O How did this story resonate with you and what lessons will you take with you into this semester?
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- <u>EP Business Plan Reports (four):</u> The business plan reports follow the course content schedule and guide the student through the business plan development.
 - o <u>Plan Report #1 (week 4):</u> Students describe their chosen EP idea based on the analysis report in week three and basic background market research.
 - Plan Report #2 (week 7): Students define their EP pricing systems and basic profit models.
 - O Plan Report #3 (week 8): Students define their go-to-market strategies, building on research in reports #1 and #2.
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 - Week 13: Self-evaluation of dress rehearsal
 - Week 15: Peer review of Shark Tank Presentations
 - o Optional Extra Credit: Peer review of graduate student Case Study Presentations

Evaluation Procedure:

	Course Assignments	Total Points Available	Percent of Total
Module 1:	Syllabus Agreement	5	1%
	Mentor Profile	25	4%
	Enterprise Product (EP) Ideas Analysis Report	25	4%
Module 2:	EP Business Plan Reports (Four)	200	35%
	EP Business Plan Presentation #1	15	3%
	Peer Review of Presentation #1	10	2%
Module 3:	EP Business Plan Presentation #2 (Peer)	15	3%
	EP Business Plan Presentation #3 (Mentor)	50	9%
Module 4:	Dress Rehearsal Self Evaluation	10	2%
	Final Shark Tank Presentation	200	35%
	Peer Review of Shark Tank Presentations	10	2%
	Total	565	100%
	Extra credit: Optional review of grad student Case Study Presentations	15	10070

Grading Policy

Course grading is consistent with UF grading policies.

Grading Scale:

The scale used will be:

A	93% or above	A-	90-92.9%		
B+	87-89.9%	В	83-86.9%	B-	80-83.9%
\mathbf{C} +	77-79.9%	\mathbf{C}	73-76.9%	C-	70-73.9%
D+	67-69.9%	D	63-66.9%	D-	60-63.9%
E	Less than 60%				

Academic Policies and Resources

Academic policies for this course are consistent with university policies. See https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Campus Health and Wellness Resources

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Software Use

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Privacy and Accessibility Policies

[required for online courses, list all technology used]

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Module & Topic List:

Module 1:	Agribusiness Product Conceptualization
Module 2:	Agribusiness Plan Development
Module 3:	Agribusiness Plan Refinement
Module 4:	Agribusiness Plan Presentation

Tentative Class Outline:

Date	Format	Topic	Assignment Due By End of Week			
	Module 1: Agribusiness Product Conceptualization					
Wk 1	Online	Orientation and Project Overview	Syllabus and Deadlines Agreement			
Wk 2	Online	Enterprise Product (EP) Conceptualization	List of Enterprise Product Ideas (3-5 ideas to analyze next week)			
	Synchronous	Meet Gator Agricultural and Rural Entrepreneur Mentors	Profile one mentor's business and personal story.			
Wk 3	Online	Analysis of EP Ideas	EP Ideas Analysis Report (Outline TBD)			

		Module 2: Agribusiness Pl	an Development
Wk 4	Online	EP Idea Decision and Approval with Initial Market Research	EP Business Plan Report #1
Wk 5	Online	Specific Considerations in Agribusiness: Legality (IP), Regulations, Supply Chain Access	
	Synchronous	EP Decision Presentations (5-minute overviews to class; mentors Zoom in)	EP Business Plan Presentation #1; Peer reviews of class presentations
Wk 6	Online	In-depth Market Research, Value Proposition, and Supply Chains in the Agricultural and Rural Sector	N/A
Wk 7	Online	Pricing and Revenue for Agribusinesses; Basic Business Accounting	EP Business Plan Report #2
Wk 8	Online	Go-To-Market Strategy for Agribusinesses	EP Business Plan Report #3
Wk 9	Online	Marketing and Branding for Agribusinesses	
Wk 10	Online	Building Your Agribusiness Structure & Team	EP Business Plan Report #4
	Synchronous	Optional review of grad student Case Study Presentations	Optional Case Study reviews
		Module 3: Agribusiness P	Plan Refinement
Wk 11	Online	Building Your Pitch (slide decks, takeaways	Pitch Deck Draft EP Business Plan Presentation #2: To Peers or Mentors (based on Mentor schedule). Must do ONE presentation to a mentor.
Wk 12	Online	Mock Peer Shark Tank Presentations (Office Hours Only)	EP Business Plan Presentation #3: To Peers or Mentors (based on Mentor schedule). Must do ONE presentation to a mentor.

			Finalize Pitch Deck
		Module 4: Agribusiness P	lan Presentation
Wk 13	Online		
	Synchronous	Dress Rehearsal	Self-Evaluation of Dress Rehearsal
Wk 14	Online		
	Synchronous	Shark Tank Presentations	Final Presentation Materials
Wk 15	Online	Wrap Up and Feedback	Peer Reviews of Shark Tank Presentations

Course|New for request 21874

Info

Request: AEB 6XXX Agricultural and Rural Entrepreneurship **Description of request**: New graduate course proposal

Submitter: Lisa House lahouse@ufl.edu

Created: 9/17/2025 3:08:23 PM

Form version: 2

Responses

Recommended Prefix AEB Course Level 4/6

Co-Listing Explanation This co-listed course will introduce students to the main principles of agricultural and rural entrepreneurship and related problem-solving skills. All students will demonstrate competency in business idea generation, analysis of new opportunities through market research, and the basics of writing a business plan for the agricultural and rural sectors, regardless of class level.

All students will complete three exams based on the textbook material, read an entrepreneurship-based book, and prepare a report and pitch presentation about the book.

The graduate students will be required to complete additional assignments beyond the undergraduate program requirements. Graduate students will be required to listen to four podcast episodes of their choice from "How I Built This by Guy Roz" for 100 additional points on their grading scale. They will answer questions in an online forum based on the podcast they listened to and the module the class is currently working through. Graduate students will be expected to provide in-depth analysis of the story they heard in the context of class learnings. They will also be required to respond to three of their classmates' posts with constructive feedback.

Course Number XXX
Lab Code None
Course Title Agricultural and Rural Entrepreneurship
Transcript Title Ag and Rural Entrepreneurship
Delivery Method AD - All Distance Learning (100% of course content taught outside of classroom)
Effective Term Fall
Effective Year 2026
Rotating Topic No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No Contact Type Regularly Scheduled Course Type Lecture Weekly Contact Hours 3

Course Description Introduces principles of agricultural and rural entrepreneurship, idea generation, business plans, market research, and challenges associated with business startups in the agricultural and rural sectors. Intended to be a combination of lectures and case studies.

Prerequisites N/A Co-requisites N/A

Rationale for Placement in the Curriculum This course will be offered as an elective course, mainly for students in the Master of Agribusiness program in the Food and Resource Economics Department Syllabus Content Requirements All Items Included

AEB 6XXX: Agricultural and Rural Entrepreneurship

3 credit hours

Class Details	Instructor Details	
Fall Semester 2026	Lisa House	
Asynchronous with four	1171 McCarty A	
synchronous sessions per	352 294-7653	
semester (times TBD)	lahouse@ufl.edu	

Office Hours: Monday, 2-5 pm, available online at https://ufl.zoom.us/my/drhouse or in office

Required Course Materials:

Textbook: Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2023). *Entrepreneurship* (12th ed.). McGraw-Hill Education.

E-learning: There is an <u>E-Learning Canvas webpage</u> for this course. E-learning can be accessed via http://elearning.ufl.edu using your Gatorlink username and password. If you are having difficulties accessing E-learning, please contact the UF Computing Help Desk by calling (352)-392-HELP or via email helpdesk@ufl.edu.

Course Description:

This class will introduce principles of agricultural and rural entrepreneurship, idea generation, business plans, market research, and challenges associated with business startups in the agricultural and rural sectors. Intended to be a combination of lectures and case studies.

Further Course Information:

This course will include asynchronous online lectures and four synchronous sessions.

This course is being taught in tandem with the undergraduate level course, AEB 4XXX. This syllabus describes the additional expectations for the graduate-level course.

Course Objectives:

- 1. Students will be able to define and identify the main principles of agricultural and rural entrepreneurship.
- 2. Generate, evaluate, and refine business ideas relevant to agriculture and rural sectors.
- 3. Analyze new opportunities through market research related to agricultural and rural sectors.
- 4. Identify, describe, and explain the fundamental components of a business plan.
- 5. Evaluate the effectiveness of entrepreneurship strategies.

Class Contribution Policy:

The course format is <u>not</u> designed to be a lecture that is void of class participation and student contribution. In fact, class contributions by <u>everyone</u> are important and vital to maximize success of both the student and the course. <u>All questions are welcomed</u>. There will be opportunities for mentoring and networking activities for professional development that will allow you to bridge the gap between traditional agribusiness education and modern entrepreneurship.

Entrepreneurship Book Assignment:

Students will be required to choose one of the following titles and prepare a report and presentation as described below:

- Sam Walton: Made in America by Sam Walton with John Huey
- Grinding it Out: The Making of McDonald's by Ray Kroc
- Becoming Trader Joe: How I Did Business My Way and Still Beat the Big Guys by Joe Coulombe
- Shoe Dog: A Memoir by the Creator of Nike by Phil Knight
- Other options may be submitted for approval. These books should focus on entrepreneurship or business development for businesses existing (or that started in) in agricultural or rural sectors.

Entrepreneurship Book Report:

- Students are required to write a three-page report on their top lessons learned from the story they chose. The report should include a brief description of the entrepreneur, their business and why their story matters (no more than one paragraph). The bulk of the report should focus on the three takeaways or key insights learned. These can be broad and include lessons on leadership, strategy, failure, solution-finding, etc. For each of the three lessons, include a reflection on how these learnings relate to your own agriculture and rural entrepreneurship goals.

Entrepreneurship Book Presentation:

- Students will prepare a short (but convincing!) presentation to "pitch" to the class and to me about why we should read this book. Pitches should be based on the learnings from the book report and how they apply to a room of people hoping to start and run agricultural and rural sector businesses. Props, visuals, and creativity are encouraged but not required.

Graduate Student Podcast Reviews:

In addition to the Entrepreneurship Book Report and Pitch, graduate students will be required to complete a podcast review once per class module. The suggested podcast is "How I Built This" with Guy Raz, available on all podcast platforms. For each of the four modules listed below, graduate students will choose a podcast episode from the "How I Built This" cache (you may propose to use a different podcast by talking to the instructor and selecting one relevant to entrepreneurship) and answer discussion questions about the entrepreneur's story in the context of that module's theme. Discussion questions will be posted online. Students will also respond to three of their classmates in the discussion board.

Evaluation Procedure:

Course Assignments	Total Points Available	Percent of Total
Exam 1	100	20%
Exam 2	100	20%
Exam 3	50	10%
Entrepreneurship Book Report	100	20%
Entrepreneurship Book Presentation	50	10%
Podcast Reviews & Discussion	100	20%

^{*} Online exams will use a proctoring service. Information about the University's proctoring services can be found at: https://pfs.tnt.aa.ufl.edu/teaching-and-technology-resources/online-proctoring/proctoring/

Grading Policy

Course grading is consistent with UF grading policies.

Grading Scale:

The scale used will be:

A	93% or above	A-	90-92.9%		
B+	87-89.9%	В	83-86.9%	B-	80-83.9%
C+	77-79.9%	C	73-76.9%	C-	70-73.9%
D+	67-69.9%	D	63-66.9%	D-	60-63.9%
F	Less than 60%				

Academic Policies and Resources

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 - o Instructure Privacy Policy
 - o <u>Instructure Accessibility</u>
- Zoom
 - o Zoom Privacy Policy
 - Zoom Accessibility

Module & Topic List:

Module 1:	Introduction and Principles of Agricultural and Rural Entrepreneurship
Module 2:	The Art and Science of a Great Idea (Idea Generation)
Module 3:	Taking the Next Step for Agricultural and Rural Businesses (Business Plans,
	Market Research)
Module 4:	Funding and Problem Solving

Tentative Class Outline:

Date	Format	Торіс	Reading Due for Class Date
M	odule 1: Introd	luction and Principles of Agri	cultural and Rural Entrepreneurship
Wk 1	Online	Orientation and the Entrepreneurship Mindset for Agricultural and Rural Businesses	Chapter 1- Textbook StrengthsFinder Test: https://high5test.com/cliftonstrengths-free/
Wk 2	Online	Types of Entrepreneurship & How Your Skills Already Apply	Chapters 2 & 3- Textbook Podcast Review & Discussion #1
	l	Module 2: The Art and Scie	nce of a Good Idea
Wk 3	Online	Creativity and the Agricultural and Rural Business Idea	Chapter 3- Textbook
	Synchronous	Meet Gator Agricultural and I stories	Rural Entrepreneurs: Three alumni share their
Wk 4	Online	Identifying Agricultural and Rural Business Opportunities	Chapter 4- Textbook
Wk 5	Online	Legal Considerations for Agricultural and Rural Entrepreneurs	Chapter 6- Textbook Case Study- Food Safety and Litigation
Wk 6	Online	Types of Strategic Analysis for New Ideas- Gator Alumnus Presentation: Risk in Agricultural and Rural Businesses	Supplemental reading to prep for in person session (TBD articles, podcasts)
	Synchronous		eration through Strategic Analysis (class does Five Forces/etc. together and in small groups)
Wk 7	Online	Exam 1 (Modules 1 & 2)	Podcast Review & Discussion #2
	Module 3:	Taking the Next Step for Agr	ricultural and Rural Businesses
Wk 8	Online	The Business Plan	Chapter 7- Textbook
Wk 9	Online	The Marketing Plan	Chapter 8- Textbook

Wk 10	Online	The Organizational and Finance Plan	Chapters 9 & 10- Textbook	
Wk 11	Online	Real World Entrepreneurship	Supplemental reading to prep for in person session (Finish Entrepreneurship Book)	
	Synchronous	Entrepreneurship Book Presentations	Book Presentation Due	
Wk 12	Online	Exam 2 (Module 3)	Podcast Review & Discussion #3	
	Module 4: Fu	nding & Problem Solving for	Agricultural and Rural Businesses	
Wk 13	Online	Funding Sources	Chapters 11 & 12- Textbook	
Wk 14	Online	Challenges and Solutions for the Agricultural and Rural Businesses Entrepreneur	Supplemental reading to prep for in person session (TBD articles, podcasts)	
	Synchronous	Group Learning: Real World Solutions with Gator Agricultural and Rural Businesses Entrepreneur Mentors (mentors share more detail about their business planning, challenges and solutions)		
Wk 15	Online	Exam 3 (Module 4)	Podcast Review & Discussion #4	

Course Differentiation for AEB 4XXX and AEB 6XXX

This co-listed course will introduce students to the main principles of agricultural and rural entrepreneurship and related problem-solving skills. All students will demonstrate competency in business idea generation, analysis of new opportunities through market research, and the basics of writing a business plan for the agricultural and rural sectors, regardless of class level.

All students will complete three exams based on the textbook material, read an entrepreneurship-based book, and prepare a report and pitch presentation about the book.

The graduate students will be required to complete additional assignments beyond the undergraduate program requirements. Graduate students will be required to listen to four podcast episodes of their choice from "How I Built This by Guy Roz" (or a podcast approved by the instructor). This will help students achieve the 5th course learning objective, "Evaluate the effectiveness of entrepreneurship strategies." This assignment will have graduate students apply principles from the class and answer questions in an online forum based on the podcast they listened to and the module the class is currently working through. Graduate students will be expected to provide in-depth analysis of the story they heard in the context of class learnings. They will also be required to respond to three of their classmates' posts with constructive feedback. This assignment is worth 100 points (20% of the overall grade).

AEB 4XXX: Agricultural and Rural Entrepreneurship

3 credit hours

Class Details	Instructor Details	
Fall Semester 2026	Lisa House	
Asynchronous with four	1171 McCarty A	
synchronous sessions per	352 294-7653	
semester (times TBD)	lahouse@ufl.edu	

Office Hours: Monday, 2-5 pm, available online at https://ufl.zoom.us/my/drhouse or in office

Required Course Materials:

Textbook: Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2023). *Entrepreneurship* (12th ed.). McGraw-Hill Education.

E-learning: There is an <u>E-Learning Canvas webpage</u> for this course. E-learning can be accessed via http://elearning.ufl.edu using your Gatorlink username and password. If you are having difficulties accessing E-learning, please contact the UF Computing Help Desk by calling (352)-392-HELP or via email helpdesk@ufl.edu.

Course Description:

This class will introduce principles of agricultural and rural entrepreneurship, idea generation, business plans, market research, and challenges associated with business startups in the agricultural and rural sectors. Intended to be a combination of lectures and case studies.

Further Course Information:

This course will include asynchronous online lectures and four synchronous sessions.

This course is being taught in tandem with the graduate level course, AEB 6XXX. This syllabus describes only the expectations for the undergraduate-level course.

Pre-requisites: Junior standing or instructor permission

Course Objectives:

- 1. Students will be able to define and identify the main principles of agricultural and rural entrepreneurship.
- 2. Generate, evaluate, and refine business ideas relevant to agriculture and rural sectors.
- 3. Analyze new opportunities through market research related to agricultural and rural sectors.
- 4. Identify, describe, and explain the fundamental components of a business plan.

Class Contribution Policy:

The course format is <u>not</u> designed to be a lecture that is void of class participation and student contribution. In fact, class contributions by <u>everyone</u> are important and vital to maximize success of both the student and the course. <u>All questions are welcomed</u>. There will be opportunities for mentoring and networking activities for professional development that will allow you to bridge the gap between traditional agribusiness education and modern entrepreneurship.

Entrepreneurship Book Assignment:

Students will be required to choose one of the following titles and prepare a report and presentation as described below:

- Sam Walton: Made in America by Sam Walton with John Huey
- Grinding it Out: The Making of McDonald's by Ray Kroc
- Becoming Trader Joe: How I Did Business My Way and Still Beat the Big Guys by Joe Coulombe
- Shoe Dog: A Memoir by the Creator of Nike by Phil Knight
- Other options may be submitted for approval. These books should focus on entrepreneurship or business development for businesses existing (or that started in) in agricultural or rural sectors.

Entrepreneurship Book Report:

- Students are required to write a three-page report on their top lessons learned from the story they chose. The report should include a brief description of the entrepreneur, their business and why their story matters (no more than one paragraph). The bulk of the report should focus on the three takeaways or key insights learned. These can be broad and include lessons on leadership, strategy, failure, solution-finding, etc. For each of the three lessons, include a reflection on how these learnings relate to your own agriculture and rural entrepreneurship goals.

Entrepreneurship Book Presentation:

- Students will prepare a short (but convincing!) presentation to "pitch" to the class and to me about why we should read this book. Pitches should be based on the learnings from the book report and how they apply to a room of people hoping to start and run agricultural and rural sector businesses. Props, visuals, and creativity are encouraged but not required.

Evaluation Procedure:

Course Assignments	Total Points Available	Percent of Total
Exam 1	100	25%
Exam 2	100	25%
Exam 3	50	12.5%
Entrepreneurship Book Report	100	25%
Entrepreneurship Book Presentation	50	12.5%
Total	400	100%

^{*} Online exams will use a proctoring service. Information about the University's proctoring services can be found at: https://pfs.tnt.aa.ufl.edu/teaching-and-technology-resources/online-proctoring/proctoring/

Grading Policy

Course grading is consistent with UF grading policies.

Grading Scale:

The scale us	sed will be
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A	93% or above	A-	90-92.9%		
B+	87-89.9%	В	83-86.9%	В-	80-83.9%
\mathbf{C} +	77-79.9%	C	73-76.9%	C-	70-73.9%

D+ 67-69.9% D 63-66.9% D- 60-63.9%

E Less than 60%

Academic Policies and Resources

Academic policies for this course are consistent with university policies. See https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Campus Health and Wellness Resources

Visit https://one.uf.edu/whole-gator/topics for resources that are designed to help you thrive physically, mentally, and emotionally at UF.

Please contact <u>UMatterWeCare</u> for additional and immediate support.

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.

Privacy and Accessibility Policies

[required for online courses, list all technology used]

- Instructure (Canvas)
 - o <u>Instructure Privacy Policy</u>
 - o <u>Instructure Accessibility</u>
- Zoom
 - o Zoom Privacy Policy
 - o Zoom Accessibility

Module & Topic List:

Module 1:	Introduction and Principles of Agricultural and Rural Entrepreneurship	
Module 2:	The Art and Science of a Great Idea (Idea Generation)	
Module 3:	dule 3: Taking the Next Step for Agricultural and Rural Businesses (Business Plans,	
	Market Research)	
Module 4:	Funding and Problem Solving	

Tentative Class Outline:

Date	Format	Торіс	Reading Due for Class Date
Module 1: Introduction and Prince		luction and Principles of Agri	cultural and Rural Entrepreneurship
Wk 1	Online	Orientation and the Entrepreneurship Mindset for Agricultural and Rural Businesses	Chapter 1- Textbook StrengthsFinder Test: https://high5test.com/cliftonstrengths-free/

Wk 2	Online	Types of Entrepreneurship & How Your Skills Already Apply	Chapters 2 & 3- Textbook
		Module 2: The Art and Scie	nce of a Good Idea
Wk 3	Online	Creativity and the Agricultural and Rural Business Idea	Chapter 3- Textbook
	Synchronous	Meet Gator Agricultural and I stories	Rural Entrepreneurs: Three alumni share their
Wk 4	Online	Identifying Agricultural and Rural Business Opportunities	Chapter 4- Textbook
Wk 5	Online	Legal Considerations for Agricultural and Rural Entrepreneurs	Chapter 6- Textbook Case Study- Food Safety and Litigation
Wk 6	Online	Types of Strategic Analysis for New Ideas- Gator Alumnus Presentation: Risk in Agricultural and Rural Businesses	Supplemental reading to prep for in person session (TBD articles, podcasts)
	Synchronous		eration through Strategic Analysis (class does Five Forces/etc. together and in small groups)
Wk 7	Online	Exam 1 (Modules 1 & 2)	
	Module 3:	Taking the Next Step for Agr	ricultural and Rural Businesses
Wk 8	Online	The Business Plan	Chapter 7- Textbook
Wk 9	Online	The Marketing Plan	Chapter 8- Textbook
Wk 10	Online	The Organizational and Finance Plan	Chapters 9 & 10- Textbook
Wk 11	Online	Real World Entrepreneurship	Supplemental reading to prep for in person session (Finish Entrepreneurship Book)
	Synchronous	Entrepreneurship Book Presentations	Book Presentation Due
Wk 12	Online	Exam 2 (Module 3)	

Wk 13	Online	Funding Sources	Chapters 11 & 12- Textbook
Wk 14	Online	Challenges and Solutions for the Agricultural and Rural Businesses Entrepreneur	Supplemental reading to prep for in person session (TBD articles, podcasts)
	Synchronous	1	Solutions with Gator Agricultural and Rural ators (mentors share more detail about their and solutions)
'k 15	Online	Exam 3 (Module 4)	

Course|New for request 21763

Info

Request: EEC 6973 Early Childhood Project in Lieu of Thesis

Description of request: This request is to create a new course for use in the MAE program for the Early Childhood Studies program that allows for completion of a Project in Lieu of Thesis. Due to the increased number of students enrolling in the online track options in the program, they are choosing Project in Lieu of Thesis as an option to complete their degree requirements. The course is suggested

to be: EEC 6973 Early Childhood Studies Project in Lieu of Thesis.

Submitter: Tara Mathien tmathien@coe.ufl.edu

Created: 8/25/2025 9:04:37 AM

Form version: 3

Responses

Recommended Prefix EEC

Course Level 6

Course Number 973

Lab Code None

Course Title Early Childhood Project in Lieu of Thesis

Transcript Title EC Project in Lieu of Thesis

Delivery Method HB - Hybrid Blend (50-79% of course content taught outside of classroom)

Effective Term Earliest Available **Effective Year** Earliest Available

Rotating Topic No

Repeatable Credit? Yes

Multiple Offerings in a Single Semester No

If repeatable, # total repeatable credit allowed 9

Amount of Credit Variable

If variable, # min 1

If variable, # max 6

S/U Only? No

Contact Type Thesis/Dissertation Supervision

Course Type Performance Indiv Instruction

Weekly Contact Hours Performance Individual Instruction will be 1-6 contact hours depending on number of credits enrolled.

Course Description Provides students the opportunity to design and implement a comprehensive, self-directed project in early childhood studies related to problems of practice, policy, or other related fields, demonstrating expertise and scholarly rigor, under faculty guidance and mentorship.

Prerequisites Permission of department

Co-requisites N/A

Rationale for Placement in the Curriculum This course will be offered beginning the final year of their MAE EC program. Students will take credits in the fall semester and in the spring semester of their final year of the program in order to complete their Project in Lieu of Thesis work. This course is required in their degree requirements if they choose the Project in Lieu of Thesis option for their degree completion.

Syllabus Content Requirements All Items Included

EEC XXXX

Early Childhood Studies Project in Lieu of Thesis Fall / Spring

1-9 variable credits

This course is intended to be completed over two semesters.

Instructor: Tara Mathien Office: 3003 Norman Hall Email: tmathien@coe.ufl.edu

Phone: (352) 273-4275

Preferred: Communicate via email or via Canvas inbox. Class Sessions: Norman Hall; Mondays 5:00-8:00PM Eastern

Office Hours: Mondays 4:00-5:00PM Eastern

Course Description

This advanced graduate course provides students the opportunity to design and implement a comprehensive, self-directed project in early childhood studies related to problems of practice, policy, or other related fields, demonstrating expertise and scholarly rigor, under faculty guidance and mentorship.

Course and Student Learning Objectives

By the end of this course, you will be able to:

- 1. Identify and articulate a problem of practice, policy, or related field in early childhood studies, demonstrating an in-depth understanding of the issue and its significance.
- 2. Design a real-world application/solution for an identified need in your field of study.
- 3. Demonstrate expertise and scholarly rigor in the development of the proposed project, reflecting a mastery of early childhood studies concepts, theories, and practices.
- 4. Apply critical thinking, problem-solving, and reflective practices to the project, integrating multiple perspectives, and considering the complexities and nuances of early childhood issues.
- 5. Synthesize the results (or anticipated results) of the project, drawing on theoretical, empirical, and practical insights, to inform early childhood education, policy, or related fields.
- 6. Communicate project outcomes effectively through written and oral presentations as concluded by you and your faculty advisor, using clear, concise, and scholarly language suitable for a variety of audiences.

Required Textbooks:

NONE

Materials will be posted on CANVAS

Recommended Resources:

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). Author.

Hempel, S. (2020). *Conducting your literature review*. American Psychological Association. [Free download through the University of Florida Library System and will provide Course Reserves free access to students]

Additional selected readings will be required from a variety of sources and provided through Canvas.

Assessment of Student Learning

Your work will be assessed by the course instructor. All assignments should follow APA 7th Edition style, unless another style is more appropriate for the topic and approved by the instructor. Assignments should be submitted via Canvas prior to the due date and time; late assignments will be reviewed as time permits. Each of the course requirements will be evaluated according to the extent to which you are able to communicate or demonstrate the learning objectives effectively, which involves qualitative assessment by the instructor.

The Project in Lieu of Thesis typically involves a substantial, applied project that demonstrates the student's mastery of the field. It includes both a project component (e.g., developing a program, implementing a new strategy, or conducting an evaluation) and a written report that explains the project's rationale, process, and outcomes. Specific details will be posted in Canvas and determined based on your individual project needs. This project and presentation plan is flexible and will be agreed upon by you, your course instructor, and your faculty advisor.

In general, the following elements should be included:

Semester 1 work:

- Problem of Practice Identification & Project Proposal (10%). Weeks 2-5. You will identify a problem in your field of study. You will present your problem by including the following: evidence regarding what the research says about your topic, an explanation for how your topic fills a research gap or identifies a problem of practice, and a general description of your proposed project to address the identified problem.
- **Project Design (15%)**. Weeks 6-7. You will share your intentions for the design of your project. This will include your methods, population/participants, implementation plans, and intended results. You will work with your faculty advisor to devise your project design submission. Additional details will be shared in Canyas.
- Real-World Implementation (15%). Weeks 8-14. Your real-world application/solution will be based on your intended results from your project. The choice of the real-world application/solution will take place under your faculty advisor's guidance and mentorship.
- Peer Feedback (10%). Week 7, 9, 12. In addition to faculty feedback, opportunities for peer feedback will be an important part of your project. Consistent, timely, insightful peer feedback will be provided at designated times throughout the course. Peer feedback will include supportive and constructive elements to offer additional insights and perspectives. Additional details will be shared in Canvas.

Semester 2 work:

- Evaluation (10%). Weeks 2-5. You will share your assessment of the project's effectiveness and impact.
- Oral Presentation (15%). By week 8 (in accordance with Graduate School deadline). Your final presentation will include a brief of your rationale for your project (synthesis of your research gap and project proposal information), summary of your overall project, design, real world application, and your findings/recommendations for the field.
- Written report (20%). Weeks 9-14. You will complete a comprehensive written report detailing the project's development, implementation, and results.

Evaluation Scale (Percentage of Grade Available):

Semester 1:

Problem of Practice Identification & Project Proposal 20 points

(10%)

Project Design (15%) 30 points

Peer Feedback (10%) 20 points

Real-World Implementation (15%) 30 points

Total: 100 points

Semester 2 work:

Evaluation (10%) 20 points

Oral Presentation (20%) 40 points

Written Report (20%) 40 points

Total: 100 points

Grading Scale

A = 93.5% - 100%

A = 89.5% - 93.4%

B+ = 86.5% - 89.4%

B = 82.5% - 86.4%

B - = 79.5% - 82.4%

C + = 76.5% - 79.4%

C = 72.5% - 76.5%

C = 69.5% - 72.4%

D+=66.5%-69.4%

D=62.5%-66.4%

D-=59.5%-62.4%

F = 0.59.4%

For additional information on the meaning of letter grades and related university policies, see the Registrar's Grade Policy regulations at:

https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Some examples of projects to choose from could include:

- Professional Learning Package: Create a comprehensive professional learning module for early childhood educators, including a presentation (e.g., PowerPoint or Google Slides), detailed facilitator notes, participant handouts, and interactive activities, all focused on your topic chosen. Citations from credible research should be provided throughout, as well as a reference list.
- Stakeholder Engagement Plan for a New Early Childhood Policy Initiative: Develop a comprehensive plan for engaging diverse stakeholders (e.g., parents, providers, policymakers, community organizations) in the development and implementation of a new early childhood policy initiative. This would include strategies for communication, feedback mechanisms, and building consensus. Include a rationale for

each element with citations from credible research and a reference page.

- Developmentally Appropriate Curriculum: Design a complete, detailed curriculum unit for a specific age group (e.g., preschoolers) that uses DAP to teach foundational concepts and align with the philosophy of the program of your choosing. Include lesson plans, material lists, and assessments. Include a written description of the curriculum that includes a rationale for each element with citations from credible research and a reference page.
- Series of Family Workshops on a selected topic: Design and outline a series of engaging workshops for
 families of young children, focusing on practical strategies they can use at home to foster learning and
 development. Include suggested activities, resources, and discussion prompts. Include a written
 description of the series that includes a rationale for each element with citations from credible research
 and a reference page.
- Policy Analysis and Recommendations for a State-Level Child Care Subsidy Program: Conduct an
 in-depth analysis of an existing state's child care subsidy program, identifying its strengths, weaknesses,
 and equity gaps or conduct a SWAT. The project would culminate in a policy brief with actionable
 recommendations for program improvements, funding allocations, and eligibility criteria, with credible
 citations and a reference page.

Course and University Policies

Attendance and Assignments

You are expected to be a regular and active participant in all class activities; the best way to do this is to come prepared to each class with at least one question, whether about the readings or your working ideas on your project. For late assignments, it is necessary that you contact your instructor in advance. Attendance and grading/assignment policies are consistent with the Graduate School guidelines found here: https://gradcatalog.ufl.edu/graduate/regulations/.

AI Policy

UF students are responsible for the information they submit based on an AI query (for instance, that it does not violate intellectual property laws, or contain misinformation or unethical content). *Their use of AI tools must be properly documented and cited to stay within university policies on academic honesty*. For example, they should refer to these resources for APA guidance when citing the use of AI: https://apastyle.apa.org/blog/how-to-cite-chatgpt.

Any assignment that is found to have used generative AI tools in unauthorized ways may be considered a violation of the Student Honor Code. When in doubt about permitted usage of these tools, please ask for clarification. To learn more about these tools, visit <u>UF's Center for Instructional Technology and Training website</u>.

E-Learning Website

Students can access the class's e-learning website by going to the UF homepage and typing "COE online" into the search box or using the following link: http://elearning.ufl.edu

Students should log into Canvas using their assigned Gatorlink username and password. This website will have a copy of the course syllabus, assignments, class announcements and other useful information. Some assignments can only be completed through the online website. All assignments will be submitted to the instructor through the class website.

For resolving technical issues, visit the helpdesk website, email <u>helpdesk@coe.ufl.edu</u>, or call 352-392-4357.

A link to UF's academic policies and resources and campus health and wellness resources can be found here: https://go.ufl.edu/syllabuspolicies

Course Schedule

All due dates and deadlines will correspond to the Graduate School guidelines for Masters degree program requirement fulfillment https://success.grad.ufl.edu/td/deadlines/. Below is a suggested timeline for target requirements.

Semester 1

Date	Task	Due Date
Week 1: 08/21	Syllabus Course Orientation	08/21 Zoom meeting 5-7pm
Weeks 2-5: 08/25-09/21 Labor Day: 09/01	Work on Problem of Practice Identification and Project Proposal	09/21 Problem of Practice Identification & Project Proposal due
Weeks 6-7: 09/22-10/05	Work on Project Design Gather peer feedback week 6	10/05 Project Design due Peer feedback due week 7
Weeks 8-14: 10/06-11/23 UF Homecoming: 10/17 Veteran's Day: 11/11 Thanksgiving: 11/24-11/28	Work on Real World Implementation Gather peer feedback weeks 8 & 11	11/23 Real World Implementation due Peer feedback due weeks 9 & 12
Week 15: 12/01-12/07	Final Zoom	12/1 Zoom meeting 5-7pm

Semester 2

Date	Task	Due Date
Week 1: 01/12-01/18	Syllabus Course Orientation	1/12 Zoom meeting 5-7pm

^{*}The instructor reserves the right to amend or change this syllabus or the course schedule as needed. Final changes will be communicated via e-mail and made available on Canvas. It is your responsibility to check UF e-mail messages and course announcements through Canvas to stay current.

Weeks 2-5: 01/19-02/15 MLK: 01/19	Work on Evaluation Sign up for oral presentation date	02/15 Evaluation due
Weeks 6-8: 02/16-03/08	Work on Oral Presentation	03/08 Oral presentation due *Oral Presentations must be submitted to Graduate School no later than 3/10
Weeks 9-14: 03/09-04/19 Spring Break: 03/16-03/20	Work on Written Report	04/19 Final Written Report due
Week 15: 04/20-04/26	Final Zoom	04/20 Zoom meeting 5-7pm

^{*}schedule subject to changed based on instructor decisions and needs of students

Course|New for request 21017

Info

Request: EMA 6XXX AI for Materials

Description of request: Request to create a new course, EMA 6XXX - Al for Materials. This course

will be co-listed with the undergraduate version EMA 4XXX.

Submitter: Tahara Franklin tfranklin@mse.ufl.edu

Created: 2/3/2025 1:09:40 PM

Form version: 1

Responses

Recommended Prefix EMA

Course Level 4/6

Co-Listing Explanation This course will be delivered simultaneously with the undergraduate course counterpart. Undergraduate homework assignments quizzes, and exams will differ from those for graduate level, in terms of workload and difficulty level. Undergraduate homework, quizzes, and exams will include more basic problems, while the graduate version will focus on more complex concepts and applications. Graduate students will have additional problems and/or more challenging problems on assigned homework, quizzes, and exams.

All students in the co-listed courses will be held to the same standards regarding attendance, academic honesty, and general class expectations.

Course Number XXX

Lab Code None

Course Title AI for Materials

Transcript Title Al for Materials

Delivery Method PC - Primarily Classroom (0-49% of course content taught outside of classroom)

Effective Term Earliest Available

Effective Year Earliest Available

Rotating Topic No

Repeatable Credit? No

Amount of Credit 3

S/U Only? No

Contact Type Regularly Scheduled

Course Type Lecture

Weekly Contact Hours 3

Course Description Application of machine learning and data science methods for questions and datasets in materials science and engineering.

Prerequisites EMA 3080C & (COP 2271 or COP 2273)

Co-requisites N/A

Rationale for Placement in the Curriculum EMA4XXX Al for Materials will be a core and required course for students in the MSE BS major and will count towards the MSE minor program. The course teaches data science and machine learning skills for materials design and selection. Students in the MSE major will typically take this course in their final semester (i.e., semester 8). Students in the MSE minor program that are interested in learning Al skills should take this course in their junior or senior year after completing the prerequisites. The department feels that this course will assist with teaching students the computational and data analysis skills that are expected by employers and grad schools and will better align with our peer institutions. Our goal is to modernize the MSE curriculum and align with employer needs for Al initiatives. Students will be expected to use computational tools to analyze data. The course builds on coding skills learned in COP 2273/COP 2271, EMA 3800, and EMA 3080C.

EMA6XXX AI for Materials is a graduate elective course for the MSE Ph.D., M.S. programs. The course teaches data science and machine learning skills for materials design and selection. Students

in the graduate program interested in learning AI methods and applying AI skills in their research should take this course after completing the graduate core courses.

Syllabus Content Requirements All Items Included

AI for Materials

EMA 6XXX Section -TBA

Class Periods: TBA
Location: TBA
Academic Term: Spring XXXX

Instructor:

Prof. Richard G. Hennig rhennig@ufl.edu

Office Hours: Days of week, hours available, office location (TBA)

Teaching Assistant/Peer Mentor/Supervised Teaching Student:

Please contact through the Canvas website

• TBA

Course Description

Application of machine learning and data science methods for questions and datasets in materials science and engineering.

Statement Related to Policy for Co-Listed Graduate/Undergraduate Courses

Students enrolled in the graduate course (EMA 6xxx) will have the following requirements imposed on them in addition to those present for the undergraduate course (EMA 4xxx):

- Undergraduate homework assignments quizzes, and exams will differ from those for graduate level, in terms of workload and difficulty level.
- Undergraduate homework, quizzes, and exams will include more basic problems, while the graduate version will focus on more complex concepts and applications.
- Graduate students will have additional problems and/or more challenging problems on assigned homework, quizzes, and exams.
- All students in the co-listed courses will be held to the same standards regarding attendance, academic honesty, and general class expectations.

Course Pre-Requisites / Co-Requisites

EMA 3080C and (COP 2273 (Python) or COP 2271 (Matlab)). Knowledge of vector and matrix algebra, derivatives and integrals, probabilities and random variables statistics, and some experience in coding in any language, such as Python (preferred), MATLAB, Java, C.

Course Objectives

- Analyze the mathematical foundations of data science and machine learning.
- Develop software using Python and data science tools to process and interpret engineering data.
- Apply AI techniques to materials data, structures, and processes to solve engineering problems.
- Evaluate real-world engineering challenges and propose data-driven solutions using machine learning methods.

Materials and Supply Fees

N/A

Required Textbooks and Software

- Machine Learning in Materials Science by Keith T. Butler, Felipe Oviedo, Pieremanuele Canepa, freely available at https://doi.org/10.1021/acsinfocus.7e5033.
- Python software and Jupyter notebooks. Freely available through various packages such as Anaconda, Google Colab, and Kaggle.

• Jupyter Notebooks developed by the instructor and made freely available on Github.

Recommended Materials

- Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow by Aurélien Géron, 2nd Edition, O'Reilly 2019, ISBN: 1492032646.
- Supplementary reading and links to various other resources/websites are provided and updated throughout the semester.

Required Computer

UF student computing requirement: https://news.it.ufl.edu/education/student-computing-requirements-for-uf/

Course Schedule

Course Schedule

Week	Class Dates	Topic	Book Chapter
1	TBA	Introduction	
		Programming Tools: Introduction to Python	
2	TBA	Math Review, Probability and Statistics	
		Linear Algebra and Differential Calculus	
	TBA	Applying Machine Learning (ML) to Materials Science	
3		Data Science Tools: Databases and Pandas Data Frames	1
		Linear Regression: Implementation in Python	
4	TBA	Using PyTorch for model training	1
4		From Linear regression to neural networks	1
	TBA	Building Trust in Machine Learning	
5		Validation and Uncertainty	2
)		Interpretability	
	TBA	Canvas Exam 1	
6	TBA	Autoencoders	
0		Convolutional neural networks	
7	TBA	Machine Learning for Materials Simulations	3
/		Representing Materials for ML	3

8	TBA	Which Representation Is Best? Ultra-fast Force Fields	
9	TBA	Analyzing Experimental Data Machine Learning for Electron Microscopy (EM)	4
Spring	Break TBA		
	TBA	Machine Learning for Diffraction	4
10		ML Analysis of Spectral Data	4
	TBA Canvas Exam 2		
12	TBA Closed-Loop Optimization and Active Learning for Materials		5
12		Black-Box Optimization	
13	TBA	Bayesian Optimization	5
13	Navigating High-Dimensional Spaces		3
	TBA	Discovering New Materials	
14		High-Throughput Virtual Screening	5
		Direct Optimization with Generative Models	
15	TBA	Canvas Exam 3	6

Important Dates

TBA

Attendance Policy, Class Expectations, and Make-Up Policy

Course Website

The course website is on the Canvas system https://ufl.instructure.com, where you can find the announcements, syllabus, pre-recorded video lectures, lecture notes, and homework assignments. We will also use Canvas for the preparatory quizzes, the course exams, and your grades. Please check it frequently.

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Flipped classrooms improved the student performance and learning experience effectively (see, for example https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6852382/). To take advantage of the in-class discussion and problem-solving requires everyone to watch the video lecture before the in-class activity and complete the quiz. Active participation and engagement in class will help you understand the material and acquire the skills to utilize thermodynamics to solve material problems you will encounter throughout your career. I expect attendance. Questions are highly encouraged. If you do not understand something, chances are that your classmates have missed that point, too. You are responsible for material presented in lectures, reading assignments, homework, and distributed notes.

Homework

Three homework exercises will be assigned. These homework questions are essential to your study and prepare you for the exams. Some exam questions will be adapted from homework. Homework is usually due back seven days before the corresponding exam. The submission dates will be posted in the e-learning assignments. The purpose of homework is to give you an opportunity to evaluate and apply your knowledge. You may collaborate on homework; however, the submitted assignment must represent your own work and preparation. Please ask during the online class to discuss homework problems.

Homework in its entirety must be word-processed. For some problems, you will require a suitable math package with graphing capability, e.g., Excel, MatLab, Python. Files have to be pdf, doc, docx, or pptx. Picture files (jpg, etc.) are not accepted.

Homework needs to be submitted online on e-learning. Email is not acceptable for submission of homework. Hard copies are also not accepted.

Homework will be evaluated on the following basis:

	100	85	70	0
Completion	All assigned	Most assigned	Some assigned	Assignment not
	work is	work is	work is	complete.
	complete.	complete.	complete.	
Accuracy	All answers are	Most answers	Some answers	Little to no
	correct.	are correct.	are correct.	answers are
				correct.
Work shown	All work shown	Most work	Several steps or	Did not show any
(derivations	in detail.	shown in detail.	figures missing.	work.
and figures)				

No credit will be given for late unexcused submissions.

Quizzes and Interactive Learning

We will have online preparatory quizzes covering current and recent lecture material. The quizzes will typically consist of ten questions that should take about 20 minutes to answer. The quizzes serve as feedback both for you and me that you understood the pre-recorded video lectures.

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We will have three Canvas exams. The exams will consist of concept questions to evaluate your familiarity with the course content and numerical problems designed to test your ability to apply concepts to new situations, i.e., to promote critical thinking. Unless otherwise informed, one sheet of prepared personal notes may be used to assist you in completing examinations. The exams will be on Canvas and use HonorLock. Exam work must be individual, and collaboration is never allowed. Observations of cheating will be promptly reported by the exam proctor. Please see UF's statement on academic honesty: https://www.dso.ufl.edu/%20sccr/process/student-conduct-honor-code. There is no final exam in this class. Tentative exam dates are included in the schedule.

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Evaluation of Grades

Assignment	Total Points	Percentage of Final Grade
Homework Sets (2)	100 each	20%
Quizzes (weekly)	varies	20%
Midterm Exam (3)	100	45%
Project Jupyter	100	15%
Notebook		
Total		100%

Grading Policy

The following is given as an example only.

Percent	Grade	Grade
		Points
93.4 - 100	Α	4.00
90.0 - 93.3	A-	3.67
86.7 - 89.9	B+	3.33
83.4 - 86.6	В	3.00
80.0 - 83.3	B-	2.67
76.7 - 79.9	C+	2.33
73.4 - 76.6	С	2.00
70.0 - 73.3	C-	1.67
66.7 - 69.9	D+	1.33
63.4 - 66.6	D	1.00
60.0 - 63.3	D-	0.67
0 - 59.9	E	0.00

More information on UF grading policy may be found at:

UF Graduate Catalog

Grades and Grading Policies

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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

AI for Materials, EMA 4XXX

Dr. Richard Hennig, Term: Spring XXXX

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.

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.

Commitment to a Safe and Inclusive Learning Environment

The Herbert Wertheim College of Engineering values varied perspectives and lived experiences within our community and is committed to supporting the University's core values, including the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of 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.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Graduate Coordinator
- HWCOE Human Resources, 352-392-0904, student-support-hr@eng.ufl.edu
- Pam Dickrell, Associate Dean of Student Affairs, 352-392-2177, pld@ufl.edu
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, nishida@eng.ufl.edu

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: https://registrar.ufl.edu/ferpa.html

Campus Resources:

Health and Wellness

U Matter, We Care:

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Counseling and Wellness Center: https://counseling.ufl.edu, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Discrimination, Harassment, Assault, or Violence

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the Office of Title IX Compliance, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, title-ix@ufl.edu

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

Academic Resources

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

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. 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://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/;https://care.dso.ufl.edu.

On-Line Students Complaints: https://distance.ufl.edu/state-authorization-status/#student-complaint.

AI for Materials

EMA 4XXX Section: TBA

Class Periods: Days of week, period, and corresponding time of day

Location: TBA

Academic Term: Spring XXXX

Instructor:

Prof. Richard G. Hennig rhennig@ufl.edu

Office Hours: Days of week, hours available, office location (TBA)

Teaching Assistant/Peer Mentor/Supervised Teaching Student:

Please contact through the Canvas website

• TBA

Course Description

Application of machine learning and data science methods for questions and datasets in materials science and engineering.

Course Pre-Requisites / Co-Requisites

EMA 3080C and (COP 2273 (Python) or COP 2271 (Matlab)). Knowledge of vector and matrix algebra, derivatives and integrals, probabilities and random variables statistics, and some experience in coding in any language, such as Python (preferred), MATLAB, Java, C.

Course Objectives

- Analyze the mathematical foundations of data science and machine learning.
- Develop software using Python and data science tools to process and interpret engineering data.
- Apply AI techniques to materials data, structures, and processes to solve engineering problems.
- Evaluate real-world engineering challenges and propose data-driven solutions using machine learning methods.

Materials and Supply Fees

N/A

Relation to Program Outcomes (ABET):

Relation to Frogram Outcomes (ADE1).							
Ou	tcome	Coverage*					
1.	An ability to identify, formulate, and solve complex	High					
	engineering problems by applying principles of						
	engineering, science, and mathematics						
2.	An ability to apply engineering design to produce						
	solutions that meet specified needs with						
	consideration of public health, safety, and welfare,						
	as well as global, cultural, social, environmental,						
	and economic factors						
3.	An ability to communicate effectively with a range	Low					
	of audiences						
4.	An ability to recognize ethical and professional						
	responsibilities in engineering situations and make						
	informed judgments, which must consider the						
	impact of engineering solutions in global,						
	economic, environmental, and societal contexts						
5.	An ability to function effectively on a team whose	Medium					
	members together provide leadership, create a						

collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions	Medium
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	

^{*}Coverage is given as high, medium, or low. An empty box indicates that this outcome is not covered or assessed in the course.

Required Textbooks and Software

- Machine Learning in Materials Science by Keith T. Butler, Felipe Oviedo, Pieremanuele Canepa, freely available at https://doi.org/10.1021/acsinfocus.7e5033.
- Python software and Jupyter notebooks. Freely available through various packages such as Anaconda, Google Colab, and Kaggle.
- Jupyter Notebooks developed by the instructor and made freely available on Github.

Recommended Materials

- Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow by Aurélien Géron, 2nd Edition, O'Reilly 2019, ISBN: 1492032646.
- Supplementary reading and links to various other resources/websites are provided and updated throughout the semester.

Required Computer

UF student computing requirement: https://news.it.ufl.edu/education/student-computing-requirements-for-uf/

Course Schedule

<u> </u>	ourse seneuale							
Week	Class Dates	Topic	Book Chapter					
1	TBA	Introduction						
1		Programming Tools: Introduction to Python						
2	TBA	Math Review, Probability and Statistics						
2		Linear Algebra and Differential Calculus						
	TBA	Applying Machine Learning (ML) to Materials Science						
3		Data Science Tools: Databases and Pandas Data Frames	1					
		Linear Regression: Implementation in Python						
4	TBA	Using PyTorch for model training	1 2					
4		From Linear regression to neural networks						
	TBA	Building Trust in Machine Learning						
5		Validation and Uncertainty	2					
5		Interpretability						
	TBA	Canvas Exam 1						
6	TBA	Autoencoders						
6		Convolutional neural networks						
7	TBA	Machine Learning for Materials Simulations	3					
/		Representing Materials for ML	3					

8	TBA	Which Representation Is Best? Ultra-fast Force Fields	3			
9	TBA	4				
Spring	Break TBA					
	TBA					
10		ML Analysis of Spectral Data	4			
	TBA	Canvas Exam 2				
12	TBA	Closed-Loop Optimization and Active Learning for Materials	5			
12		Black-Box Optimization				
13	TBA	Bayesian Optimization	5			
		Navigating High-Dimensional Spaces	Ŭ.			
	TBA	Discovering New Materials				
14		High-Throughput Virtual Screening	5			
		Direct Optimization with Generative Models				
15	15 TBA Canvas Exam 3					

Important Dates

TBA

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Homework needs to be submitted online on e-learning. Email is not acceptable for submission of homework. Hard copies are also not accepted.

Homework will be evaluated on the following basis:

	100	85	70	0	
Completion	All assigned work is complete.	Most assigned work is complete.	Some assigned work is complete.	Assignment not complete.	
Accuracy	All answers are correct.	Most answers are correct.	Some answers are correct.	Little to no answers are correct.	
Work shown (derivations and figures)	All work shown in detail.	Most work shown in detail.	Several steps or figures missing.	Did not show any work.	

No credit will be given for late unexcused submissions.

Quizzes and Interactive Learning

We will have online preparatory quizzes covering current and recent lecture material. The quizzes will typically consist of ten questions that should take about 20 minutes to answer. The quizzes serve as feedback both for you and me that you understood the pre-recorded video lectures.

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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: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Evaluation of Grades

Assignment	Total Points	Percentage of Final Grade				
Homework Sets (2)	100 each	20%				
Quizzes (weekly)	varies	20%				
Midterm Exam (3)	100	45%				
Project Jupyter	100	15%				
Notebook						
Total		100%				

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73.4 - 76.6	C	2.00
70.0 - 73.3	C-	1.67
66.7 - 69.9	D+	1.33
63.4 - 66.6	D	1.00
60.0 - 63.3	D-	0.67
0 - 59.9	E	0.00

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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.

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U Matter, We Care:

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Counseling and Wellness Center: https://counseling.ufl.edu, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Discrimination, Harassment, Assault, or Violence

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the Office of Title IX Compliance, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, title-ix@ufl.edu

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

Academic Resources

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

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. 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://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/;https://care.dso.ufl.edu.

On-Line Students Complaints: https://distance.ufl.edu/getting-help/ ; https://distance.ufl.edu/state-authorization-status/#student-complaint .

Course|New for request 18750

Info

Request: GMS 6XXX Genomic Surveillance of Infectious Disease

Description of request: I am an Assistant Professor in the Department of Pathology.

I am submitting the syllabus for my new course "GENOMIC SURVEILLANCE OF INFECTIOUS

DISEASE" to be taught in the Spring 2024 for approval.

Submitter: Carla Mavian cmavian@ufl.edu

Created: 9/22/2025 5:09:27 PM

Form version: 2

Responses

Recommended Prefix GMS Course Level 6

Course Number XXX
Lab Code None
Category of Instruction Intermediate
Course Title GENOMIC SURVEILLANCE OF INFECTIOUS DISEASE
Transcript Title GENOMIC SURVEILLANCE
Degree Type Graduate

Delivery Method(s) On-Campus **Co-Listing** No

Effective Term Spring Effective Year 2026 Rotating Topic No Repeatable Credit? No

Amount of Credit 2

S/U Only? No Contact Type Regularly Scheduled Course Type Lecture Weekly Contact Hours 4

Course Description An overview of genomics and phylodynamics of infectious disease. The course will cover the theory and practical sessions focused on genomics of pathogens, microbiome/metagenomics analyses for infectious disease, tree-building algorithms, natural selection, evolutionary models, molecular clocks, coalescence theory, and finally Bayesian phylogenetic analyses. Students will gain a fundamental understanding of the theory and practice of next generation sequencing, phylogenetics, and phylogeography.

Prerequisites MAC2311 or BSC2010 or additional Science or Math classes.

Rationale and Placement in Curriculum Today, understanding the principles of genomics surveillance, from clinical sample to interpretation of the results that allow public health intervention, is critical to foster the next generation of scientists, researchers, clinicians, and public health officials. This course offers both theoretical concepts in next generation sequencing, technology used in from research to clinical settings, in phylogenetics and phylodynamics, which allow us to infer transmission dynamics of pathogens, as well as hands-on practical sessions to use real world data.

Course Objectives The goal of this course is to provide a solid understanding of the basic principles of genomics for infectious disease, molecular evolution, infectious disease transmission dynamics, and molecular epidemiology. The course is designed to enable students to gain a fundamental understanding of the principles of genomic surveillance of infectious disease and hands-on experience with real data, from raw reads to phylogenies. By the end of the course the students will have a solid

understanding of the basic principles of molecular evolution, tree-building algorithms (distance,

maximum likelihood and Bayesian based methods), molecular clocks theory, and coalescence theory. They will also be able to analyze real molecular sequence data (HIV, SARS-CoV-2, Zika, and V. cholerae data sets) to infer maximum likelihood (IQ-TREE) and Bayesian trees (BEAST), calibrate a molecular clock and use coalescence models to investigate the demographic history of microbial epidemics and the relationship between intra-host viral evolution and pathogenesis (BEAST). Course Textbook(s) and/or Other Assigned Reading The literature half of the course will consist of primary research papers posted in Canvas. If you are unfamiliar with phylogenetics, the following books are suggested, but not mandadory:

- The phylogenetic handbook: a practical approach to phylogenetic analysis and hypothesis testing, 2009, Lemey P, Salemi M and Vandamme AM, Cambridge University Press, New York
- Inferring phylogenies, 2004, Felsenstein J, Sinauer Associates Inc, Sunderland, MA.
- The evolution and emergence of RNA viruses, 2009, Holmes E. G., Oxford University Press, Oxford, UK.

Weekly Schedule of Topics This course will meet only for 9 weeks of the semester.

Week 1: Introduction to genomic surveillance of infectious disease: tracing outbreaks and their dynamics

- Intro to genomic surveillance: from the sample to a tree, to public health
- Lessons from the field: HIV, SARS-CoVv-2, Zika, TB, cholera

Week 2: Reference mapping and De novo assembly (theory and practice)

- Introduction to NGS
- Mapping theory: alignment algorithms, error correction
- Graph theory and assembly
- Practical sessions

Week 3: Metagenomics (theory and practice)

- Metagenomics for discovery
- Metagenomics for AMR
- Practical sessions

Week 4: Phylogenetic Inference using Maximum Likelihood methods (theory and practice)

- An overview of the evolutionary theory at the molecular level
- Phylogeny inference: bootstrapping and likelihood ratio based test
- Inferring and interpreting phylogenies: Mega7, IQTREE and FigTree

Week 5: Evolutionary processes: recombination and selection (theory and practice)

- Phylogenetic signal, phylogenetic noise, and recombination
- Brief overview of recombination detection methods How to deal with recombination in bacteria and viruses: GARD, RDP4, Gubbins
- How to deal with selection: HyPhy

Week 6: Bayesian Phylodynamics and Phylogeography (theory and practice)

- Temporal signal and molecular clocks
- Coalescent theory and Bayesian Phylogeography

Week 7: Bayesian Phylodynamics and Phylogeography (Journal Club)

- Hypothesis testing and Bayesian Phylogeography practice
- Journal discussions (student presentations)

Week 8: Bayesian Phylodynamics and Phylogeography (Journal Club)

Journal discussions (student presentations)

Week 9: Bayesian Phylodynamics and Phylogeography (Journal Club)

- Journal discussions (student presentations)
- Final assessment (exam)

Grading Scheme Students' evaluation Evaluation will include the following:

- participation in discussions during classes, 10% (10 points);
- journal club presentation, 30% (30 points);
- final written exam, 60% (60 points).

Grading Scale: Point cut-offs for letter grades

Percentage Earned 93-100 90-92 87-89 83-86 80-82 77-79 73-76 70-72

67-69 63-66 60-62 Below 60

Letter Grade A A- B+ B B- C+ C C- D+

D D- E

Information on current UF grading policies for assigning grade points can be found at the following web site: http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html.

Instructor(s) Carla Mavian
Attendance & Make-up Yes
Accomodations Yes
UF Grading Policies for assigning Grade Points Yes
Course Evaluation Policy Yes

TITLE: Genomic surveillance of infection disease

Instructor: Carla Mavian

Office location: Room 113-F, Emerging Pathogens Institute

Tel: 352-273-5702 Email: cmavian@ufl.edu

Office hours: By appointment Tuesday and Thursday 1-3pm, please contact Karen Cox (kcox.ufl.edu)

to make an appointment.

Course Goals and/Or Objectives: The goal of this course is to provide a solid understanding of the basic principles of genomics for infectious disease, molecular evolution, infectious disease transmission dynamics, and molecular epidemiology. The course is designed to enable students to gain a fundamental understanding of the principles of genomic surveillance of infectious disease and hands-on experience with real data, from raw reads to phylogenies. By the end of the course the students will have a solid understanding of the basic principles of molecular evolution, tree-building algorithms (distance, maximum likelihood and Bayesian based methods), molecular clocks theory, and coalescence theory. They will also be able to analyze real molecular sequence data (HIV, SARS-CoV-2, Zika, and V. cholerae data sets) to infer maximum likelihood (IQ-TREE) and Bayesian trees (BEAST), calibrate a molecular clock and use coalescence models to investigate the demographic history of microbial epidemics and the relationship between intra-host viral evolution and pathogenesis (BEAST).

Instructional Methods: GMS is an introductory course aimed at students interested in learning about the principles and recent advances in genomics and phylodynamics of infectious disease. Each week is divided into two parts: theoretical lectures and practical sessions. Theoretical classes are given in PowerPoint, practical sessions are in markdowns. Reading of the paper and directing thoughtful analysis of the paper will be due at the end of the 7th and 8th week via a 15 minutes power point presentation. Higher grades for the discussion are earned by citing related literature in the discussion to varying degrees, i.e., specific figures or tables.

Required Text: Syllabus, lesson plans, lecture slides, assigned papers will all be accessible online. The exact address will be provided to the students by email prior to class starting. If you are unfamiliar with phylogenetics, the following books are suggested, but not mandadory:

- The phylogenetic handbook: a practical approach to phylogenetic analysis and hypothesis testing, 2009, Lemey P, Salemi M and Vandamme AM, Cambridge University Press, New York
- Inferring phylogenies, 2004, Felsenstein J, Sinauer Associates Inc, Sunderland, MA.
- The evolution and emergence of RNA viruses, 2009, Holmes E. G., Oxford University Press, Oxford, UK.

Weekly Course Schedule

Week 1: Introduction to genomic surveillance of infectious disease: tracing outbreaks and their dynamics

- Intro to genomic surveillance: from the sample to a tree, to public health
- Lessons from the field: HIV. SARS-CoVv-2, Zika, TB, cholera

Week 2: Reference mapping and De novo assembly (theory and practice)

- Introduction to NGS
- Mapping theory: alignment algorithms, error correction
- Graph theory and assembly

Practical sessions

Week 3: Metagenomics (theory and practice)

- Metagenomics for discovery
- Metagenomics for AMR
- Practical sessions

Week 4: Phylogenetic Inference using Maximum Likelihood methods (theory and practice)

- An overview of the evolutionary theory at the molecular level
- Phylogeny inference: bootstrapping and likelihood ratio based test
- Inferring and interpreting phylogenies: Mega7, IQTREE and FigTree

Week 5: Evolutionary processes: recombination and selection (theory and practice)

- Phylogenetic signal, phylogenetic noise, and recombination
- Brief overview of recombination detection methods How to deal with recombination in bacteria and viruses: GARD, RDP4, Gubbins
- How to deal with selection: HyPhy

Week 6: Bayesian Phylodynamics and Phylogeography (theory and practice)

- Temporal signal and molecular clocks
- Coalescent theory and Bayesian Phylogeography

Week 7: Bayesian Phylodynamics and Phylogeography (Journal Club)

- Hypothesis testing and Bayesian Phylogeography practice
- Journal discussions (student presentations)

Week 8: Bayesian Phylodynamics and Phylogeography (Journal Club)

• Journal discussions (student presentations)

Week 9: Bayesian Phylodynamics and Phylogeography (Journal Club)

- Journal discussions (student presentations)
- Final assessment (exam)

Methods by Which Students will be Evaluated and their Grade Determined: Attendance to all lessons is expected. Excused absences follow the criteria of the UF Graduate Catalogue (e.g., illness, serious family emergency, military obligations, religious holidays), and should be communicated to the instructor prior to the missed class day when possible. Regardless of attendance, students are responsible for all material presented in class and meeting the scheduled due dates for class assignments. Personal issues with respect to class attendance or fulfillment of course requirements will be handled on an individual basis.

Post lecture Exam: Exam is multiple choice and will be administered by Honorlock and are closed book and will cover the material taught during the course. They will be administered over three-day windows to accommodate students who work. There will be two exams that

Research paper discussions: Minimally, the discussion post encourages students to express their thoughts on the assigned paper. To get a higher grade, students must cite another related primary research paper and specific data from that paper.

Grading Policy: Students' evaluation Evaluation will include the following:

- participation in discussions during classes, 10% (10 points);
- journal club presentation, 30% (30 points);

• final written exam, 60% (60 points).

Grading Scale: Point cut-offs for letter grades

Percentage	93-	90-	87-	83-	80-	77-	73-	70-	67-	63-	60-	Below
Earned	100	92	89	86	82	79	76	72	69	66	62	60
Letter Grade	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	Е

Information on current UF grading policies for assigning grade points can be found at the following web site: http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html.

To support consistent and accessible communication of university-wide student resources, instructors must include this link to academic policies and campus resources: https://go.ufl.edu/syllabuspolicies. Instructor-specific guidelines for courses must accommodate these policies. If you have previously listed these policies separately on your syllabus, you may provide this link in their place to ensure that syllabuses stay up-to-date, reducing administrative burden without compromising student access to current policies and support services.

Course|New for request 21724

Info

Request: GMS 6XXX Homeostasis and the Brain

Description of request: GMS 6XXX Homeostasis and the Brain

Submitter: Ikiah Young ilyoung@ufl.edu

Created: 7/18/2025 8:47:50 PM

Form version: 1

Responses

Recommended Prefix GMS Course Level 6

Course Number XXX
Lab Code None
Course Title Homeostasis and the Brain
Transcript Title Homeostasis and the Brain
Delivery Method AD - All Distance Learning (100% of course content taught outside of classroom)
Effective Term Earliest Available
Effective Year Earliest Available
Rotating Topic No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No Contact Type Regularly Scheduled Course Type Lecture Weekly Contact Hours 3

Course Description Homeostasis is a fundamental concept in biology and neurobiology, and three of the most-studied themes are Thermoregulation, Body Fluid Balance (including drinking), and Energy Balance (including eating). Major strides have been made in the past few years in going from a description of the behavioral and physiological responses that underlie these mechanisms of homeostasis, to understanding the detailed brain mechanisms involved.

Prerequisites GMS 6007 or permission of the instructor

Co-requisites N/A

Rationale for Placement in the Curriculum Homeostasis and the Brain is an advanced online course designed for students in the UF Biomedical Neuroscience Certificate Program and related graduate programs. Building on foundational knowledge from GMS 6007, this course explores how the brain regulates core physiological processes: thermoregulation, fluid balance, and energy balance to maintain homeostasis.

Placed as an upper-level elective, the course emphasizes recent advances in our understanding of the neural mechanisms underlying homeostatic regulation. It strengthens students' grasp of integrative neurophysiology and prepares them for further study or research in neuroscience, physiology, and biomedical science.

Syllabus Content Requirements All Items Included

Homeostasis and the Brain

Course Number: GMS6XXX

Credit Hours: 3 credit hours

This semester online course is organized into 12 modules, each focusing on a facet of homeostatic regulation of the body by the brain. The primary focus of this course is developing a deeper understanding of how neurological processes regulate various physiological systems to maintain a balance compatible with life and the environment.

Course Goals / Learning Outcomes

Homeostasis is a fundamental concept in biology and neurobiology, and three of the most-studied themes are Thermoregulation, Body Fluid Balance (including drinking), and Energy Balance (including eating). Major strides have been made in the past few years in going from a description of the behavioral and physiological responses that underlie these mechanisms of homeostasis, to understanding the detailed brain mechanisms involved.

At the end of this course, you will have a working knowledge how the brain regulates homeostatic processes of the body and a greater understanding and appreciation of how the nervous system interacts with other physiological systems.

Target Audience

This semester course has been specifically designed for students enrolled in the UF Biomedical Neuroscience Certificate Program. Graduate students attending UF in programs outside of the IDP Neuroscience Program and interested postgraduate and advanced undergraduate students are encouraged to inquire about registration.

Prerequisites

If you are an Online Certificate student or an Online Master's student, GMS 6007 - Fundamentals of Neuroscience, is an absolute prerequisite for taking this course. <u>If you are enrolled somehow without having taken GMS 6007 course, please contact the instructor or drop the course immediately.</u>

Rationale

Homeostasis and the Brain is an advanced online course designed for students in the UF Biomedical Neuroscience Certificate Program and related graduate programs. Building on foundational knowledge from GMS 6007, this course explores how the brain regulates core physiological processes: thermoregulation, fluid balance, and energy balance to maintain homeostasis.

Placed as an upper-level elective, the course emphasizes recent advances in our understanding of the neural mechanisms underlying homeostatic regulation. It strengthens students' grasp of integrative neurophysiology and prepares them for further study or research in neuroscience, physiology, and biomedical science.

Course Director and Instructor

Nick Musselwhite, Ph.D.

Instructional Assistant Professor
Email: nick.musselwhite@ufl.edu



Course Modules & Units

This course is divided into 12 Modules, each lasting one week starting on Monday mornings. Each module is broken down into 1-3 Units, each dealing with a subset of the material that week. Each Unit is accompanied by a Voice Thread presentation, and sometimes with additional reading material. [There is no required text for this course, so the readings are crucial]. Each Module concludes with a multiple-choice quiz on the entire Module (due Saturday 11:59 pm) and a written paper on a relevant topic (due Sunday at 11:59 pm). In addition, each Monday morning you will be assigned a paper submitted by one of your peers for peer review, and this will be due the next day, Tuesday by 11:59 pm. All of these times are in Eastern Standard time: if you are in a different time zone, then YOU must make the conversion/adjustment.

GENERAL COURSE SCHEDULE

Module 1 Thermoregulation Basics

Unit 1 Introduction to Homeostasis

Unit 2 Temperature Receptors

Unit 3 Brain Mechanisms in Fish

Module 2 Thermoregulation in Mammals

Unit 1 Mammalian Thermoregulation & Endotherm Strategies

Unit 2 Molecular Neurobiology

Unit 3 Comparative Thermoregulation

Module 3 Human Thermoregulation

Unit 1 Basics of Human Thermoregulation

Unit 2 Adaptation

Unit 3 Cognitive Aspects of Thermoregulation

Module 4 Body Fluids and Osmoregulation

Unit 1 Body Fluid Composition and Distribution

Unit 2 Osmoregulation

Unit 3 Osmoreceptor Location and Pathways

Module 5 Body Fluid – Volume Regulation

Unit 1 Volume Regulation and Angiotensin

Unit 2 Hypotension Thirst and Aging

Unit 3 Molecular Neurobiology and Hypovolemia

Module 6 Integration of Thirst Sources

Unit 1 Hybrid Dehydrations

Unit 2 Brain Substrates of Hybrid Thirst

Unit 3 Prandial Drinking and Circadian Factors

Module 7 Sodium Homeostasis and Appetite

Unit 1 Characteristics of Sodium Appetite

Unit 2 Brain Mechanisms of Sodium Appetite

Module 8 Macronutrients, Micronutrients, and Metabolism

Unit 1 Eater Classes, Energy, and Energy Balance

Unit 2 Macronutrients

Unit 3 Basic Brain Mechanisms of Feeding

Module 9 Chemosensation: Nose, Tongue, and Gut

Unit 1 Olfaction

Unit 2 Taste

Unit 3 Gut: Enteroendocrine

Module 10 Brain Mechanisms of Eating

Unit 1 Brainstem

Unit 2 Hedonic Mechanisms

Module 11 Special Topics in Feeding



Unit 1 Microbiome
Unit 2 Genetics and Epigenetics
Unit 3 Learning about Food

Module 12 Intersections and Integration
Unit 1 Temperature, Fluid, and Energy Homeostasis

Required Texts

There is no required text for this course, however each unit has a provided selection of required reading comprised of papers from the literature that are vital for your understanding of the material, so these readings are crucial.

VoiceThread/Canvas

- All VoiceThread lectures are accessed directly through the Canvas course website.
 VoiceThread is an asynchronous interaction platform that allows you to post questions
 about the material directly within the lectures using the text, audio, or video + audio
 commenting feature of VoiceThread. VoiceThread is easy to use and you will become familiar
 with it as you work through the Start Module of the course.
- Discussion boards for each Module are available for posting questions about the course materials covered in that Module.
- Online or face-to-face meetings with instructors are available upon request.

ASSIGNMENTS AND EXAMINATIONS

For each of the 12 modules, students will complete a Module Test, Writing Assignment, and Peer Review.

Module Tests (Using Lockdown Browser)

Module Test multiple choice and are due Saturday at midnight (11:59 pm) Once a question is answered and submitted, you will not be able to return to that question. You must answer each question to view the next question. You will be given 60 secs to answer each question on average.

Therefore, it is imperative that you leave yourself enough time on Saturday to take this test.

We highly recommend that you take the online tests during UF Help Desk hours whenever possible so that you can obtain assistance if needed. Moreover, remember that the Canvas server does not have unlimited bandwidth. Therefore, if you wait until 11pm on Saturday night to begin your assignments, many other people around the UF campus are doing the same thing. This stresses the server on our end which may slow loading of test pictures and take away from your time. Taking assessments at the last minute also does not allow for unexpected problems that may occur.

Importantly, the time limit for completing the exam starts when you start the exam. For example, if you begin a 40 min exam 20 minutes before it is due, you will be given only 20 min to complete the exam because it automatically submits your exam when it is due.

Writing Assignments

Each Module contains one Writing Assignment where you will be tasked with discussing a prompt pertaining to that weeks content/subject. Papers should be approximately 800 words in length (not including references). Each paper should contain at a minimum 5 scholarly references, most of which should be from original research papers. These writing assignments are due Sunday at midnight (11:59 pm). References and citations should adhere to the Journal of Neuroscience style guide (this



is a very easy and clean looking reference style). **All references should contain a hyperlink to the material used** (preferably by hyperlinking the DOI). The rubric used for grading these papers can be found on Canvas by clicking the "Rubrics" link in the course sidebar.

Peer Review

The Monday morning following the submission of a writing assignment you will be assigned a fellow student's paper to peer review. You will use the same rubric used by the instructors to grade the peer review essay. There is a great deal of evidence that these peer review assessments greatly improve your comprehension of the materials. These peer reviews are due the next day (Tuesday) at midnight (11:59 pm).

Assignments, quizzes and tests will not be accepted late.

As a rule, unless you have a medical excuse or a confirmed family emergency with appropriate documentation, late assignments, quizzes, and tests will not be accepted. 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. 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 POLICY

There is a lot of material covered in this course. Thus, it is **VERY IMPORTANT** that you set aside sufficient time each week to complete the required work. Students will be expected to complete <u>all requirements for one module each week</u>. There will be no deadline extensions for completion of a module unless granted by the course directors prior to the scheduled completion date. Failure to submit a module assignment by the course deadlines will be recorded as a zero. Once final grades are published, there are no alterations allowed. If a student has an issue with an individual graded assignment, they must address that concern the week of the assignment. Therefore, individual assignment grade changes will not be considered at the end of the course.

Grading Scale

The grade for the course will be based on total points, with the A-B+ boundary probably near 90% and the B-C+ near 80%. I will let you know more about any adjustments to this nearer the end of the course. Each **QUIZ** will be worth about **15 points**, essay **papers 50** points, and **peer reviews 10** points. Thus, each module (except #12 which has no quiz) will have 75 points associated and the 12 module total will be 885 points.

```
93-100% = A

90-92.9% = A-

87-89.9% = B+

83-86.9% = B

80-82.9% = B-

77-79.9% = C+

73-76.9% = C

70-72.9% = C-

67-69.9% = D+

63-66.9% = D

<63% =E
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REQUIRED TECHNOLOGY

- Laptop or desktop computer equipped with microphone and video camera. A microphone and video camera will be used for video conferencing with instructors if you choose to do this. You must have stable internet of > 50 Mbps at your disposal. A computer with at least 12 Mb of internal RAM, running a CPU of at least 1 GHz is recommended. All the images in this course were created with a PC using Windows. While everything should work on a Mac OS system, if there are problems with images, PC to Mac OS encoding difficulties are probably at fault and it is unlikely that you get to retake questions where images don't appear.
 - There is a Canvas app that can be used to access the course using your portable devices. The app is not as good as laptop or desktop computers. <u>Under no</u> circumstances should you take any quiz using a portable device.
 - 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 laptop or desktop computers when working on this course. (While I often use the iOS VT app myself, I have found it to be terribly unreliable. VT often fixes issues rapidly and please feel free to contact their support which is very responsive.)
 - This is an online course. Therefore, travel during the course is the student's choice but because this course is extremely challenging with many time sensitive assignments due every week, optional travel is strongly discouraged. The requirements for high-speed internet and appropriate level computer with a modern operating system are still absolute requirements during travel and are the students' responsibility. Unexpected emergency travel to areas with poor infrastructure can be an excused absence but the course instructors must be advised either prior to or as soon as possible during the emergency travel. Optional travel cannot be disallowed but, again, it is the student's responsibility to ensure the availability of reliable high-speed internet and appropriate computer equipment. Internet failure during optional travel may not be deemed an excused absence.
- Installation of LockDown Browser installation instructions and a practice quiz are under Task 3 of Unit 2 in the Start Module. Prior to starting LockDown Browser, quit all other programs on your computer.
- High speed, broad band internet connection such as DSL or cable. When using LockDown
 Browser your computer should be directly connected to the internet rather than
 accessing using WiFi. A broadband Internet connection is strongly recommended. Slower
 connections should still be able to access e-Learning, but will take longer to load.
- It is highly recommended that you work with Canvas and VT using either the **Firefox or Chrome Browsers.** Only Chrome can be used for Honorlock on a majority of the assessments in this course.
- 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.

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.

COURSE CONDUCT (What is expected of you)

In all course related activities, students are expected to respect one another and use proper language. Students need to be aware that online learning can present significant challenges, particularly to individuals who are not 'self-starters' or those who do not possess good time management skills.

The online classroom is available to you 24 hours a day. Unlike traditional instructional settings in which each student gets the same class, the online setting means that every student gets a different class, the class of his or her choosing. In theory, this type of instruction should be more adaptable to a variety of learning styles. The reality is, however, that some students seem unwilling (we believe all are able) to create their own virtual classroom. This results in procrastination and low quality performance. Recognizing that everyone learns differently, it is impractical to prescribe a 'best way' to approach this course.

You are expected to adhere to the class calendar. If you have a calendar app that you prefer to use, it is recommended that you put the due dates in your app as reminders. The assignments, quizzes and tests associated with the Modules are due on the days and times stipulated on the syllabus and in the Modules section accessed through the Modules menu button in the left-hand menu. While class interaction and group study are encouraged (it is a very effective way to learn in this course), there are no group projects and all assignments should be prepared and completed individually.

Academic Honesty

As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

We fully support the intent of the above statement and will not tolerate academic dishonesty.

All students enrolled in GMS 7795 are expected to follow the University of Florida Honor Code (excerpt above). The full text can be found at: http://regulations.ufl.edu/chapter4/4041-2008.pdf

Student guidelines for ethical behavior can be found at: http://www.registrar.ufl.edu/catalog/policies/students.html.

Please also review the use of copyrighted materials, which can be found on the Health Science Center Library's web page:

http://www.library.health.ufl.edu/services/copyright.htm

A Note on Generative and other Al tools.

The use of artificial intelligence (AI) technologies, including AI-generated content and automated tools, is strictly prohibited for the purpose of completing assignments, projects, or any other course-related tasks. The intention behind this restriction is to ensure that students engage directly with the course material, demonstrate their individual understanding and critical thinking, and foster a fair and



equitable learning environment. Any violation of this AI usage restriction may result in academic penalties, as determined by the course instructor and the academic integrity policies of the University of Florida. Students are encouraged to seek clarification from the instructor if there are any questions about the scope of this restriction or the appropriate methods of completing course assignments. Additionally, while AI tools are very exciting, current models are not great at graduate level neuroscience.

Additional Conduct Policy for this online course PLEASE READ THIS SECTION CAREFULLY

It is strictly forbidden to use a second device such as a cellphone camera to take images of assessments. A first violation of this rule will result in the student receiving a zero for that assessment. A second violation of this rule will result in the student failing the course and this violation being reported to the University. This rule applies in all situations and even applies to taking a screenshot of a completed assignment in order to send to the instructor a dispute about a question. To avoid the need to take screenshots, you can use the comment feature within the test while viewing your results. In the comment, include the assessment title, question number, and issue at hand. Again, this policy is absolute. **There are no exceptions.**

Attendance and Make-up Policy

This is an asynchronous 100% online course so attendance is never required. However, as indicated above, various assessments have hard deadlines. In order to make up an assessment, you must have an excused absence. In general, we want all our students to succeed and are willing to allow wide latitude regarding excused absences. However, in the spirit of fairness to all classmates, we must have some reasonable form of documentation. **Pre-clearance of an absence with the approval of the instructor is the best way to deal with obtaining an excused absence.** If you have an excused absence, extensions will be granted.

Potential excused absences:

- Medical emergencies require documentation.
- Family emergencies require some sort of documentation.
- Intervention of work or military deployment: We value our students who also have careers, therefore, sometimes the students' career can intervene. In this case, it is critical that prior approval for an extension be obtained from the instructor with some form of documentation. Most times, finishing assignments well prior to their deadline ameliorates this type of problem.
- Internet outages: internet outages in your town or neighborhood can be an excused absence. However, a copy of a chat with your ISP or some other strict form of documentation must be provided. Again, finishing assignments early reduces the chances of internet outages affecting your ability to submit assignments.
- Power outages: severe storms occur especially in the spring. Paying attention to weather
 reports indicating potential severe storms should allow you to plan in advance so that a power
 outage does not derail your on-time completion of assignments. However, if a power outage
 does affect your submission deadline, some form of proof from your provider, the internet, or a
 newspaper must be provided. See also travel policy above.
- This list is not completely inclusive and other types of absences can be considered with documentation on a case by case basis.

Excused absences must be consistent with university policies in the <u>Graduate Catalog</u> and require appropriate documentation. Additional information can be found in <u>Attendance Policies</u>.



GETTING HELP

When Do I Contact The Uf Helpdesk?

In the event that you have <u>technical difficulties with E-learning</u>, please contact the UF helpdesk at learning-support@ufl.edu, or (352) 392-4357. 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.

<u>NOTE:</u> 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. 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 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 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. One of the guiz 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 with 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 (Canvas).

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 Zoom meeting.
- 3. If you have questions about the course itself, please reread this handbook before asking a



question. If the answer is not in the handbook, 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.

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 Via 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 in the best case this will include the course number, the module and unit in question, and the item (writing assignment, VT, etc). While this subject line may seem overly complicated it will allow the instructor to easily collate and search for specific questions throughout the course.
- 6. Type your message and add any necessary attachments. Be sure that your subject line adheres to the format indicated above.
- 7. Click "send."

Student Support Services

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/.

For a list of additional student support services links and information please visit: http://www.distance.ufl.edu/student-services.

<u>Special Accommodations</u> - Students requesting disability-related academic accommodations must first register with the Disability Resource Center (http://www.dso.ufl.edu/drc/). This should be cone as early in the semester as possible. The Disability Resource Center will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. The Disability Resource Center is located in 001 Building 0020 (Reid Hall). Their phone number is 352-392-8565.

Course Evaluation Policy Required

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/.



Course|New for request 21553

Info

Request: GMS 6XXX Neurobiology of Learning and Memory I

Description of request: This course is the first in a 2 part series intended to teach our online program the Neurobiology of Learning and Memory. By the end of this course students should be able to describe the anatomical and physiological (mainly LTP) basis of learning and memory. Furthermore, students should be able to describe the experiments that lead up to the presented theories of the neurobiology of learning and memory.

Submitter: Ronald Mandel rmandel@ufl.edu

Created: 5/8/2025 2:01:07 PM

Form version: 1

Responses

Recommended Prefix GMS Course Level 6

Course Number XXX
Lab Code None
Course Title Neurobiology of Learning and Memory I
Transcript Title Neurobiol Learning & Memory I
Delivery Method AD - All Distance Learning (100% of course content taught outside of classroom)
Effective Term Spring
Effective Year 2026
Rotating Topic No
Repeatable Credit? No

Amount of Credit 2

S/U Only? No Contact Type Regularly Scheduled Course Type Lecture Weekly Contact Hours 2

Course Description To understand how the brain learns and remembers requires an integration of psychological concepts and behavioral methods with mechanisms of synaptic plasticity and systems neuroscience. The Neurobiology of Learning and Memory, Third Edition, provides a synthesis of this interdisciplinary field. Each chapter makes the key concepts transparent and accessible to a reader with minimal background in either neurobiology or psychology and is extensively illustrated with full-color photographs and figu

Prerequisites GMS 6705 Functional Human Neuroanatomy

Rationale for Placement in the Curriculum Graduate course for the Biomedical Neuroscience Online Certificate and Master's program. This course is an elective.

Syllabus Content Requirements All Items Included

NEUROBIOLOGY OF LEARNING AND MEMORY I

GMS 7795

2 CREDIT HOURS

SPRING 2024

INSTRUCTORS: Ron Mandel and Nicholas Musselwhite

rmandel@ufl.edu

nick.musselwhite@ufl.edu

OFFICE HOURS: By request via zoom.

COURSE WEBSITE: https://ufl.instructure.com/courses/526792

COURSE COMMUNICATIONS: via email directly or via Canvas

TEXTBOOKS: REQUIRED→THE NEUROBIOLOGY OF LEARNING AND MEMORY BY JERRY W. RUDY, SOLD BY: SINAUER ASSOCIATES IS AN IMPRINT OF OXFORD UNIVERSITY PRESS ISBNS: 9781605359687, 1605359351, 9781605359359, 9781605359342, VENX0ZASAH

course depicting important concepts and experimental data. The course will use most of this book to teach the biological underpinnings of human learning and memory.

PREREQUISITE KNOWLEDGE AND SKILLS: GMS 6705

COURSE GOALS AND/OR OBJECTIVES (REQUIRED): By the end of this course students will be able to describe the anatomical and physiological (mainly LTP) basis of learning and memory. Furthermore, students should be able to describe the experiments that lead up to the presented theories of the neurobiology of learning and memory.

HOW THIS COURSE RELATES TO THE STUDENT LEARNING OUTCOMES IN THE BIOMEDICAL NEUROSCIENCE ONLINE PROGRAM: Learning and memory is a key subject in biomedical neurosciences. For example, Alzheimer's disease is characterized by deficits in learning and memory and is the most common neurodegenerative disorder of the growing aged population. While this course does not directly address AD, the student will understand the brain areas and potential pathologies that lead to learning and memory deficits in AD.

INSTRUCTIONAL METHODS: Online lectures and weekly or biweekly guizzes.

COURSE POLICIES:

ATTENDANCE POLICY: Attendance is asynchronous but there are strict due dates on each quiz

QUIZ/EXAM DATES/POLICIES: Each exam has a strict due date. Excused absences are accepted with appropriate documentation.

MAKE-UP POLICY: With an excused *documented* absence (late assignment), you will be allowed to make up the missed assignment with no penalty. For unexcused absences, the instructor can use their discretion on whether to allow a time extension with some grading penalty, however, typically, the student receives a zero on the missed assignment.

COURSE TECHNOLOGY: Canvas

- http://helpdesk.ufl.edu
- (352) 392-HELP select option 2

ONLINE COURSE EVALUATION: I

"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 semesters, 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.

UF POLICIES:

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES (REQUIRED): "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."

UNIVERSITY POLICY ON ACADEMIC CONDUCT: 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 honesty 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 obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor.

CLASS DEMEANOR OR NETIQUETTE: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats.

GETTING HELP:

For issues with technical difficulties for Canvas, please contact the UF Help Desk at:

- http://helpdesk.ufl.edu
- (352) 392-HELP (4357)
- Walk-in: HUB 132

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from the Help Desk 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.

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

(Required) Should you have any complaints with your experience in this course please visit http://www.distance.ufl.edu/student-complaints to submit a complaint.

GRADING POLICIES:

METHODS BY WHICH STUDENTS WILL BE EVALUATED AND THEIR GRADE DETERMINED: 100% via Chapter tests

There are 8 chapter quizzes in this course and their grades count equally towards the final grade. You can attempt each quiz 2 times and the average of your 2 attempts will be the final grade for that quiz. You will see your incorrect answers after your first attempt. TESTS ARE CLOSED BOOK (see Honor Code above). The test uses HonorLock to lock you into Chrome but you are not strictly proctored. There are recorded VoiceThread lectures for each chapter but the quizzes are based on the written book chapters. The lectures are not all inclusive, therefore, studying from the chapters is necessary to succeed in this course.

GRADING SCALE:

A = 92.5 and above

A = 90.0 to 92.49

B+=87.5 to 89.9

B= 82.5 to 87.49

B-= 80.0 to 84.9

C+= 78.5 to 79.9

C= 72.5 to 78.49

C-= 70 to 72.49

D+= 67.5 to 69.9

D= 62.5 to 67.49

D = 60-62.49

E = less than 60

COURSE SCHEDULE:

A WEEKLY SCHEDULE OF TOPICS AND ASSIGNMENTS:

Available in Canvas

Course|New for request 21554

Info

Request: GMS 6XXX Neurobiology of Learning and Memory II

Description of request: This request is for a 2 credit hour elective course for our online program that is part 2 of a 2 part course series. Learning and memory is a key subject in biomedical neurosciences. For example, Alzheimer's disease is characterized by deficits in learning and memory and is the most common neurodegenerative disorder of the growing aged population. While this course does not directly address AD, the student will understand the brain areas and potential pathologies that lead to learning and memory deficits in AD.

Submitter: Ronald Mandel rmandel@ufl.edu

Created: 5/8/2025 2:08:16 PM

Form version: 1

Responses

Recommended Prefix GMS Course Level 6

Course Number XXX
Lab Code None
Course Title Neurobiology of Learning and Memory II
Transcript Title Neurobiol Learn and Mem II
Delivery Method AD - All Distance Learning (100% of course content taught outside of classroom)
Effective Term Summer
Effective Year 2026
Rotating Topic No
Repeatable Credit? No

Amount of Credit 2

S/U Only? No Contact Type Regularly Scheduled Course Type Lecture Weekly Contact Hours 2

Course Description To understand how the brain learns and remembers requires an integration of psychological concepts and behavioral methods with mechanisms of synaptic plasticity and systems neuroscience. The Neurobiology of Learning and Memory, Third Edition, provides a synthesis of this interdisciplinary field. Each chapter makes the key concepts transparent and accessible to a reader with minimal background in either neurobiology or psychology and is extensively illustrated with full-color photographs and figu

Prerequisites GMS 6XXX Neurobiology of Learning and Memory I

Rationale for Placement in the Curriculum This is an elective course to be taught within our Graduate Biomedical Neuroscience Online Certificate and Master's programs. Learning and memory is a key subject in biomedical neurosciences. For example, Alzheimer's disease is characterized by deficits in learning and memory and is the most common neurodegenerative disorder of the growing aged population. While this course does not directly address AD, the student will understand the brain areas and potential pathologies that lead to learning and memory deficits in AD.

Syllabus Content Requirements All Items Included

NEUROBIOLOGY OF LEARNING AND MEMORY II

GMS 7795

2 CREDIT HOURS

SPRING 2024

INSTRUCTORS: Ron Mandel and Nicholas Musselwhite

rmandel@ufl.edu

nick.musselwhite@ufl.edu

OFFICE HOURS: By request via zoom.

COURSE WEBSITE: https://ufl.instructure.com/courses/526792

COURSE COMMUNICATIONS: via email directly or via Canvas

TEXTBOOKS: REQUIRED→THE NEUROBIOLOGY OF LEARNING AND MEMORY BY JERRY W. RUDY, SOLD BY: SINAUER ASSOCIATES IS AN IMPRINT OF OXFORD UNIVERSITY PRESS ISBNS: 9781605359687, 1605359351, 9781605359359, 9781605359342, VENX0ZASAH

course depicting important concepts and experimental data. The course will use most of this book to teach the biological underpinnings of human learning and memory.

PREREQUISITE KNOWLEDGE AND SKILLS: GMS 7795 Learning and

COURSE GOALS AND/OR OBJECTIVES (REQUIRED): By the end of this course students will be able to describe the anatomical and physiological (mainly LTP) basis of learning and memory. Furthermore, students should be able to describe the experiments that lead up to the presented theories of the neurobiology of learning and memory.

HOW THIS COURSE RELATES TO THE STUDENT LEARNING OUTCOMES IN THE BIOMEDICAL NEUROSCIENCE ONLINE PROGRAM: Learning and memory is a key subject in biomedical neurosciences. For example, Alzheimer's disease is characterized by deficits in learning and memory and is the most common neurodegenerative disorder of the growing aged population. While this course does not directly address AD, the student will understand the brain areas and potential pathologies that lead to learning and memory deficits in AD.

INSTRUCTIONAL METHODS: Online lectures and weekly or biweekly guizzes.

COURSE POLICIES:

ATTENDANCE POLICY: Attendance is asynchronous but there are strict due dates on each quiz

QUIZ/EXAM DATES/POLICIES: Each exam has a strict due date. Excused absences are accepted with appropriate documentation. Students may dispute suspected grading errors but it is absolutely required that they use the "Add a comment" feature from within the quiz in question.

MAKE-UP POLICY: With an excused *documented* absence (late assignment), you will be allowed to make up the missed assignment with no penalty. For unexcused absences, the instructor can use their discretion on whether to allow a time extension with some grading penalty, however, typically, the student receives a zero on the missed assignment.

COURSE TECHNOLOGY: Canvas

- http://helpdesk.ufl.edu
- (352) 392-HELP select option 2

ONLINE COURSE EVALUATION: I

"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 semesters, 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.

UF POLICIES:

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH

DISABILITIES (REQUIRED): "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."

UNIVERSITY POLICY ON ACADEMIC CONDUCT: 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 honesty 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 obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor.

CLASS DEMEANOR OR NETIQUETTE: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats.

GETTING HELP:

For issues with technical difficulties for Canvas, please contact the UF Help Desk at:

- http://helpdesk.ufl.edu
- (352) 392-HELP (4357)
- Walk-in: HUB 132

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from the Help Desk 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.

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

(Required) Should you have any complaints with your experience in this course please visit http://www.distance.ufl.edu/student-complaints to submit a complaint.

GRADING POLICIES:

METHODS BY WHICH STUDENTS WILL BE EVALUATED AND THEIR GRADE DETERMINED: 100% via Chapter tests

There are 11 chapter quizzes in this course and their grades count equally towards the final grade. You can take the test once. TESTS ARE CLOSED BOOK (see Honor Code above). The test uses HonorLock to lock you into Chrome but you are not strictly proctored. There are recorded VoiceThread lectures for each chapter but the quizzes are based on the written book chapters. The lectures are not all inclusive, therefore, studying from the chapters is necessary to succeed in this course. If you need to communicate regarding your score or a specific question on a quiz, you must use the "add a comment" feature that is available when you choose the quiz in "Grades". We will not respond to emails about quizzes.

GRADING SCALE:

A = 92.5 and above

A = 90.0 to 92.49

B+= 87.5 to 89.9

B= 82.5 to 87.49

B-= 80.0 to 84.9

C+=78.5 to 79.9

C = 72.5 to 78.49

C-= 70 to 72.49

D+= 67.5 to 69.9 D= 62.5 to 67.49 D- = 60-62.49 E = less than 60

COURSE SCHEDULE:

A WEEKLY SCHEDULE OF TOPICS AND ASSIGNMENTS:

Available in Canvas see the dynamic Syllabus on the left menu in the course.

Course|New for request 21786

Info

Request: GMS 6XXX Neuroimaging II

Description of request: 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 why the images produced with various neuroimaging modalities appear as they do and how to interpret the content of such imaging data are also encouraged to enroll in this course.

Submitter: Ikiah Young ilyoung@ufl.edu

Created: 8/1/2025 12:54:09 PM

Form version: 1

Responses

Recommended Prefix GMS Course Level 6

Course Number XXX Lab Code None Course Title Neuroimaging II

Transcript Title GMS XXXX Neuroimaging II. SS.

Delivery Method AD - All Distance Learning (100% of course content taught outside of classroom)

Effective Term Earliest Available
Effective Year Earliest Available
Rotating Topic No
Repeatable Credit? No

Amount of Credit 1

S/U Only? No

Contact Type Regularly Scheduled

Course Type Lecture

Weekly Contact Hours Students should have an average of one contact hour per week for the Neuroimaging II course.

Course Description Students with a keen interest in learning about the specific signal and contrast characteristics that allow for visualization of the nervous system will find a great deal of informative content in the Neuroimaging II course offering. During the course, students will learn what types of signals are used to produce neuroimages and how research scientists and clinicians manipulate the contrast characteristics of samples in order to highlight and visualize features of interest.

Prerequisites GMS6793

Co-requisites N/A

Rationale for Placement in the Curriculum This course is intended to be offered to Graduate and Professional students in the online master's and certificate programs in UFs Neuroscience department. This course is slated to serve as an elective offering in our online programs.

Syllabus Content Requirements All Items Included

UNIVERSITY OF FLORIDA COLLEGE OF MEDICINE SYLLABUS

NEUROSCIENCE

GMS7795 Neuroimaging 2 (1 credit hour)

Semester: Summer B
Delivery Format: Online

Instructor Name: Jeremy Flint, PhD

Room Number: N/A

Email Address: iflint@mbi.ufl.edu

Office Hours: Arranged by student request

Graduate Assistant: N/A

Required Course Communications: Email through Canvas

Prerequisites: Satisfactory Completion of the Neuroimaging I course. 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 II course (GMS7795) is designed to build upon the topics introduced in the Neuroimaging I course by delving into the specific image and contrast characteristics which comprise each neuroimaging-related methodology. Assignments in this course are designed to help students understand the content of neruoimages, why they appear as they do (i.e. what factors determine their contrast characteristics and relative signal properties) and what can be inferred about the specimen under investigation based on the content of the observed imaging data.

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 why the images produced with various neuroimaging modalities appear as they do and how to interpret the content of such imaging data 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 cellular and sub-cellular components of neural tissues based on the contrast properties of various histological methods common to neuroimaging.
- Identify which histology stains / contrast techniques are best employed in neuroimaging studies based on application-specific requirements: in-vitro, ex-vivo, or in-vivo.
- Describe the specific protein targets and associated reporter tools which allowed histologists to differentiate between the various components of the nervous system.
- Compare the excitation and emission peaks of the most common fluorophores used in neuroimaging applications.
- Explain the density-based quantification metrics used in X-Ray and Computed Tomography scans
- Compare and contrast the purpose and content of SPECT and PET based neuroimages.
- Identify neural structures observed in an ultrasound image.
- Explain the cellular signaling mechanism responsible for calcium-based functional imaging.
- Identify the contrast characteristics associated with magnetic resonance imaging (MRI) techniques most relevant to neuroimaging studies: T1, T2, Proton Density, FLuid Attenuated Inversion Recovery (FLAIR), Chemical Shift Selective (CHESS) fat saturation, diffusion-weighted imaging (DWI), diffusion-tensor imaging (DTI), arterial spin labeling (ASL), dynamic susceptibility contrast (DSC), blood-oxygen-level-dependent (BOLD) functional imaging, and Quantitative Susceptibility Mapping (QSM).

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 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 to inquire about its content does not allow me to provide you with sufficient educational support since I may not be able to answer your questions in a timely fashion.

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. You may request an assignment deadline extension, but such requests must be submitted to me and approved prior to the deadline if possible. Please reach out via Canvas email as soon as you are aware that you may not meet an assignment deadline or may require an extension.

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 - Neuroimaging and Histology: A Study in Stains and Contrast
2	Mod 2 - Contemporary Light Microscopy
3	Mod 3 - Further Up the Electromagnetic (EM) Spectrum: Energies that Reside
	Beyond the Limits of Visible Light
4	Mod 4 - Further Down the Electromagnetic Spectrum: Ultrasound and Multi-
	Photon Imaging
5	Mod 5 - Further Down the Electromagnetic Spectrum: Magnetic Resonance
	Imaging (MRI)

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 are 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. Portions of books, journal articles, and other multimedia sources required for use as reference material are provided in the Canvas course pages. Sources of this reference material 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 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.

Deadline extensions for the completion of an assignment are requested by the student through Canvas email and granted by me (see Exam/Assignment Policy below).

Course Assignment Point Distribution

Assignment	Points Available
Module 1 Test	100

Module 2 Test	145
Module 3 Test	135
Module 4 Test	155
Module 5 Test	170
	Total Points = 705

GRADING SCALE

Percentage total	Letter Grade	Grade Points
points earned		
93-100	А	4.0
90-92	A-	3.67
87-89	B+	3.33
83-86	В	3.0
80-82	B-	2.67
77-79	C+	2.33
73-76	С	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 <u>UF Attendance Policies</u> 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 <u>technical difficulties with E-learning</u>, 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 guiz guestions 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)
- 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 do your best to locate the answer to your question using the course's reference materials and the internet reference sources available to you. If you are unable to find a satisfactory answer to your question, email me with your inquiry via Canvas.

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 email at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services <u>career.ufl.edu/</u>.

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. <u>teachingcenter.ufl.edu/</u>

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. 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 21691

Info

Request: GMS 6XXX Nutrition, Metabolism, and Human Aging

Description of request: This request proposes the addition of a new graduate-level course, designed to be offered as either a required or elective component within several online distance learning programs administered by the Department of Physiology and Aging. These programs include the online Master's Degrees in Innovative Aging Studies and in Physiology and Aging, as well as the Graduate Certificate in Aging and Geriatric Practice. The course will also be available to graduate students from other programs who are interested in the intersection of nutrition, metabolism, and

Submitter: Rui Xiao rxiao@ufl.edu Created: 6/25/2025 12:10:43 PM

Form version: 1

Responses

Recommended Prefix GMS Course Level 6

Course Number XXX Lab Code None Course Title Nutrition, Metabolism, and Human Aging Transcript Title Nutrition, Metabolism, Aging **Delivery Method** AD - All Distance Learning (100% of course content taught outside of classroom) **Effective Term** Earliest Available Effective Year Earliest Available **Rotating Topic** No Repeatable Credit? No Multiple Offerings in a Single Semester No

Amount of Credit 3

S/U Only? No Contact Type Regularly Scheduled **Course Type** Lecture Weekly Contact Hours 3 weekly contact hours

Course Description "Nutrition, Metabolism, and Human Aging" explores how diet and metabolism affect aging. The course covers changing nutritional needs, evidence-based strategies like caloric restriction and protein optimization, and emerging approaches such as nutraceuticals and microbiome modulation. Students will study the science and practical applications of nutrition to support healthy aging, disease prevention, cognitive health, and longevity.

Prerequisites N/A Co-requisites N/A

Rationale for Placement in the Curriculum As the global population continues to age, a deeper understanding of the complex relationship between nutrition, metabolism, and the biology of aging is essential for promoting healthspan and preventing age-related diseases. This course addresses a critical gap in our graduate curriculum by focusing specifically on how dietary needs and metabolic processes evolve across the lifespan and how targeted nutritional strategies can support healthy aging, cognitive function, chronic disease prevention, and longevity.

Currently, a search for "Nutrition and Aging" courses at UF returns only two undergraduate-level offerings: HSC 2103 Personal and Family Health and HUN 3403 Nutrition Through the Life Cycle. A review of existing graduate-level courses reveals no dedicated offering that integrates nutrition, metabolism, and aging with a strong scientific and clinical foundation. This new course offers a unique perspective by bridging fundamental biology with medical application—reflecting the expertise of the instructor and the Department of Physiology and Aging within the College of Medicine. In addition to covering evidence-based interventions such as caloric restriction, protein optimization, micronutrient support, and microbiome modulation, the course will explore how these approaches translate into clinical outcomes, prevention strategies, and potential treatments for age-related conditions.

This course is intended to be offered as either a required or elective option within several online distance learning programs administered by the Department of Physiology and Aging. These include the online Master's Degrees in Innovative Aging Studies and in Physiology and Aging, as well as the Graduate Certificate in Aging and Geriatric Practice. The course will also be open to graduate students from other programs who have an interest in the intersection of nutrition, metabolism, and aging.

Syllabus Content Requirements All Items Included

Nutrition, Metabolism, and Human Aging

Course Syllabus

Course Number: GMS XXXX

Credit Hours: Three (3) credit hours

Course Format: This online course is tailored for distance learners in an asynchronous format.

Course Description:

"Nutrition, Metabolism, and Human Aging" explores the complex interplay between diet, metabolic processes, and the biological mechanisms of aging. This course examines how nutritional needs evolve across the lifespan and how targeted dietary strategies can influence age-related health outcomes, including chronic disease prevention, cognitive function, muscle preservation, and longevity. Students will engage with current scientific research to evaluate evidence-based interventions such as caloric restriction, protein optimization, micronutrient support, and emerging approaches like nutraceuticals and microbiome modulation. Emphasis is placed on both the physiological foundations and the practical applications of nutritional strategies aimed at promoting healthy aging.

Course Director:

Rui Xiao, PhD Associate Professor Department of Physiology and Aging College of Medicine

Email: <u>rxiao@ufl.edu</u> Phone: 352-273-9389

Office hour: Fridays, 4–5 PM (by appointment only)

Schedule: This course will be offered yearly during each semester.

Course Goals:

The goals of the course are to: (1) Understand the biological foundations of aging and nutrition: Analyze how aging affects human metabolism and nutritional needs, with emphasis on physiological, biochemical, and cellular changes during aging; (2) Evaluate evidence-based nutritional interventions for healthy aging: Critically assess current and emerging dietary strategies aimed at preventing or mitigating age-related diseases, preserving function, and promoting longevity; and (3) Apply scientific knowledge to real-world aging challenges: Develop the ability to translate research findings into practical strategies and interventions that support healthy aging across clinical, community, or personal wellness settings.

Learning Outcomes:

Upon completion of this course, students are expected to be able to:

- 1. Explain the physiological and metabolic changes that occur with aging and how these impact nutritional requirements and health outcomes.
- 2. Communicate evidence-based nutritional strategies tailored to aging populations, considering both individual and public health perspectives.
- 3. Critically analyze scientific literature to evaluate the effectiveness, mechanisms, and limitations of nutritional interventions aimed at promoting healthy aging.

Learning Resources:

- 1. Topic articles will be placed on the course website. The information in these articles is coordinated with online lecture materials and serves as the required text for the course.
- 2. An on-line discussion will be available every week to address questions related to the lectures or other learning material.
- 3. The weekly discussion questions will stimulate critical thinking about issues relevant to that week's topic.

Course Outline and Assignments:

The course is divided into 15 modules. Each module consists of specific reading assignments, videos, and other internet resources. For each module students will: (1) review the learning objectives and corresponding lecture notes; (2) read and complete the assignments as given; (3) participate in weekly discussion boards as assigned.

Discussion Board:

Students will be expected to participate in discussion boards. These discussion boards will be used for addressing questions related to the weekly lecture as well as addressing selected student discussion questions. This discussion board will have an ongoing format, where students may post questions or comments at a convenient time during the week. The course director or instructor for each class session will monitor the discussion board and respond to questions or comments as necessary. Students will be expected to make at least two significant, thoughtful comments for each discussion board.

Projects:

With the completion of each module, students will be required to complete a project. Each project is a bit different; however, the idea is to create content so that the student may use these module projects to help construct the larger final project.

Late Work Policy:

All assignments/projects must be submitted via the deadline provided on the course web site. For assignments that require manual grading (e.g., research papers, projects), unless you have an approved excused absence, a 10% deduction will be applied for each week when the assignment is late.

Grading:

Each student's final grade for the course will be calculated as follows:

- <u>Module Projects: 50%</u>. These projects will be graded according to a rubric defined each week. This may include short papers, presentations, and reflections in response to a writing prompt. Each module project is worth 10 to 25 points and is graded on application of the module content to the specific prompt and media used.
- <u>Discussions/Online forums: 25%.</u>
- <u>Final project (week 15): 25%</u>. Drawing on the material covered throughout this course, identify and discuss your current favorite nutritional intervention for promoting healthy aging. Additionally, select the nutritional strategy you believe holds the greatest future potential in supporting longevity and age-related health? Create a video presentation (PowerPoint with voice-over) with a minimum of 30 slides. Your presentation should:
 - 1. Explain the mechanisms and scientific rationale behind both interventions
 - 2. Compare their advantages, potential benefits, and real-world applications
 - 3. Discuss the challenges, limitations, and areas requiring further research
 - 4. Support your arguments with evidence from current studies and course content.

Grading Scale:

A = 93-100%	C+=77-79%
A - = 90-92%	C = 73-76%
B+=87-89%	C = 70 - 72%
B = 83-86%	D+ = 67-69%
B - = 80 - 82% <	D = 63-66%
D-= 59-62%	E < 59%

A grade of incomplete (I) may be given if a student fails to complete the course as scheduled for unforeseen circumstances beyond the student's control.

Course Schedule:

Schedule	Module			
Week 1	Introduction to Human Nutrition			
VV CCK 1	Basics of nutrients: macronutrients and micronutrients			
	Dietary guidelines and nutritional requirements			
Week 2	Digestion and Absorption of Nutrients			
	Overview of the digestive system			
	Mechanisms of nutrient absorption and transport			
Week 3	Nutrition and Aging: An Overview			
	How nutritional needs change with age			
	 Impact of aging on appetite, digestion, and nutrient requirements 			

Week 4	Aging and the Digestive System
	Age-related changes in digestion and nutrient absorption
	Common gastrointestinal issues affecting elderly nutrition
Week 5	Carbohydrate Metabolism in the Elderly
	 Alterations in glucose tolerance and insulin sensitivity with aging
	 Implications for diet and risk of type 2 diabetes
Week 6	Lipid Metabolism and Aging
	Changes in lipid profiles and fat distribution
	Role of lipids in age-related cardiovascular risk
Week 7	Protein Metabolism and Sarcopenia
	 Protein needs to prevent muscle loss in aging
	Impact of anabolic resistance on muscle protein synthesis
Week 8	Micronutrient Requirements and Deficiencies in Older Adults
	• Common vitamin and mineral deficiencies in aging (e.g., B12, vitamin D, calcium
	Strategies to address micronutrient gaps
Week 9	Energy Metabolism Changes with Aging
.,	 Decline in basal metabolic rate and its nutritional implications
	 Adjusting caloric intake to prevent frailty and weight loss
Week 10	Metabolic Responses to Fasting and Stress in the Elderly
	Differences in metabolic flexibility and recovery
	Risks associated with malnutrition and catabolic stress
Week 11	Nutritional Status in Older Adults
	Nutritional biomarkers sensitive to aging
	Challenges in diagnosing malnutrition and undernutrition in elderly
Week 12	Nutrition's Role in Healthy Aging and Longevity
	• Impact of diet patterns (e.g., Mediterranean, caloric restriction) on aging
	Nutritional interventions to delay aging processes
Week 13	Age-Related Metabolic Disorders
	 Metabolic syndrome, diabetes, and obesity in older populations
	Strategies for supporting healthy metabolism in older adults
Week 14	Gut Microbiota, Nutrition, and Aging
	Interaction between diet, gut microbiota, and metabolism
	Influence on immune function and health in elderly
Week 15	Nutritional Interventions for Healthy Aging
TTOOK IS	Dietary supplements and functional foods
	Personalized nutritional approaches for aging populations

Academic Integrity:

Please review the University's complete policy regarding academic dishonesty, found online in the student handbook: http://www.dso.ufl.edu/judicial/pdffiles/handbook2003.pdf

Students are expected to abide by the University's Academic Honesty Policy, and to adhere to the following pledge:

"We, the member of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

On all work submitted for credit by students at the University 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."

According to the UF Student Guide, Academic dishonesty includes the following.

- Cheating copying another's work for academic gain. Plagiarism representing another's work as your own.
- Bribery offering, giving, soliciting, or receiving goods or services of value for academic gain.
- Misrepresentation altering facts (e.g., signing an absent classmate's name to an attendance sheet).
- Conspiracy planning with others to commit academic dishonesty. Fabrication making up information to avoid punishment or other difficulty.

Copyright Information:

Please also review the policy for the use of copyrighted materials, which can be found on the Health Science Center Library's web page: http://www.library.health.ufl.edu/services/copyright.htm

Acknowledging Use of AI-Generated Content:

When do I need to acknowledge the use of an AI tool?

Any assignments that allow the use of AI tools should include an acknowledgement of your AI use.

Do not assume that you are allowed to use AI tools on an assessment. Check with your instructor if you are unsure. Policies will vary from instructor to instructor.

How do I acknowledge my use of AI?

Include an acknowledgement in an appendix to your assignment or in a location designated by your instructor.

Acknowledgement of how you used AI tools on an assignment should include the following:

- The name of the tool used and a link to the website for the tool
- A description of the type of task you used the tool to accomplish (e.g., generate text, generate images, edit text, generate code, etc.)
- A list of the specific prompt(s) used
- An explanation of how you used the output in your final work

Example Statement:

"I, [student's full name], declare that I have used generative artificial intelligence (AI) as an academic tool in the completion of this assignment. All AI-generated content has been properly cited and attributed to [name of

AI tool used]. The prompts I provided include: [list of prompts], and the resulting output was used to [explain how the output was used]. Despite this assistance, I affirm that the assignment reflects my own understanding, critical thinking, and original work. I acknowledge the college's academic integrity policy and confirm that I have complied with its guidelines. I understand that any violation of this policy may result in disciplinary action."

Accommodation Policy:

Students requesting classroom accommodation must first register with the Dean of Students' office, 202 Peabody Hall, 392-1261. The DSO will provide documentation to the student who must then provide this documentation to the instructor.

Student Support Services:

As a student in a distance learning course or program you have access to the same student support services that on campus students have. For course content questions contact your instructor. 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/. For a list of additional student support services links and information please visit: http://www.distance.ufl.edu/student-services.

Special Accommodations:

Students requesting disability-related academic accommodations must first register with the Disability Resource Center. http://www.dso.ufl.edu/drc/.

The Disability Resource Center will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

Complaints:

Should you have any complaints with your experience in this course please visit http://www.distance.ufl.edu/student-complaints to submit a complaint.

Course Evaluation:

Students are expected to provide thoughtful, professional, and respectful feedback on the quality of instruction in this course by completing the online course evaluations. Your input is valued and helps improve teaching and learning at UF. You can complete evaluations in any of the following ways:

- 1. Via the link emailed to you from **GatorEvals**,
- 2. Through the Gator Evals section in your course menu on Canvas, or
- 3. By visiting the central evaluation portal at https://my-ufl.bluera.com.

Guidance on providing constructive feedback can be found at https://gatorevals.aa.ufl.edu/students/. You will receive a notification when the evaluation period begins.

Course|New for request 21552

Info

Request: GMS 6XXX Rigor and Experimental Design

Description of request: This is a request for an approved required course. This course is intended to strengthen students' practical understanding of Statistics for Neuroscientists. Understanding experimental design and analysis is key to your future success both in our program and afterwards in your scientific career. Even if you choose to leave science, this course will aid your ability to evaluate other's research.

Submitter: Ronald Mandel rmandel@ufl.edu

Created: 5/8/2025 1:50:04 PM

Form version: 1

Responses

Recommended Prefix GMS Course Level 6

Course Number XXX
Lab Code None
Course Title Rigor and Experimental Design
Transcript Title Rigor and Experimental Design
Delivery Method PC - Primarily Classroom (0-49% of course content taught outside of classroom)
Effective Term Fall
Effective Year 2026
Rotating Topic No
Repeatable Credit? Yes

Amount of Credit 2

S/U Only? No Contact Type Regularly Scheduled Course Type Seminar Weekly Contact Hours 2

Course Description This course has 2 intertwined modes of instruction. The course will start with several lectures on pitfalls in neuroscience research related statistics. Then, once per week a student will present a paper focusing on the methods, results, and interpretation of the data by the author. The student is expected to critique how effectively the author tested their hypothesis. Once per week there will be experimental designs from the textbook presented with practical examples of the advantages and disad

Prerequisites GMS6025C Statistics for Neuroscientists

Rationale for Placement in the Curriculum Graduate course that is required for all Neuroscience graduate students in their first year. This course is intended to strengthen you practical understanding of Statistics for Neuroscientists. Understanding experimental design and analysis is key to your future success both in our program and afterwards in your scientific career. Even if you choose to leave science, this course will aid your ability to evaluate other's research..

Syllabus Content Requirements All Items Included

Rigor and Experimental Design Fall 2025 Instructor: Ron Mandel rmandel@ufl.edu

2 CREDIT HOURS

MEETS TUESDAY THURSDAY 2-3PM L1-101

OFFICE HOURS: Zoom by request anytime

COURSE WEBSITE: https://ufl.instructure.com/courses/526791

COURSE COMMUNICATIONS: Ask Ron anything at any time. We can set up

discussions in Canvas upon request

REQUIRED OR RECOMMENDED TEXTBOOKS (REQUIRED): KIRK, R.E., ISBN 9781483305516 DIGITAL, EXPERIMENTAL DESIGN AND ANALYSIS 4th edition → Department is supposed to pay for this

COURSE DESCRIPTION: This course has 2 intertwined modes of instruction. The course will start with several lectures on pitfalls in neuroscience research related statistics. Then, once per week a student will present a paper focusing on the methods, results, and interpretation of the data by the author. The student is expected to critique how effectively the author tested their hypothesis. Once per week there will be experimental designs from the textbook presented with practical examples of the advantages and disadvantages for neuroscience research.

PREREQUISITE KNOWLEDGE AND SKILLS: GMS6025C Statistics for Neuroscientists

COURSE GOALS AND/OR OBJECTIVES (REQUIRED): By the end of this course, each student should feel more confident in designing their dissertation experiments and have a good understanding of hypothesis testing with appropriate statistics.

HOW THIS COURSE RELATES TO THE STUDENT LEARNING OUTCOMES IN THE DEPARTMENT OF NEUROSCIENCE: This course is intended to strengthen your practical understanding of Statistics for Neuroscientists. Understanding experimental design and analysis is key to your future success

both in our program and afterwards in your scientific career. Even if you choose to leave science, this course will aid your ability to evaluate other's research.

INSTRUCTIONAL METHODS: Didactic lectures and interactive student presentations.

COURSE POLICIES:

ATTENDANCE POLICY: You will learn more if you consistently attend class. However, the instructor will treat you as an adult in a manner consistent with university policies that can be found at:

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

QUIZ/EXAM DATES/POLICIES (REQUIRED): Grades are 100% dependent upon class participation.

ASSIGNMENT POLICY (REQUIRED): Each student is expected to pick a date to present, pick their research paper, get approval from the instructor, and present their paper on the agreed upon date.

COURSE TECHNOLOGY: Canvas

http://helpdesk.ufl.edu

• (352) 392-HELP - select option 2

ONLINE COURSE EVALUATION:

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 semesters, 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.

UF POLICIES:

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES (REQUIRED): "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."

UNIVERSITY POLICY ON ACADEMIC CONDUCT: 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 honesty 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 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.

CLASS DEMEANOR OR NETIQUETTE: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats.

GETTING HELP:

For issues with technical difficulties for Canvas, please contact the UF Help Desk at:

- http://helpdesk.ufl.edu
- (352) 392-HELP (4357)
- Walk-in: HUB 132

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from the Help Desk 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.

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

(Required) Should you have any complaints with your experience in this course please visit http://www.distance.ufl.edu/student-complaints to submit a complaint.

GRADING POLICIES:

METHODS BY WHICH STUDENTS WILL BE EVALUATED AND THEIR GRADE DETERMINED (REQUIRED)

INFORMATION ON CURRENT UF GRADING POLICIES FOR ASSIGNING GRADE POINTS:

Class participation meaning consistently asking questions and participation in class discussions.

GRADING SCALE: Consistent class participation and attendance = A. > 2 unexcused absences = B, > 4 unexcused absences = C.

COURSE SCHEDULE:

THIS WILL BE AVAILABLE ON CANVAS AS WELL.

Date L1-101	Name	Paper Link	
1/14/25	Mandel	organizational meeting	
		<u>p-values</u>	
		main Nuzzo paper	
		ASA statement on p	
1/16/25	Mandel	p value fix discussion	
		Odds r it's wrong	
		Lowenstein	
		Watch this: dance of the p	
		<u>values</u>	

1/21/25	Mandel	<u>Nieuwenhuis</u>	
1/23/25	Mandel	Low power problem	
1/28/25	Mandel	Kirk Chapter 1 Nuisance variables	
1/30/25	Mandel	<u>TBA</u>	
2/4/25	Mandel	Kirik Chapter 2 Experimental Design	
2/6/25	Student presentation	ТВА	
2/11/25	Mandel	Kirk Chapter 3 ANOVA	
2/13/25	Student presentation	ТВА	
2/18/25	Mandel	Kirk Chapter 4 Randomized Design	
2/20/25	Student presentation	ТВА	
2/25/25	Mandel	Matthew Shrag Rigor	
2/27/25	Student presentation	ТВА	
0/4/05		Kirk Chapter 5 multiple comparisons	
3/4/25	Mandel	Prism post hoc tests	
		SPSS post hoc tests	
3/6/25	Student presentation	ТВА	
3/11/25	Mandel	Kirk Randomized block design	
3/13//25	Student presentation	ТВА	

3/18-3/20/25	Spring Break	
3/25/25	BAW	
3/27/25	BAW	
4/1/25	Mandel	Kirk chapter 9
4/3/25	Student presentation	ТВА
4/8/25	Mandel	Kirk Heirarchical designs and split plot design chapters 11(brief) and 12 chapter 14
4/10/25	Student presentation	ТВА
4/15/25	Student presentation	ТВА
4/17/25	Mandel	Review of early papers.

Course|New for request 21770

Info

Request: GMS 6706 Functional Human Neuroanatomy II

Description of request: GMS 6705 has recently been modified. This newly requested course is the

second half of GMS 6705.

Submitter: Ronald Mandel rmandel@ufl.edu

Created: 8/8/2025 2:48:34 PM

Form version: 2

Responses

Recommended Prefix GMS

Course Level 6

Course Number 706

Lab Code None

Course Title Functional Human Neuroanatomy II

Transcript Title Functional Human Neuroanatomy

Delivery Method AD - All Distance Learning (100% of course content taught outside of classroom)

Effective Term Summer Effective Year 2026 Rotating Topic No Repeatable Credit? No

Amount of Credit 2

S/U Only? No

Contact Type Regularly Scheduled

Course Type Lecture

Weekly Contact Hours There is a minimum of 2 hours of average content for each week.

Course Description This semester online course is organized into six modules, each of which covers a key human neuroanatomical system in the forebrain. The primary focus of this course is mastery of human neuroanatomy and understanding how the various structures in the brain are connected to form functional neural systems. For all modules in this course, you will work through a new Focus Case Study. Each Focus Case Study describes a patient exhibiting symptoms characteristic of disruption of the neural system bein

Prerequisites GMS 6007 & GMS 6705

Co-requisites NONE

Rationale for Placement in the Curriculum This course is part of the Biomedical Neuroscience Online Graduate Certificate and Masters Programs. It is a degree requirement for both certificate and masters.

Syllabus Content Requirements All Items Included

Functional Human Neuroanatomy II Course Handbook for GMS67XX

Table of contents

Course Description

Course Goals / Learning Outcomes

Course Format

Target Audience

Prerequisites

Course Director and Instructor

Schedule

Learning Resources

Assignments and Examinations

Grading Scale

Grading Policy

Required Technology

Notifications

Course Conduct

Academic Honesty

When do I contact the UF Helpdesk?

When do I post questions to the Course Questions Discussion Board?

When do I email my instructor?

How to email your instructor

Student Support Services

COURSE NUMBER GMS67xx

CREDIT HOURS 2 credit hours

COURSE DESCRIPTION

This semester online course is organized into six modules, each of which covers a key human neuroanatomical system in the forebrain. The primary focus of this course is mastery of human neuroanatomy and understanding how the various structures in the brain are connected to form functional neural systems. For all modules in this course, you will work through a new Focus Case Study. Each Focus Case Study describes a patient exhibiting symptoms characteristic of disruption of the neural system being studied that week. Over the course of the week, you will "solve" the multi-assignment case study using the information presented in the module and in previous modules. These case studies have been designed to help you master the neuroanatomy and functions of the primary neural system under study. At the end of this course you will not only have a working knowledge of forebrain human neuroanatomy, but you will also be able to use this knowledge to explain how disruption of brain structure leads to changes in human behavior and cognition.

COURSE GOALS / LEARNING OUTCOMES

Functional Human Neuroanatomy is a complex but rewarding field of study. The driving force behind studies of the human brain continues to be our desire to explain normal human behavior and cognition and the changes in behavior that often result from injury and disease. In this course we will

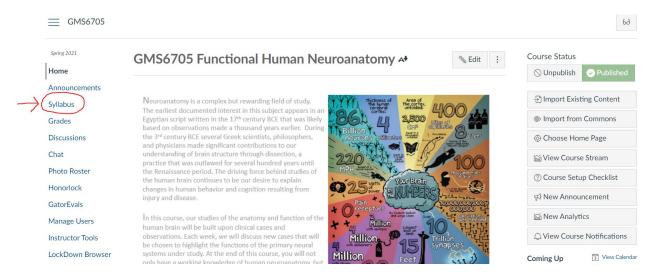
cover the anatomy and functions of key neural systems including visual, auditory, vestibular sensory systems, the higher order motor modulatory systems, the limbic system, and higher cortical function.

At the end of this course, you will not only have a working knowledge of human neuroanatomy, but you will also be able to use this knowledge to explain how disruption of brain structure leads to changes in human behavior.

COURSE FORMAT

The Syllabus

We call the current document the course handbook and this document contains most of the information that is normally found in a typical syllabus. The reason this document is not officially a "syllabus", is, that there is no precise schedule herein. The precise class schedule is found in Canvas and is dynamically updated automatically if a change in the schedule is instituted. You can find the syllabus as shown below.



Course Modules

This course is divided into 6 Modules. All Modules in this course will be completed in 2 weeks. Each Module covers a specific neural system and is broken down into 2-4 Units that contain the core material. You must complete the 6 Modules sequentially, and each Module will be considered complete when you have <u>submitted the Case Study assignments</u>, and completed the Module tests for that module. The flow of the class is strictly controlled. If you do not complete the Case studies or Module tests on time, you will be automatically locked out of the Identification tests, Case Studies, and Module test for the following module which required that item as a prerequisite.

Focus Case Studies

Each Module contains a Focus Case Study that you will "solve" over the course of the week using the information presented in the Module under study and in the previous Modules. Each Case Study contains 2-5 assignments that you will be required to complete sequentially and submit prior to taking the Module tests that accompany each Module.

Units

Each Module is broken down into 2-4 Units that have been designed to improve your ability to access and understand the material presented on the neural system covered in each module. Each Unit contains a reading assignment, a video lecture(s) in VoiceThread format, and a self-check quiz that will allow you to determine how well you have understood the material presented in the unit. Each VoiceThread lecture is ~20-40 min in duration and can easily be viewed slide-by-slide allowing you to view the lectures on your schedule.

Weighting of Quizzes and Assignments

The self-check quizzes will constitute 15% of your final grade and the module tests will constitute 50% of your final grade. The remaining 35% of the final grade will be derived from the Case Study assignments you complete for each module. The content and quality of the Case Study assignments will be evaluated by both instructors.

Unit Self-check quizzes 15% Grade
Module tests 50% Grade
Case Study Assignments 35% Grade

TARGET AUDIENCE

This semester course has been specifically designed for students enrolled in the UF Biomedical Neuroscience Certificate Program. This course is designed to provide a working understanding of Functional Human Neuroanatomy.

PREREQUISITES

If you are an Online Certificate student or an Online Master's student, GMS 6007 and GMS 6705 are an absolute prerequisites for taking this course. <u>If you are enrolled somehow without having taken GMS 6705 course</u>, please drop the course immediately.

COURSE DIRECTOR AND INSTRUCTOR

Nick Musselwhite, Ph.D Lecturer Biomedical Neuroscience Online

Ron Mandel, Ph.D. Instructor
Professor of Neuroscience
Assistant Director of Biomedical Neuroscience Online

Email - see directions below

GENERAL COURSE SCHEDULE

This is a semester course that is offered during the spring semester each year. One course module will be completed each week unless otherwise indicated. In addition to reading assignments, quizzes and tests, students will complete one Focus Case Study each module starting in Module 3.

Start Module (0-1/2 week)

Unit 1 The Course Handbook, Syllabus, and Deadlines

Unit 2 Course Textbooks and Neuroanatomy Websites and Apps

Module 8 The Visual System

Unit 1 The Eye

Unit 2 The Neural Retina

Unit 3 Retinal Output and Central Visual Pathways

Module 9 The Auditory and Vestibular Systems

Unit 1 The Labyrinth and Cochlea

Unit 2 The Vestibule and Semicircular Canals

Unit 3 The Auditory and Vestibular Pathways

Unit 4 Clinical Correlations of Auditory and Vestibular Lesions

Module 10 The Basal Ganglia and Cerebellum

Unit 1 The Basal Ganglia: Anatomy and normal function

Unit 2 The Cerebellum: Anatomy, connectivity, and normal function

Unit 3 Clinical Correlations

Module 11 The Hypothalamus

Unit 1 Hypothalamus anatomy and function

Unit 2 The Autonomic Nervous System

Unit 3 Clinical Correlations of Hypothalamic and ANS Lesions

Module 12 The Limbic System

Unit 1 Limbic System Anatomy

Unit 2 Clinical Correlations of Limbic System Lesions

Module 13 Higher Cortical Function

Unit 1 Multimodal Cortical Association Areas and Cerebral Lateralization

Unit 2 Language

Unit 3 Higher Order Visual Processing

LEARNING RESOURCES

• The following two textbooks are REQUIRED for this course:

1. Neuroanatomy through Clinical Cases, 3rd Edition. Author: Hal Blumenfeld. Sinauer Associates, Inc. 2021. I recommend you buy the hardcopy from a friend or a vendor like Amazon because I do not like the eBook interface. However, if you are interested in the eBook the link is below (if you have any trouble obtaining this book please notify me immediately).

3rd Edition: <u>https://www.vitalsource.com/products/neuroanatomy-through-clinical-cases-hal-blumenfeld-v9681605359632</u>

2. Neuroanatomy in Clinical Context: An Atlas of structures, Sections, Systems, and Syndromes. Haines, D.E. 11th edition., ISBN/ISSN 9681496386936, https://shop.lww.com/Neuroanatomy-Atlas-in-Clinical-Context/p/9781975197292?srsltid=AfmBOopz5LLDndOGyKS5nLqfMxcrR0btWVbMHuKISEy25fkevb4Q3gTC

 We will also be providing you with specific relevant Chapters from Medical Neuroscience Authors: Stephen E. Nadeau, Tanya S. Ferguson, Edward Valentstein, Charles J. Vierk, Jeffrey C. Petruska, Wolfgang J. Streit and Louis A. Ritz, Saundars 2004, ISBN 0-6216-0249-5 (out of print) as supplementary reading.

- All VoiceThread lectures are accessed directly through the Canvas course website.
 VoiceThread is an asynchronous interaction platform that allows you to post questions
 about the material directly within the lectures using the text, audio, or video + audio
 commenting feature of VoiceThread. VoiceThread is easy to use and you will become familiar
 with it as you work through the Start Module of the course.
- Each unit contains a self-check online quiz that is designed to reinforce the materials covered in each unit. These quizzes contain questions that will serve as examples of those comprising the module tests.
- Discussion boards for each Module are available for posting questions about the course materials covered in that Module.
- Online or face-to-face meetings with instructors are available upon request.

Assignments and Examinations

SELF-CHECK QUIZZES, MODULE TESTS, and FOCUS CASE STUDIES

For each of the 6 modules, students will complete 3-4 self-check unit quizzes and two module tests (identification, chapter fact test). For all modules, you will need to display competency in the identification of neuroanatomical structures in order to progress to the in a fact-based chapter test and the focus case studies (competency = an average of 70% within up to 4 attempts). For modules 3-6 students will also complete a multi-part case study. Most Modules are covered in 2 weeks. All self-check quizzes for the modules are due on the Thursday or Friday of that week at 11:59 pm.

SELF-CHECK QUIZZES

Each unit is accompanied by a self-check quiz that is designed to allow you to determine how well you know the material in that unit. These quizzes will be taken under the same conditions as the identification and module tests – that is they will be taken using Honorlock without intrusive proctoring, they will be timed, and <u>once a question is answered and submitted, you will not be able to return to that question. You must answer each question to view the next question.</u> You will be given 1 min to answer each question on average.

You must complete all self-check quizzes for a specific Module by 11:59 pm on the Thursday or Friday (as indicated on the dynamic syllabus in Canvas or on the quiz itself) before the Module tests are due. You will see which questions you missed immediately. Self-check quizzes are intended to help you study by focusing extra study on the questions that you missed.

The reasons for completing these guizzes by this deadline are:

- 1. You will not be able to access the quizzes after 11:59 on Thursday and will receive zero points for quizzes not completed by the deadline.
- 2. Taking these low stakes quizzes by 11:59 on Thursday will enable you to determine what materials you don't understand and will give you an opportunity to obtain help with this material on Friday-Saturday before taking the module tests on Sunday. The instructor will have limited availability for answering questions on Sunday.
- 3. The answers for the self-check quizzes taken each week will be made available to you automatically. You must have submitted the quiz to see the answers. The correct answers may not be shown (many questions are accompanied by explanations) because you are expected to figure out the correct answer as a study method for the final module test.

IDENTIFICATION TEST (using Honorlock)

The first weekly quiz will consist of **neuroanatomical identification** questions that are mainly multiple choice but some do contain some fill-in-the-blank. The ID test is due at 11:59 pm on every Friday starting with module 3 (Mod 1-2 on Saturday). In the identification module test, the <u>questions will be randomized and will be presented one-at-a-time. Once a question is answered and submitted, you will not be able to return to that question. You must answer each question to view the next <u>question.</u> You will be given an average of 20 sec to answer each question. You must achieve an average of 70% correct answers on this module test to be allowed to matriculate to the chapter test due on Sunday. Canvas is set to keep your average score and it doesn't matter how many attempts you use of the 4, you must meet the 70% average benchmark or above. You may take the ID test as many as 4 times to achieve the 70% benchmark. If you fail to reach the 70% benchmark for an ID test, you must contact one of the course directors to allow an additional attempt. Five points will be deducted from the ID test score for each additional attempt. Due to the way Canvas operates, the points will be deducted just prior to calculation of the final grades for the course. **Therefore, it is imperative that you leave yourself enough time on Friday to take this test multiple times or you may be locked out of the next module test. This then locks you out of the following**</u>

module tests for the rest of the class (this is a Canvas feature that cannot be defeated by the Instructor). See below for excused absence policy.

We allow 4 attempts for ID tests because achieving a 70% average or above can be difficult. Because teaching 3 dimensional neuroanatomy on a 2 dimensional screen can be challenging, we intend for you to study for the ID test and do your best on each attempt, studying your hopefully few misses until you meet the 70% benchmark. Keeping the average score makes each ID test attempt equally valuable and makes achieving the 70% potentially difficult especially if you score low on any of your early attempts.

CHAPTER TEST (using LockDown Browser)

The module tests will consist of T/F, multiple choice, matching, fill-in-the-blank, and multiple answer questions. All sections will be timed and taken using LockDown Browser.

The questions will be randomized and will be presented one-at-a-time. Once a question is answered and submitted, you will not be able to return to that question. You must answer each question to view the next question. You will be given an average of 1 min per total points on this module test. Also, in some of these quizzes, there are multiple answer choice questions. Canvas grades these multiple answer questions as follows: Canvas gives proportional points for each correct selection but removes points for each incorrect answer (there are not negative total points for an individual question). For example, if the question is worth 3 points and there are 6 correct choices, and a student answers 4 correct choices and 2 incorrect choices, the student receives +2 points for the correct choices but -1 for the incorrect choices. Therefore, even though 4 choices were correct, the student only receives 1 point total. This is a feature of Canvas and cannot be changed. Therefore, on multiple answer choice questions, it is best not to guess.

We highly recommend that you take the online tests during UF Help Desk hours whenever possible so that you can obtain assistance if needed. Moreover, remember that the Canvas server does not have unlimited bandwidth. Therefore, if you wait until 11pm on Sunday night to begin your assignments, many other people around the UF campus are doing the same thing. This stresses the server on our end which may slow loading of test pictures and take away from your time. Taking assessments at the last minute also does not allow for unexpected problems that may occur.

Importantly, the time limit for completing the exam starts when you start the exam but ends at 11:59pm on the Sunday unless otherwise stated. For example, if you begin a 40 min exam 20 minutes before it is due, you will be given only 20 min to complete the exam because it automatically submits your exam when it is due.

If you attempt to take a quiz and you are asked for an access code, this indicates something wrong with either the HonorLock Chrome extension or Lockdown browser. THERE ARE NO ACCESS CODES REQUIRED TO TAKE QUIZZES IN THIS COURSE.

FOCUS CASE STUDIES

Case study assignments accompany modules 3-6. They consist of 2-5 assignments, each of which must be completed and submitted before the next module is the study is available to you. You must complete and submit the case study assignments for each module before you will be allowed to take

the module tests. Focus case studies are open book and are untimed and unproctored. Although the focus case studies are open book, they are to be completed alone, **they are not group projects**.

For both the module test and the focus case studies, you will eventually be able to see the answers. Because grading can take variable amount of time, the available time to view the results may be variable. That being said, the instructor's goal is to finish grading by each Monday afternoon and if this is achieved, the answers will be available for 24 hours after the grades are posted.

OUTSIDE SOURCES

The field of Neuroscience is among the fastest moving fields of research. In addition, there is far more yet to be known about brain function than we already know. Therefore, it is possible, using outside sources to dispute most, if not all of the questions on each type of assessment by using outside sources that might be seen to contest a presented fact. We can only ask questions that are derived from the learning resources listed in this handbook. There is no question that there are controversies and unknowns in the field of functional human neuroanatomy but you will be tested only on the information presented in this course. For the purposes of this course, the information presented is considered to be solid even if some of the information could legitimately be disputed. Therefore, we can only assess your answers to any assessment type based on the information presented from within this course. While we would never discourage anyone to do outside reading, you will not be awarded points based on some outside source that disputes the answer to any particular question.

This policy may be one of the most important in the course because without this

This policy may be one of the most important in the course because without this policy, we could not assess grades at all.

Assignments, quizzes and tests will not be accepted late.

As a rule, unless you have a medical excuse or a confirmed family emergency with appropriate documentation, late assignments, quizzes, and tests will not be accepted. 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. We will not be receptive to retrospective requests for deadline extensions. Your emails will be responded to within 24 business hours (typically sooner). Our strict rules on accepting late assignments is due to the rapid and dense nature of the course structure. This strict late assignment policy makes it imperative that you try not to wait until the last minute prior to the due date to complete an assignment. By not waiting to the last moment to submit an assignment, you mitigate the potential for unexcused circumstances from preventing you from submitting an assignment.

Cumulative nature of the class

Each module is cumulative, i.e., you will be expected to remember and have mastered the material for past modules. You <u>will</u> be asked questions that require knowledge of previous modules on ID tests, module test and especially focus case studies. Once a learning objective is introduced, you will be expected to know that subject matter from there on out in the course.

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 created within a few minutes of the technical difficulty and submitted as soon as possible (see below).

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.

If the class average reaches 85% or above the following scale for letter grades will apply:

93-100% = A 90-92.9% = A-86-89.9% = B+ 83-86.9% = B 80-82.9% = B-66-69.9% = C+ 63-66.9% = C-66-69.9% = D+ 63-66.9% = D <63% = E

If the class average is < 85% everyone's score will be scaled to a class average of 85% automatically (emailing doesn't accelerate the curving process) and then the above scale will apply. There is no rounding of curved grades. Because final scores are not final until after the last test is completed, it is impossible to answer questions about an individual person's grade prior to the calculation of the final curve. Therefore, emailing the course director prior to the end of the course to ask about your final grade is futile.

GRADING POLICY

There is a lot of material covered in this course. Thus, it is **VERY IMPORTANT** that you set aside sufficient time each week to complete the required work. Students will be expected to complete <u>all requirements for one module each week</u>. There will be no deadline extensions for completion of a module unless granted by the course directors prior to the scheduled completion date. Failure to submit a module assignment, self-check quiz, or module test by the course deadlines will be recorded as a zero. Once final grades are published, there are no alterations allowed. If a student has an issue with an individual graded assignment, they must address that concern the week of the assignment. Therefore, individual assignment grade changes will not be considered at the end of the course.

REQUIRED TECHNOLOGY

- Laptop or desktop computer equipped with microphone and video camera. A microphone and video camera will be used for video conferencing with instructors if you choose to do this. You must have stable internet of > 100 Mbps at your disposal. A computer with at least 16 Mb of internal RAM, running a CPU of at least 1.8 GHz, and a separate graphics card are recommended.
- All the images in this course were created with a PC using Windows. While everything should work on a Mac OS system, if there are sometimes problems with images, PC to Mac OS encoding difficulties are probably at fault and it is certain that you will not get to retake questions where images don't appear. We have gone through the course and reduced the resolution of each image in the chapter tests to 150 dpi which is the screen resolution to try to reduce the problem of images not appearing in tests but this still happens. If this happens to you, you will not receive points but we strongly recommend taking steps to assure your

computer hardware meets the requirements listed above. This issue can also be mitigated by not taking tests during peak server hours which is any time close to 11:59pm on any given day.

- There is a Canvas app that can be used to access the course using your portable devices. The app is not as good as laptop or desktop computers. <u>Under no</u> <u>circumstances should you take any quiz using a portable device.</u>
- 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 laptop or desktop computers when working on this course. (While I often use the iOS VT app myself, I have found it to be terribly unreliable. VT often fixes issues rapidly and please feel free to contact their support which is very responsive).
- This is an online course. Therefore, travel during the course is the student's choice but because this course is extremely challenging with many time sensitive assignments due every week, optional travel is strongly discouraged. The requirements for high-speed internet and appropriate level computer with a modern operating system are still absolute requirements during travel and are the students' responsibility. Unexpected emergency travel to areas with poor infrastructure can be an excused absence but the course instructors must be advised either prior to or as soon as possible during the emergency travel. Optional travel cannot be disallowed but, again, it is the student's responsibility to ensure the availability of reliable high-speed internet and appropriate computer equipment. Internet failure during optional travel may not be deemed an excused absence.
- Installation of LockDown Browser installation instructions and a practice quiz are under Task 3 of Unit 2 in the Start Module. Prior to starting LockDown Browser, quit all other programs on your computer.
- High speed, broad band internet connection such as DSL or cable. When using LockDown
 Browser your computer should be directly connected to the internet rather than
 accessing using WiFi. A broadband Internet connection is strongly recommended. Slower
 connections should still be able to access e-Learning, but will take longer to load.
- Install Honorlock as an add on to Chrome
 - 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.
- It is highly recommended that you work with Canvas and VT using either the Firefox or Chrome Browsers. Only Chrome can be used for Honorlock on a majority of the assessments in this course.
- 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.

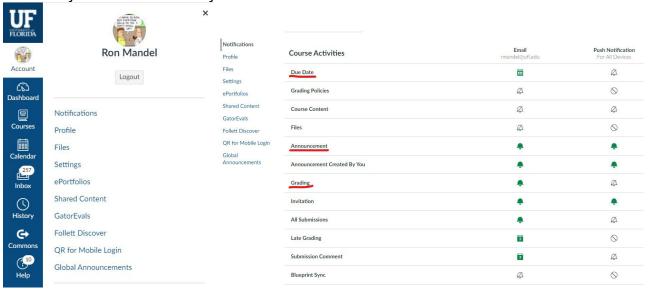
Software Use

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.

NOTIFICATIONS

The complicated nature of this course in Canvas necessitates the liberal use of announcements. Moreover, after tests are graded and released, you can get notifications of the test opening. Without these notifications, you may miss important course information or your chance to go over your test results in detail. Therefore, it is critical that you set up your notifications in Canvas under your account to your own specifications. Below are 2 figures showing you the location of your notifications in Canvas and suggested settings. Choose 'Notifications' from the 'Account' tab, set which notifications and how you wish to receive your chosen notifications as shown.



COURSE CONDUCT (What is expected of you)

In all course related activities, students are expected to respect one another and use proper language. Students need to be aware that online learning can present significant challenges, particularly to individuals who are not 'self-starters' or those who do not possess good time management skills.

The online classroom is available to you 24 hours a day. Unlike traditional instructional settings in which each student gets the same class, the online setting means that every student gets a different class, the class of his or her choosing. In theory, this type of instruction should be more adaptable to a variety of learning styles. The reality is, however, that some students seem unwilling (we believe all are able) to create their own virtual classroom. This results in procrastination and low quality performance. Recognizing that everyone learns differently, it is impractical to prescribe a 'best way' to approach this course.

You are expected to adhere to the class calendar. If you have a calendar app that you prefer to use, it is recommended that you put the due dates in your app as reminders. The assignments, quizzes and tests associated with the Modules are due on the days and times stipulated on the syllabus and in the also shown in the 'To Do' section on the right side of the course home page. While class interaction

and group study are encouraged (it is a very effective way to learn in this course), there are no group projects and all assignments must be prepared and completed individually.

ACADEMIC HONESTY

As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

We fully support the intent of the above statement and will not tolerate academic dishonesty.

All students enrolled in GMS 6605 are expected to follow the University of Florida Honor Code (excerpt above). The full text can be found at: http://regulations.ufl.edu/chapter4/4041-2008.pdf

Student guidelines for ethical behavior can be found at: http://www.registrar.ufl.edu/catalog/policies/students.html.

Please also review the use of copyrighted materials, which can be found on the Health Science Center Library's web page:

http://www.library.health.ufl.edu/services/copyright.htm

Additional Conduct Policy for this online course PLEASE READ THIS SECTION CAREFULLY

It is strictly forbidden to use a second device such as a cellphone camera to take images of assessments. A first violation of this rule will result in the student receiving a zero for that assessment. A second violation of this rule will result in the student failing the course and this violation being reported to the University. This rule applies in all situations and even applies to taking a screenshot of a completed assignment in order to send to the instructor a dispute about a question. To avoid the need to take screenshots, you must use the "add a comment" feature within the test while viewing your results. In the comment, include the assessment title, question number, and issue at hand. Again, this policy is absolute. We do not respond to emails disputing test results, only comments within the test are accepted. There are no exceptions.

Attendance and Make-up Policy

This is an asynchronous 100% online course so attendance is never required. However, as indicated above, various assessments have hard deadlines. In order to make up an assessment, you must have an excused absence. In general, we want all our students to succeed and are willing to allow well documented excused absences. In the spirit of fairness to all classmates, we must have some reasonable form of documentation. Pre-clearance of an absence with the approval of the instructor is the best way to deal with obtaining an excused absence. Technical difficulties must be documented by a Help Desk ticket (see below). In the absolute best case, the Help Desk Ticket should be documented prior to the due deadline of the assignment. However, if you waited until the last minute (which, while being your right, is not advisable), and the technical problem occurs during the assignment, the timestamp of the Help Desk Ticket must be very close to the closing deadline of the assignment. If you have an excused absence, extensions will be granted.

Potential excused absences:

- Medical emergencies require documentation.
- Family emergencies require some sort of documentation.
- Intervention of work or military deployment: We extremely value our students who also have careers, therefore, sometimes the students' career can intervene. In this case, it is critical that prior approval for an extension be obtained from the instructor with some form of documentation. Most times, finishing assignments well prior to their deadline ameliorates this type of problem.
- Internet outages: internet outages in your town or neighborhood can be an excused absence. However, a copy of a chat with your ISP or some other strict form of documentation must be provided. Again, finishing assignments early reduces the chances of internet outages affecting your ability to submit assignments.
- Power outages: severe storms occur especially in the spring. Paying attention to weather
 reports indicating potential severe storms should allow you to plan in advance so that a power
 outage does not derail your on-time completion of assignments. However, if a power outage
 does affect your submission deadline, some form of proof from your provider, the internet, or a
 newspaper must be provided. See also travel policy above.
- This list is not completely inclusive and other types of absences can be considered with documentation on a case by case basis.

Excused absences must be consistent with university policies in the <u>Graduate Catalog</u> and require appropriate documentation. Additional information can be found in <u>Attendance Policies</u>.

WHEN DO I CONTACT THE UF HELPDESK?

In the event that you have <u>technical difficulties with E-learning</u>, please contact the UF helpdesk at learning-support@ufl.edu, or (352) 392-4356. 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. As of this writing, Help Desk is only available during normal week day business hours. Therefore, taking tests at the last minute or even after business hours eastern time is risky because you cannot get instant help. If you email them with your problem, an automated reply will acknowledge your ticket submission. This ticket acknowledgement is an important time stamp to show you documented your problem in a timely fashion. Late work that involves technical difficulties with E-learning <u>MUST</u> be accompanied by a ticket number from the Help Desk.

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.

<u>NOTE:</u> 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. 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 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 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. 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 with 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 (Canvas).

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 Zoom meeting. PS, don't get behind: this course is nearly impossible to make up time in.
- 3. If you have questions about the course itself, please reread this handbook before asking a question. If the answer is not in the handbook, 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 first, your classmates can be a good source.
- 4. There are usually 40 or more students in this class, this makes it difficult for your course director to need to be required to respond to questions that you can figure out on your own OR the answer to which makes absolutely zero difference to your educational experience in this calls. Therefore, please think long and hard about the value of your question regarding the nuts and bolts of how the class functions prior to emailing the instructor.

DO NOT e-mail the instructor with general course questions (see above), the course is run by a computer application that is designed to function automatically.

DO e-mail the instructor if there is a broken link Canvas or something critical is not working (if it is an emergency try Help Desk).

If your question is of a personal nature, e-mail your instructor from within e-learning system using the instructions below.

DO NOT e-mail the instructor to act as your personal study partner. There are too many students in the class for the instructor to function as your personal study mate and it is not fair to the other students in the class who do not get this attention. All the self-checks and chapter tests show you what you got incorrect specifically so you can go back and learn the correct answers on your own. We provide you with all the resources you need to be able to find the answer to every question in this course. The instructor will not answer "what is the right answer?". If you ask this type of question, you will receive a Socratic-style study prompt question in return (as a teaching tool). We understand that you might find this method frustrating but this method is the best teaching strategy and is in line with the practical fact that there are many students in the class. After a due date, trying to use the discussion board to get clarification on a question could be a good strategy if you really can't find an answer on your own and your classmates choose to answer.

DO NOT e-mail the instructor to ask for extra credit. Extra credit assignments that are not available to everyone are not fair. There are no assignments available in the course to act as extra credit. If they are not available to everyone, then they are not 'extra'. This course contains a plethora of assignments, waiting until the end of the semester to try to increase your grade via extra credit is not a viable strategy.

We write all the questions on the assessments. They have been vetted over greater than a 10 year period (100s of people have read and answered these questions successfully). Please read them very carefully. It is impossible to write the type of clinical questions required in this course so that every single person in the world will interpret them in the way we intend them to be interpreted. Through experience, we have learned that there is a tiny subset of people who consistently interpret questions incorrectly or in the way they want to interpret them. Do not email the instructor with your interpretation of the question, it is your job as a student to figure out what we are asking. This type of complaint or the "I just want to understand" email falls under the category of asking the instructor to be your study partner. Repeated violation of this policy can lead to deduction of points at the instructor's discretion.

HOW TO EMAIL YOUR INSTRUCTOR

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 in the best case this will include the course number, GMS 6605, the module in question (1-13), the unit in question (1-6), and the item such as self check #1. While this subject line may seem overly complicated it will allow the instructor to easily collate and search for specific questions throughout the course.

- 6. Type your message and add any necessary attachments. Be sure that your subject line adheres to the format indicated above.
- 7. Click "send."

STUDENT SUPPORT SERVICES

For any technical issues you encounter with your course please contact the UF computing Help Desk at 352-392-4356. For Help Desk hours visit: http://helpdesk.ufl.edu/.

For a list of additional student support services links and information please visit: http://www.distance.ufl.edu/student-services.

<u>Special Accommodations</u> - Students requesting disability-related academic accommodations must first register with the Disability Resource Center (http://www.dso.ufl.edu/drc/). This should be cone as early in the semester as possible. The Disability Resource Center will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. The Disability Resource Center is located in 001 Building 0020 (Reid Hall). Their phone number is 352-392-8565.

Course|New for request 21878

Info

Request: LAS 6XXX Reproduction and Reproductive Justice in the Americas **Description of request:** Course request for permanent graduate course number

Submitter: Margaret Weeks weeksm@ufl.edu

Created: 9/4/2025 2:03:55 PM

Form version: 1

Responses

Recommended Prefix LAS Course Level 6

Course Number XXX
Lab Code None
Course Title Reproduction and Reproductive Justice in the Americas
Transcript Title Reproduction in the Americas
Delivery Method PC - Primarily Classroom (0-49% of course content taught outside of classroom)
Effective Term Earliest Available
Effective Year Earliest Available
Rotating Topic No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No Contact Type Regularly Scheduled Course Type Seminar Weekly Contact Hours 3

Course Description In this seminar, we examine the history of reproduction as a political and social phenomenon in the Americas, including North, South, and Central America as well as the Caribbean. We cover topics such as eugenics, reproduction under slavery, population control, reproductive rights activism, adoption, surrogacy, and reproductive technologies as a means of understanding how societies and governments regulate belonging, citizenship, physical and moral fitness, and gendered behaviors.

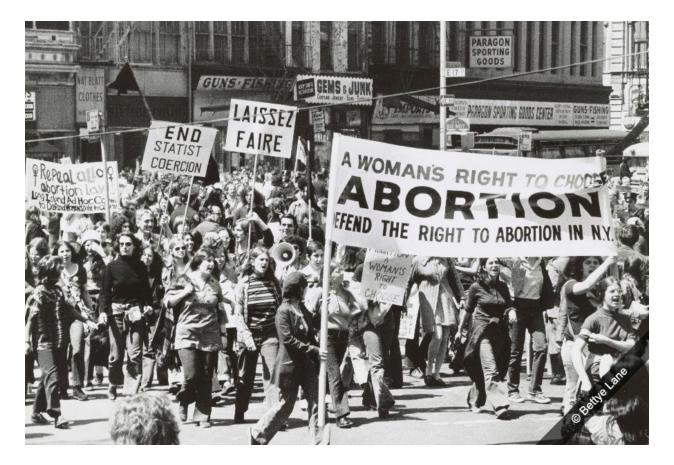
Prerequisites graduate standing, MA or PhD

Rationale for Placement in the Curriculum This course is part of the curriculum for bachelors, as well as graduate-level MA and PhD programs in history, women's and gender studies, Latin American Studies, and other related fields. It is an elective but can count toward the MA in LAS and the undergraduate LAS minor as well as undergraduate and graduate history and WST degrees.

Syllabus Content Requirements All Items Included

LAS4935/6938/WST4930: Reproduction and Reproductive Justice in the Americas Assistant Professor Meg Weeks (weeksm@ufl.edu) Office hours (Grinter 378): Mondays, 2-4pm, Wednesdays, 3-5pm

Spring 2025 Mondays, 9:35-12:35 Grinter 376



Course Description: In this seminar, we will think broadly about reproduction and movements for reproductive justice in the Americas, examining foundational theoretical texts by feminists in the US and Latin America as well as anthropological and historical articles and monographs. Reaching back to the nineteenth century, we will explore the strategies that families and women, including enslaved women, have deployed to carve out reproductive agency for themselves across the region. In the capacious spirit of the reproductive justice (RJ) framework, we will examine efforts to control fertility and terminate unwanted pregnancies, as well as campaigns to end sterilization abuse and advocate for better conditions for parenting. By reading texts on both individual women's reproductive strategies and analyses of social movements making claims for reproductive rights, students will gain an understanding of the political role that sexual discipline, eugenics, reproduction, population control, and childrearing have played in empire, slavery, and nation-building projects. We will also consider the historical forces that have structured the adoption and surrogacy markets, as well as thinking critically about the importance of reproductive justice for queer and incarcerated people. Finally, we will look to the long history of abortion rights activism to examine the recent

decriminalization of abortion in Argentina, Colombia, and Mexico, while seeking to understand the illegality of the procedure in Brazil, El Salvador, and, as of the overturning of *Roe v. Wade* in 2022, a number of US states. Primary sources for this course include foundational theory and praxis texts by the founders of RJ, activist periodicals from the 1970s and '80s, poetry, visual art, and films, in addition to secondary-source historical, sociological, and anthropological texts.

Course Learning Objectives:

- Gain an understanding of the underlying theory and praxis of movements for reproductive justice in the Americas
- Learn how reproduction and reproductive control have been recruited at the service of projects of slavery, pronatalist nationalism, colonialism, and neo-colonialism
- Learn how women from the broader Americas have attempted to secure reproductive autonomy for themselves and their communities
- Understand the dynamics surrounding abortion legislation in the US and Latin America
- Learn how Black, Indigenous, and other grassroots feminists in Latin America have pioneered novel strategies for reproductive autonomy
- Develop varied research skills with the ability to critically analyze a variety of different mediums, both scholarly and cultural
- Develop and refine writing skills through the execution of three written assignments

Recommended Text:

- Radical Reproductive Justice: Foundations, Theory, Practice, Critique, edited by Loretta J. Ross, Lynn Roberts, Erika Derkas, Whitney Peoples, and Pamela Bridgewater Toure (Feminist Press, 2017)

Assignments:

Attendance: 15% Participation: 15%

Weekly Comment/News presentation: 10%

First paper (prompt, 5-7 pages / 1300-1600 words): 15%

Second paper (prompt OR film review or analysis of cultural production, 5-7 pages/ 1300-1600

words): 15%

Final Paper proposal and bibliography: 10%

Final Paper (10-12 pages/3000-3800 words for undergraduates, 12-15 pages/3800-5000 words for

graduate students): 20%

Note: This course meets the UF 6000-word writing requirement

Each week, students will submit a brief **comment or question** (one paragraph maximum, 9 comments total over the course of the semester) that relates to the weekly readings. The comment, which should attempt to cover all readings assigned, will be posted to a collective message board in order to facilitate classroom discussion. **Please include quotations and engage directly with the assigned texts.** Comments should be posted by 8 am each Monday. Students are permitted to skip two weeks over the course of the semester, but you must keep track of your own submissions.

Additionally, in lieu of one weekly comment, each student will briefly present to the class a recent news story about reproduction (I will provide a sign-up sheet).

Attendance and active participation are key to the successful completion of this course. I will assess participation not only on the frequency of contributions to classroom discussion, but also on the quality of comments, which should indicate thoughtful engagement with our assigned readings and other materials.

Please come to class having read the assigned texts and ready to participate in group discussions. If you are unable to read a particular text in a comprehensive manner, try to at least distill its main arguments. If helpful to you, prepare a list of questions in advance of each class so that our discussion will proceed dynamically. I encourage lively, rigorous debate but I ask that you engage with your peers and with me in a respectful manner.

- Attendance and absence policy: If you have to miss class, I ask that you email me to notify
 me of your absence and make every effort to come to office hours to make up the missed
 material. Excused absences require a doctor's note or some other compelling indication of a
 medical or other inability to attend class. Multiple unexcused absences will adversely affect
 your participation grade. Otherwise, requirements for class attendance and make-up exams,
 assignments, and other work in this course are consistent with university policies:
 https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/
- I ask that you make every effort to arrive on time to class, so we can take full advantage of the limited time we have together as a course. Regular tardiness will adversely affect your participation grade.
- I ask that you refrain from texting, chatting, or using your computers for tasks not related to our course during class time. Phones should be kept out of sight for the duration of the class.

Over the course of the semester, students will be expected to submit **three writing assignments**. The first will draw on foundational RJ theory to answer one of two prompts provided by the instructor. This assignment will pertain to historical questions of reproduction and reproductive autonomy. The second assignment is more flexible and can either respond to a prompt or review a film or another work of cultural production (short stories, poetry, visual art, etc.), drawing on RJ theory, history, and critique. The final paper will be an original research project that focuses on any aspect of the history of reproduction or movements for reproductive justice in the Americas and must involve analysis of primary sources and historical argumentation. The nature of these sources can be determined by the student. We will have an opportunity to workshop paper proposals, bibliographies, and paper drafts before the final assignment is due.

Policies and Additional Information

Note This course will count towards the minor/certificate in Latin American Studies. For more information about enrollment in the undergraduate programs offered by the Center for Latin American Studies, contact the undergraduate coordinator Luis Felipe Gómez Lomelí at luisgomezlomeli@ufl.edu. If you are a graduate student, contact the graduate coordinator, Clate Korsant at ckorsant@latam.ufl.edu.

Extension policy: I will grant extensions of up to three days if requested in writing, preferably several days in advance of the original due date. Plan ahead! If extenuating circumstances require a lengthier extension, please contact me and we can work out an alternate submission date.

Late papers: If a student has not requested an extension, I will deduct five points from the final grade each day that the paper is late. Please communicate with me if you are facing circumstances that may challenge your ability to turn an assignment in on time!

Students with disabilities: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center (DRC): https://disability.ufl.edu/get-started/ I ask that students share their accommodation letter with me and reach out to discuss access needs as early as possible in the semester.

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 at the end of the semester. 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/.

Library Use: UF has a world-class library, and I strongly encourage you to make good use of it. The Latin American and Caribbean Collection at Smathers Library has extensive secondary sources in addition to many fascinating collections of primary documents, ready to be analyzed for our final research paper. I suggest you reach out to LACC chief librarian Margarita Vargas-Betancourt (mvargasb@ufl.edu) or one of the other excellent librarians to learn more about the collection and see what possibilities exist for accessing sources either on campus or online. For more information: https://lacc.uflib.ufl.edu/ or stop by the third floor of Smathers Library. Remember to plan ahead! Start thinking about your research topic in October.

UF 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 Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. For more information: https://sccr.dso.ufl.edu/process/student-conduct-code/

ChatGPT and Plagiarism Policy:

The use of uncited AI software is not appropriate for written contributions to this course. These assignments are meant to foster creative, critical, and synthetic thinking through evaluation and integration of course materials, personal experiences, discussion, independent research, and reflection. TURN IT IN and AI detection programs will be used to confirm that written work is original.

Grades will be calculated as follows:

A	100 pts to	93 pts
A-	<93 pts to	90 pts

B+	<90 pts to	87 pts
В	<87 pts to	83 pts
B-	<83 pts to	80 pts
C+	<80 pts to	77 pts
C	<77 pts to	73 pts
C-	<73 pts to	70 pts
D+	<70 pts to	67 pts
D	<67 pts to	63 pts
D-	<63 pts to	60 pts
F	<60 pts to	0 pts

Please consult the UF website for further information on grades and grading policies: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Rubric for papers /100

	Great	Good	Average	Poor	Absent
	19-20	16-18	9-15	2-8	0-1
Analysis	The thesis is	The thesis	The essay is	The thesis is split or	No thesis
-	original.	is	focused on	unclear; the paper	or focus.
	Compelling	interesting.	a single	wanders off-topic.	Or seems
	ideas	At least one	thesis or		AI-
	throughout.	original	idea.		generated.
		perspective			
		in one of			
		the points.			
Evidence	27-30	23-26	15-22	11-14	0-10
	A variety of	Supporting	Supporting	Some evidence, but	Almost no
	support for	evidence	evidence	in key places evidence	detailed
	every claim,	for all	for most of	is vague or missing.	evidence to
	and it is	claims, but	the claims,		support the
	strong,	it is not as	but some		thesis.
	concrete, and	strong or	evidence		
	appropriate.	complete in	may be		
		some areas.	unrelated or		
			vague.		
Organization	19-20	16-18	13-15	7-12	0-6

	Each paragraph is focused and in the proper order. Introduction and conclusion are complementar y. Excellent transitions. In the main, content and not vocabulary, achieves the transition.	Each part of the paper is engaging, but better transitions, more/fewer paragraphs, stronger conclusion are needed.	Clear introduction, body, and conclusion, but some paragraphs may need to be focused or moved.	Some organization, but the paper is "jumpy" without a clear introduction and conclusion. Paragrap hs are not focused or out of order.	Little or no organizatio n.
Language	10	8-9	6-7	4-5	0-3
	Creative word choice and sentence structure enhance the meaning and focus of the paper. Special attention to precise verbs. Avoids cliché.	The language is clear with complex sentence structure but contains minor grammatical errors.	Writing is clear, but sentence structures are simple or repetitive; or repeated grammatical errors.	Grammatical mistakes slightly interfere with the meaning of the paper. Basic and imprecise verbs. Or excessively informal expression.	Frequent and serious grammatica l mistakes make the meaning unclear.
Style/Voic e	9-10	8-9	6-7	4-5	0-3
	A keen sense of the intended audience. The author's voice and the writing convey passion.	The paper addresses the audience appropriatel y and is engaging with a strong sense of voice.	Essay addresses the audience appropriatel y with some examples of creative expression.	Writing is general with little sense of the audience or communication of the writer's voice or passion.	Writing is general with no sense of either the writer or audience. Robotic.
Citations	10	9	7-8	4-6	0-3
	All evidence is well cited in appropriate format.	All evidence is cited, but with minor	Good citations but not	Some citations but either incomplete or inappropriate.	Almost entirely without citations.

format	enough of	Or AI-
errors.	them.	generated
		content.

IMPORTANT: If I notice that a student's writing is in need of improvement prior to the final assignment, I may refer them to the UF Writing Studio. This is not meant as a punishment, and it is not a requirement, just a recommendation. On-campus resources are available so that we can all continue to improve our skills; there is no shame in needing a little extra help. Working with the Writing Studio will allow you to workshop drafts, improve sentence structure, clarify grammatical issues, and get a handle on organization. I strongly suggest availing yourself of this FREE resource to get your writing in top shape!

Writing Studio: 2215 Turlington Hall, 352-846-1138, https://writing.ufl.edu/writing-studio/

Course Schedule:

January 13, Week 1: Course Introduction

January 20: NO CLASS

January 27, Week 2: Theories of Reproduction and Reproductive Justice

- Loretta Ross, et al, "Introduction," and Toni M. Bond Leonard, "Laying the Foundations for a Reproductive Justice Movement," in Radical Reproductive Justice: Foundations, Theory, Practice, Critique, p. 11-31, 39-49
- Laura Briggs, How All Politics Became Reproductive Politics: From Welfare Reform to Foreclosure to Trump, Introduction, p. 1-18
- Lynn M. Morgan and Elizabeth F.S. Roberts, "Reproductive Governance in Latin America," Anthropology & Medicine, p. 241-254

February 3, Week 3: Reproduction Under Slavery and in its Aftermath

- Dorothy Roberts, Killing the Black Body, Chapter One: "Reproduction in Bondage," p. 22-55
- Camillia Cowling, Conceiving Freedom: Women of Color, Gender, and the Abolition of Slavery in Havana and Rio de Janeiro, Introduction, Chapter Three, p. 1-20, 71-96 (Optional, Chapter Eight: 198-213)
- Cassia Roth, "From Free Womb to Criminalized Woman: Fertility Control in Brazilian Slavery and Freedom," *Slavery & Abolition*, p. 269-286
- Optional: Angela Davis, "Reflections on the Black Woman's Role in the Community of Slaves," *The Massachussetts Review*, p. 81-100

February 10, Week 4: Imperialism, Nationalism, and Eugenics

- Laura Briggs, Reproducing Empire: Race, Sex, Science, and US Imperialism in Puerto Rico, Introduction, Chapters Four and Five, p. 1-20, 109-161
- Nancy Stepan, The Hour of Eugenics: Race, Gender, and Nation in Latin America, Introduction, p. 1-20
- Alexandra Minna Stern, "Sterilized in the Name of Public Health: Race, Immigration, and Reproductive Control in Modern California," *American Journal of Public Health*, p. 1128-38

February 17, Week 5: The Origins of Reproductive Justice in the US

- FIRST PAPER DUE ON FEB. 20
- Jennifer Nelson, Women of Color and the Reproductive Rights Movement, Introduction, Chapters 1 & 2, p. 1-83
- Kirsten Swinth, Feminism's Forgotten Fight: The Unfinished Struggle for Work and Family, Introduction and Chapter Six, p. 1-12, 156-179
- Watch The Janes, dir. by Tia Lessin and Emma Pildes

February 24, Week 6: Militant Motherhood and Maternalist Movements

- Meghan Gibbons, "Political Motherhood in the United States and Argentina," in *Mothers Who Deliver: Feminist Interventions in Public and Interpersonal Discourse*, p. 253-78
- Tracy Crowe Morey and Cristina Santos, "Las Madres Guerreras: Testimonial Writing on Militant Motherhood in Latin America" in *Motherhood and War*, p. 61-83
- Susan Francheschet, Jennifer M. Piscopo, Gwynn Thomas, "Supermadres, Maternal Legacies and Women's Political Participation in Contemporary Latin America," *Journal of Latin American Studies*; p. 1-32

March 3, Week 7: Abortion and Family Planning in the Americas 1: Religion, Medicine, and the Law

- Elizabeth O'Brien, "'A Tacit Pact with the State': Constrained Choice and the Politics of Abortion in 1930s Mexico," *Journal of Women's History*, p. 53-75
- Jane Marcus-Delgado, *The politics of abortion in Latin America: public debates, private lives*, Chapters One and Five; p. 1-26, 85-101
- Elise Andaya, Conceiving Cuba: Reproduction, Women, and the State in Post-Soviet Cuba, Introduction and Chapter Four, p. 1-23, 68-92

March 10, Week 8: Abortion and Family Planning in the Americas 2: Struggles from Below

- Mala Htun, Sex and the State: Abortion, Divorce, and the Family Under Latin American Dictatorships and Democracies, Chapter Six, p. 142-171 (Recommended: Skim Chapter One)
- Jane Marcus Delgado, The Politics of Abortion in Latin America, Chapter Four; p. 65-84
- Alba Ruibal, "Using constitutional courts to advance abortion rights in Latin America," International Feminist Journal of Politics, p. 579-599

March 15-23: SPRING BREAK, NO CLASS

March 24, Week 9: Black and Indigenous Feminisms and Efforts to Resist Forced Sterilization

- SECOND PAPER DUE ON MARCH 27
- Rafael de la Dehesa, "Social Medicine, feminism, and the politics of population: From transnational knowledge networks to national social movements in Brazil and Mexico," *Global Public Health*, p. 803-816
- Sônia Beatriz dos Santos, "Controlling black women's reproductive health rights: An impetus to black women's collective organizing," *Cultural Dynamics*, p. 13-30
- Ernesto Vasquez Del Aguila, "Precarious Lives: Forced sterilization and the struggle for reproductive justice in Peru," *Global Public Health*; p. 100-114

March 31, Week 10: Adoption in the Americas: Geopolitics, Race, and Family

- FINAL PAPER PROPOSAL DUE ON APRIL 3

- Kimberly McKee, "Adoption as a Reproductive Justice Issue," Adoption & Culture, p. 74-93
- Laura Briggs, Somebody's Children: The Politics of Transracial and Transnational Adoption Introduction; p. 1-24
- Rachel Nolan, *Until I Find You: Disappeared Children and Coercive Adoptions in Guatemala*, Introduction, p. 1-25
- Podcast: "Adoptive Couple v. Baby Girl" Radiolab: https://radiolab.org/podcast/295210-adoptive-couple-v-baby-girl

April 7, Week 11: Surrogacy in the Americas: Queerness, Disability, and Labor

- Sophie Lewis, Full Surrogacy Now: Feminism Against Family, Chapter One (Recommended: Skim the rest of the book)
- Carolin Schurr and Elisabeth Militz, "The affective economy of transnational surrogacy," Environment and Planning, p. 1626-1645
- Lucía Franco, "Colombia's surrogacy market: Buying a baby for \$4,000," *El País*: https://english.elpais.com/international/2023-01-04/colombias-surrogacy-market-buying-a-baby-for-4000.html
- Podcast: "Birthstory," Radiolab: https://radiolab.org/podcast/birthstory2018

April 14: Week 12: Reproduction Under the Carceral State

- ANNOTATED BIBLIOGRAPHY DUE ON APRIL 17
- Dorothy Roberts, *Killing the Black Body*, Chapter Four, "Making Reproduction a Crime," p. 151-201
- Rachel Roth, "She Doesn't Deserve to Be Treated Like This': Prisons as Sites of Reproductive Injustice" in Radical Reproductive Justice, p. 285-301
- Carolyn Sufrin, "Making Mothers in Jail: Carceral Reproduction of Normative Motherhood," Reproductive BioMedicine and Society Online, p. 55-65

April 21, Week 13: Contemporary Struggles over Reproduction

- Omar Encarnación, "Latin America's Abortion Rights Breakthrough," *Journal of Democracy*, p. 89-103
- Amy Littlefield, "How Does Reproductive Justice Win?" *The New Republic:* https://newrepublic.com/article/167399/how-does-reproductive-justice-sex-education-universal-childcare-food-security-win
- Margaret Talbot, "J.D. Vance and the Right's Call to Have More Babies," *The New Yorker*: https://www.newyorker.com/news/daily-comment/j-d-vance-and-the-rights-call-to-have-more-babies
- Optional: Watch *Clandestinas*, by Renata Correa (https://www.youtube.com/watch?v=AXuKe0W3ZOU&t=304s)

FINAL PAPER DUE DATE: TBD

Course|New for request 21764

Info

Request: MCB 5XXX Clinical Mycology

Description of request: since some students have already taken some of our undergraduate level courses, we are designing 1-credit clinical courses to fill the gaps in their knowledge. These 1-credits courses will be used in the Clinical Laboratory Microbiologist graduate certificate. This request is for the creation of a 1-credit course to teach clinical mycology to graduate students interested in pursuing clinical microbiology career.

Submitter: Anne Mathews anne.mathews@ufl.edu

Created: 8/29/2025 5:14:25 PM

Form version: 2

Responses

Recommended Prefix MCB

Course Level 5

Course Number XXX
Lab Code None
Course Title Clinical Mycology
Transcript Title Clinical Mycology
Delivery Method AD - All Distance Learning (100% of course content taught outside of classroom)
Effective Term Earliest Available
Effective Year Earliest Available
Rotating Topic No
Repeatable Credit? No

Amount of Credit 1

S/U Only? No

Contact Type Regularly Scheduled

Course Type Lecture

Weekly Contact Hours Online asynchronous, 2 contact hours per week

Course Description The study of human pathogenic fungi, focusing on their identification, virulence factors, host interactions, and clinical significance. It reviews traditional and current lab techniques for pathogen isolation, identification, and susceptibility testing, along with integrating lab results with clinical observations to improve patient care.

Prerequisites n/a completion of bachelor of science in microbiology or related field

Co-requisites N/A

Rationale for Placement in the Curriculum Degree level: Graduate

Program: Clinical Laboratory Microbiology graduate certificate

Syllabus Content Requirements All Items Included

Clinical Mycology MCB5XXX

Contact information

Instructor: Dr. Leandro Teixeira (leandroteixeira@ufl.edu) 352-392-8350.

Office: Microbiology and cell science department, Room 1047.

Office hours: 11:00am - 12:00pm (Monday).

Course time and location

This is an asynchronous that course will be taught 100% online and all lectures will be recorded and available through Canvas. This is a 1-credit course that is offered in the Spring and the Fall semester.

Welcome!

Welcome to Clinical Mycology! I am excited to embark on this journey with you as we explore the fascinating world of fungi and their roles in human health and disease. This 100% online course is designed to provide you with a comprehensive understanding of this critical area in microbiology. As we engage with the material, I encourage you to participate actively, ask questions, and collaborate with your peers. Together, we will develop the knowledge and skills necessary for effective clinical practice in the field of diagnostic microbiology.

Course description

The study of human pathogenic fungi, focusing on their identification, virulence factors, host interactions, and clinical significance. This course reviews traditional and current lab techniques for pathogen isolation, identification, and susceptibility testing, along with integrating lab results with clinical observations to improve patient care.

Required Book

Bailey & Scott Diagnostic Microbiology, 15th edition, Tille, Patricia, Elsevier (Mosby) Inc. ISBN: 9780323681056.

Pre-requisite

Applicants must hold a bachelor's degree in microbiology, Biology, or a closely related life science discipline.

Course objectives

By the end of this course, students will be able to:

- 1. Summarize the classification and taxonomy of clinically significant fungi.
- 2. Describe the morphological characteristics of various pathogenic microorganisms and their relevance to clinical diagnostics.
- 3. Explain the mechanisms of pathogenesis for fungi, including their interactions with the host immune system.
- 4. Analyze the clinical significance of fungal infections, including their epidemiology and impact on public health.
- 5. Apply knowledge of laboratory techniques for the identification, isolation, and susceptibility testing of pathogenic microorganisms.
- 6. Correlate clinical findings with laboratory results to facilitate accurate diagnosis and treatment of infectious diseases.
- 7. Evaluate current trends and advancements in clinical mycology research and their implications for practice.
- 8. Effectively communicate complex concepts related to mycology to both healthcare professionals and the public.

These objectives will guide your learning throughout the course and prepare you for practical applications in clinical settings.

Getting started

All course correspondence as well as assignments, exams and discussions will be available via eLearning Canvas Website https://elearning.ufl.edu/. You may also contact the UF help desk at 352-392-HELP, option 2.

Please Remember to check the Announcements and Mail each day in Canvas. "I did not know about the assignment, deadline…" is NOT an accepted excuse. Your instructor will have his/her own Canvas webpage where section specific information will be posted.

All assignments, projects and reports are expected to be submitted electronically through Canvas. Each assignment is processed through Turnitin.com and as such is checked for plagiarism. Students are encouraged to use Draft Coach to check their work for plagiarism before submitting their assignments.

Use of generative AI tools (e.g., ChatGPT, Bard, Copilot) is prohibited for all course assignments and assessments unless explicitly authorized by the instructor. Submissions will be monitored for AI-generated content using detection tools, and violations will be treated as academic misconduct.

Have a Question? Please email us to schedule an online meeting. We are here to help!

Expectations of the students

As a student in the Clinical Microbiology course, you are expected to engage actively and take responsibility for your learning. Here are key expectations to help you succeed:

1. Engagement and Participation

- Participate in discussions to enhance your understanding of the material.
- Contribute thoughtfully to class discussions, sharing insights and asking questions to clarify concepts.

2. Preparation and Study

Complete assigned readings from Bailey & Scott's Diagnostic Microbiology, 15th
 Edition and other provided materials before each class.

 Review lecture notes regularly and prepare for quizzes and assessments to reinforce your knowledge.

3. Critical Thinking and Application

- Approach case studies and problem-solving exercises with a critical mindset, applying theoretical concepts to real-world scenarios.
- Engage in collaborative learning with peers to deepen your understanding and enhance your problem-solving skills.

4. Professionalism and Ethics

- Maintain a professional demeanor in all interactions, respecting the diverse perspectives of your classmates and instructors.
- Adhere to ethical standards in discussions about patient care and the implications of microbiological practices.

5. Time Management and Commitment

- Allocate adequate time each week for study and review, balancing course requirements with other commitments.
- Stay committed to your personal and professional growth throughout the course, seeking help when needed.

By embracing these expectations, you will foster a positive learning environment and enhance your understanding of medical microbiology, preparing you for future endeavors in healthcare or research

Evaluation of learning

Learning will be evaluated based on the following criteria:

Engagement and participation - 20% (100 points)

After watching the class of the week, students must participate in discussion groups via canvas. Active participation is essential for fostering a collaborative learning environment and enhancing understanding of clinical bacteriology concepts. Students are encouraged to contribute thoughtfully to discussions, ask questions, and engage with their peers to deepen their comprehension of course material. Evaluation will be based on the quality and relevance of contributions, as well as the ability to build on

others' ideas and respond to feedback. Regular attendance and active involvement will ensure that students not only enhance their own learning but also enrich the experience for their classmates. The deadline for each discussion section is 11:59pm on the Sunday before the subsequent week's lecture. There will be 13 discussion sections, 3.5 to 4 points each depending on the topic. The rubric for grading your participation in the discussion sections can be found on the course canvas.

Quizzes – 25% (125 points)

After watching the lectures of a chapter, students will have to answer an open book quiz. Quizzes can include videos to be watched or required readings before class. All quizzes are cumulative. There are 14 quizzes, 8 to 9 points each quiz.

Public health project - 25% (125 points)

At the end of the semester, students will record a presentation regarding Public Health issues caused by fungi, in which the students should demonstrate the impact of the microbe in human health, the proper diagnosis methods to identify the pathogen causing the disease, as well as possible treatment. The presentations will be individual and should be presented in PowerPoint format. All students must participate in the presentation as these presentations will be peer reviewed.

• Final Exam - 30% (150 points)

Students must take the final exam in the last week of classes, with a total of 150 points. The exam will cover all chapters taught in this course, ensuring that students not only retain knowledge from recent lectures but also integrate and apply concepts from earlier topics. Students will be evaluated on their ability to demonstrate critical thinking, problem-solving skills, and mastery of the subject matter. It is essential for students to review and synthesize their understanding consistently, as success on the exam will reflect both their ongoing engagement with the course material and their preparedness to apply their knowledge in clinical contexts. Exams will be proctored with Honorlock and students will have 120 minutes to finish the exam. Books and notes are not allowed during the exam.

Cheating (usage of unauthorized support material/notes) will automatically be reported to the Dean of Students Office (DSO) for consideration of disciplinary action.

Items graded	Points	%
Participation	100	20
Quizzes	125	25
Public Health Project	125	25
Exams	150	30
Total	500	100

We don't curve and the grading scale will not be adjusted based on class performance. You will have 2 weeks to challenge your grade and request a change of grade by contacting the course's instructor.

Final grades will be based on the following performance standard:

>92.0%	A	72.0 – 76.99%	С
90.0 - 91.99%	A-	70.0 – 71.99%	C-
87.0 - 89.99%	B+	67.0 – 69.99%	D+
82.0 - 86.99%	В	62.0 - 66.99%	D
80.0 - 81.99%	B-	60.0 - 61.99%	D-
77.0 - 79.99%	C+	<60.0%	E

Course schedule and reading list

Week	Topic	Assessment	Readings
Week 1	Introduction to Mycology:	Week 1 quiz.	Chapter 58
Janura	laboratory safety, specimen		
	management, fungal taxonomy,		
	microscopy & culture basics		
Week 2	Direct microscopic examination	Group discussion 1.	Chapter 58
	techniques: wet mounts, tape,	Week 2 quiz.	
	tease mounts, slide cultures		

Week 3	Specimen processing & culture	Group discussion 2.	Chapter 58
	methods: media, incubation, safety	Week 3 quiz.	
	protocols in mycology lab		
Week 4	Hyaline molds & zygomycetes:	Group discussion 3.	Chapter 59
	morphology, clinical	Week 4 quiz.	
	manifestations, identification		
Week 5	Dermatophytes: skin, nail and hair	Group discussion 4.	Chapter 59
	infections; lab diagnosis and	Week 5 quiz.	
	identification		
Week 6	Opportunistic/systemic hyaline	Group discussion 5.	Chapter 59
	molds (e.g., Aspergillus spp.,	Week 6 quiz.	
	Fusarium, Scedosporium)		
Week 7	Dematiaceous (pigmented) molds:	Group discussion 6.	Chapter 60
	phaeohyphomycosis and	Week 7 quiz.	
	chromoblastomycosis		
Week 8	Mid-course review & integration:	Group discussion 7.	Chapters
	comparison of byoline ve	Mode Causin	50.00
	comparison of hyaline vs	Week 8 quiz.	59,60
	dematiaceous molds, case studies	vveek 8 quiz.	59,60
Week 9		Group discussion 8.	59,60 Chapter 61
Week 9	dematiaceous molds, case studies	·	
Week 9	dematiaceous molds, case studies Opportunistic atypical fungus:	Group discussion 8.	
Week 9 Week 10	dematiaceous molds, case studies Opportunistic atypical fungus: Pneumocystis jirovecii and related	Group discussion 8.	
	dematiaceous molds, case studies Opportunistic atypical fungus: Pneumocystis jirovecii and related organisms	Group discussion 8. Week 9 quiz.	Chapter 61
	dematiaceous molds, case studies Opportunistic atypical fungus: Pneumocystis jirovecii and related organisms Yeasts: Candida, Cryptococcus,	Group discussion 8. Week 9 quiz. Group discussion 9.	Chapter 61
	dematiaceous molds, case studies Opportunistic atypical fungus: Pneumocystis jirovecii and related organisms Yeasts: Candida, Cryptococcus, Malassezia—morphology,	Group discussion 8. Week 9 quiz. Group discussion 9.	Chapter 61
Week 10	dematiaceous molds, case studies Opportunistic atypical fungus: Pneumocystis jirovecii and related organisms Yeasts: Candida, Cryptococcus, Malassezia—morphology, identification, clinical relevance	Group discussion 8. Week 9 quiz. Group discussion 9. Week 10 quiz.	Chapter 61 Chapters 62
Week 10	dematiaceous molds, case studies Opportunistic atypical fungus: Pneumocystis jirovecii and related organisms Yeasts: Candida, Cryptococcus, Malassezia—morphology, identification, clinical relevance Other yeasts and yeast-like fungi:	Group discussion 8. Week 9 quiz. Group discussion 9. Week 10 quiz. Group discussion	Chapter 61 Chapters 62
Week 10	dematiaceous molds, case studies Opportunistic atypical fungus: Pneumocystis jirovecii and related organisms Yeasts: Candida, Cryptococcus, Malassezia—morphology, identification, clinical relevance Other yeasts and yeast-like fungi: emerging pathogens and	Group discussion 8. Week 9 quiz. Group discussion 9. Week 10 quiz. Group discussion 10.	Chapter 61 Chapters 62
Week 10 Week 11	dematiaceous molds, case studies Opportunistic atypical fungus: Pneumocystis jirovecii and related organisms Yeasts: Candida, Cryptococcus, Malassezia—morphology, identification, clinical relevance Other yeasts and yeast-like fungi: emerging pathogens and uncommon isolates	Group discussion 8. Week 9 quiz. Group discussion 9. Week 10 quiz. Group discussion 10. Week 11 quiz.	Chapter 61 Chapters 62 Chapters 62

Week 13	Therapy and prevention strategies:	Group discussion	Chapters 63
	antifungal agents, resistance	12.	
	mechanisms, prophylaxis	Week 13 quiz.	
Week 14	Urinary Tract Infections (UTI)	Group discussion	Chapters 72
	Public Health Project	13.	
		Week 14 quiz.	
		Public Health Project	
		Presentations.	
Final	Final Exam	Final exam	N/A
exams			
week			
	Adopted textbook: Bailey & Scott		
	<i>Diagnostic Microbiology</i> , 15th		
	edition, Tille, Patricia, Elsevier		
	(Mosby) Inc. ISBN:		
	9780323681056.		

Academic Policies and Resources

Academic policies for this course are consistent with university policies. See https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Course|New for request 21765

Info

Request: MCB 5XXX Clinical Parasitology

Description of request: since some students have already taken some of our undergraduate level courses, we are designing 1-credit clinical courses to fill the gaps in their knowledge. These 1-credits courses will be used in the Clinical Laboratory Microbiologist graduate certificate. This request is for the creation of a 1-credit course to teach clinical parasitology to graduate students interested in pursuing clinical microbiology career.

Submitter: Anne Mathews anne.mathews@ufl.edu

Created: 8/29/2025 5:16:44 PM

Form version: 2

Responses

Recommended Prefix MCB Course Level 5

Course Number XXX
Lab Code None
Course Title Clinical Parasitology
Transcript Title Clinical Parasitology

Delivery Method AD - All Distance Learning (100% of course content taught outside of classroom)

Effective Term Earliest Available
Effective Year Earliest Available
Rotating Topic No
Repeatable Credit? No

Amount of Credit 1

S/U Only? No Contact Type Regularly Scheduled Course Type Lecture

Weekly Contact Hours online asynchronous, 2 contact hours per week

Course Description The study of human pathogenic parasites, focusing on their identification, virulence factors, host interactions, and clinical significance. It reviews traditional and current lab techniques for pathogen isolation, identification, and susceptibility testing, along with integrating lab results with clinical observations to improve patient care.

Prerequisites n/a completion of bachelor of science in microbiology or related field

Co-requisites N/A

Rationale for Placement in the Curriculum Degree level: Graduate

Program: Clinical Laboratory Microbiologist graduate certificate

Syllabus Content Requirements All Items Included

Clinical Parasitology MCB5XXX

Contact information

Instructor: Dr. Monika Oli (moli@ufl.edu) 352-392-8434.

Office: Microbiology and Cell Science Department, Room 1047.

Office hours: 11:00am - 12:00pm (Monday).

Course time and location

This course is an asynchronous course that will be taught 100% online and all lectures will be recorded and available through Canvas. This is a 1-credit course that is offered in the Spring and the Fall semester.

Welcome!

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- Explain the mechanisms of pathogenesis for parasites, including their interactions with the host immune system.
- 4. Analyze the clinical significance of parasitical infections, including their epidemiology and impact on public health.
- 5. Apply knowledge of laboratory techniques for the identification, isolation, and susceptibility testing of pathogenic microorganisms.
- 6. Correlate clinical findings with laboratory results to facilitate accurate diagnosis and treatment of infectious diseases.
- 7. Evaluate current trends and advancements in clinical parasitology research and their implications for practice.
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- Contribute thoughtfully to class discussions, sharing insights and asking questions to clarify concepts.

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 Edition and other provided materials before each class.

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- Engage in collaborative learning with peers to deepen your understanding and enhance your problem-solving skills.

4. Professionalism and Ethics

- Maintain a professional demeanor in all interactions, respecting the diverse perspectives of your classmates and instructors.
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- Allocate adequate time each week for study and review, balancing course requirements with other commitments.
- Stay committed to your personal and professional growth throughout the course, seeking help when needed.

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Evaluation of learning

Learning will be evaluated based on the following criteria:

Engagement and participation - 20% (100 points)

After watching the class of the week, students must participate in discussion groups via canvas. Active participation is essential for fostering a collaborative learning environment and enhancing understanding of clinical parasitology concepts. Students are encouraged to contribute thoughtfully to discussions, ask questions, and engage with their peers to deepen their comprehension of course material. Evaluation will be based on the quality and relevance of contributions, as well as the ability to build on

others' ideas and respond to feedback. Regular attendance and active involvement will ensure that students not only enhance their own learning but also enrich the experience for their classmates. The deadline for each discussion section is 11:59pm on the Sunday before the subsequent week's lecture. There will be 13 discussion sections, 3.5 to 4 points each depending on the topic. The rubric for grading your participation in the discussion sections can be found on the course canvas.

• Quizzes – 25% (125 points)

After watching the lectures of a chapter, students will have to answer an open book quiz. Quizzes can include videos to be watched or required readings before class. All quizzes are cumulative. There are 14 quizzes, 8 to 9 points each quiz.

Public health project - 25% (125 points)

At the end of the semester, students will record a presentation regarding to Public Health issues caused by parasites, in which the students should demonstrate the impact of the microbe in human health, the proper diagnosis methods to identify the pathogen causing the disease, as well as possible treatment. The presentations will be individual and should be presented in PowerPoint format. All students must participate in the presentation as these presentations will be peer reviewed.

• Final Exam - 30% (150 points)

Students must take the final exam in the last week of classes, with a total of 150 points. The exam will cover all chapters taught in this course, ensuring that students not only retain knowledge from recent lectures but also integrate and apply concepts from earlier topics. Students will be evaluated on their ability to demonstrate critical thinking, problem-solving skills, and mastery of the subject matter. It is essential for students to review and synthesize their understanding consistently, as success on the exam will reflect both their ongoing engagement with the course material and their preparedness to apply their knowledge in clinical contexts. Exams will be proctored with Honorlock and students will have 120 minutes to finish the exam. Books and notes are not allowed during the exam.

Cheating (usage of unauthorized support material/notes) will automatically be reported to the Dean of Students Office (DSO) for consideration of disciplinary action.

Items graded	Points	%
Participation	100	20
Quizzes	125	25
Public Health Project	125	25
Exams	150	30
Total	500	100

We don't curve and the grading scale will not be adjusted based on class performance. You will have 2 weeks to challenge your grade and request a change of grade by contacting the course's instructor.

Final grades will be based on the following performance standard:

>92.0% A >72.0% C >90.0% A- >70.0% C- >87.0% B+ >67.0% D+				
>87.0% B+ >67.0% D+	>92.0%	Α	>72.0%	С
	>90.0%	A-	>70.0%	C-
	>87.0%	B+	>67.0%	D+
>82.0% B >62.0% D	>82.0%	В	>62.0%	D
>80.0% B- >60.0% D-	>80.0%	B-	>60.0%	D-
>77.0% C+ <60.0% E	>77.0%	C+	<60.0%	E

Course schedule and reading list

Week	Topic	Assessment	Readings
Week 1	Introduction to Parasitology – lab safety, specimen collection, taxonomy, microscopy & general diagnostic methods	Week 1 quiz.	Chapter 46

Week 2	Protozoan diagnostics: amoebae	Group	Chapter 47
	(Entamoeba spp., Acanthamoeba) –	discussion 1.	
	morphology, clinical infections, lab ID	Week 2 quiz.	
Week 3	Flagellates: Giardia, Trichomonas,	Group	Chapter 48
	Dientamoeba – life cycles, clinical	discussion 2.	
	presentation, identification	Week 3 quiz.	
Week 4	Hemoflagellates: Trypanosoma,	Group	Chapter 49
	<i>Leishmania</i> – epidemiology, smear,	discussion 3.	
	culture, molecular methods	Week 4 quiz.	
Week 5	Ciliates: Balantidium coli and emerging	Group	Chapter 50
	protozoan pathogens	discussion 4.	
		Week 5 quiz.	
Week 6	Apicomplexans I: Cryptosporidium,	Group	Chapter 51
	Cyclospora, Isospora – waterborne and	discussion 5.	
	foodborne diseases	Week 6 quiz.	
Week 7	Apicomplexans II: <i>Plasmodium</i> spp.	Group	Chapter 52
	(malaria) – species identification,	discussion 6.	
	staining, rapid diagnostics	Week 7 quiz.	
Week 8	Apicomplexans III: Toxoplasma gondii,	Group	Chapters 53
	Babesia – serology, molecular	discussion 7.	
	methods, clinical relevance	Week 8 quiz.	
Week 9	Tissue protozoa: <i>Leishmania</i>	Group	Chapter 49-
	(cutaneous vs visceral), <i>Others</i> –	discussion 8.	53
	histopathological and clinical	Week 9 quiz.	
	correlation	·	
Week	Trematodes (flukes): Schistosoma,	Group	Chapters 54
10	Fasciola, Paragonimus – egg	discussion 9.	

	morphology, specimen types,	Week 10 quiz.	
	epidemiology		
Week	Cestodes (tapeworms): Taenia,	Group	Chapters 55
11	Echinococcus, Diphyllobothrium – life	discussion 10.	
	cycle, clinical, lab identification	Week 11 quiz.	
Week	Nematodes I: intestinal roundworms –	Group	Chapters 56
12	Ascaris, Trichuris, Enterobius,	discussion 11.	
	Strongyloides	Week 12 quiz.	
Week	Nematodes II: tissue/dog and cat	Group	Chapters 57
13	nematodes – <i>Wuchereria</i> , <i>Loa</i> ,	discussion 12.	
	Onchocerca; Toxocara	Week 13 quiz.	
Week	Case-based scenario review: mixed	Group	Chapters 47-
14	parasitic infections, diagnostic pitfalls,	discussion 13.	57
	clinical decision-making	Week 14 quiz.	
Week	Public Health Project Presentations &	Public Health	N/A
15	Final Exam	Project	
		Presentations	
	Adopted textbook: Bailey & Scott		
	<i>Diagnostic Microbiology</i> , 15th edition,		
	Tille, Patricia, Elsevier (Mosby) Inc.		
	ISBN: 9780323681056.		

Academic Policies and Resources

Academic policies for this course are consistent with university policies. See https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Course|New for request 21911

Info

Request: PHC 6XXX Grant Writing and Evaluation in Multidisciplinary Sciences

Description of request: The College of Public Health and Health Professions request to create new

course PHC6XXX Grant Writing and Evaluation in Multidisciplinary Sciences.

Submitter: April Oneal apriloneal3@ufl.edu

Created: 9/9/2025 1:25:27 PM

Form version: 1

Responses

Recommended Prefix PHC

Course Level 6

Course Number XXX

Lab Code None

Course Title Grant Writing and Evaluation in Multidisciplinary Sciences

Transcript Title Multidiscipline Grant Writing

Delivery Method PC - Primarily Classroom (0-49% of course content taught outside of classroom)

Effective Term Earliest Available
Effective Year Earliest Available
Rotating Tonic No

Rotating Topic No Repeatable Credit? No

Amount of Credit 2

S/U Only? No Contact Type Regularly Scheduled Course Type Lecture Weekly Contact Hours 2

Course Description Students engage in activities to cover grant funding mechanisms offered through multiple federal agencies germane to their respective fields of interest (e.g., NSF, USDA, NIH, EPA, Sea Grant). Students choose relevant funding opportunities and, throughout the course, develop all sections of a full proposal based on agency guidelines. Proposal products are evaluated through a series of student-led mock review panels.

Prerequisites Enrollment in a UF doctoral program or permission of the instructor; and Introduction to Biostatistical Methods (PHC 6052 or equivalent).

Co-requisites N/A

Rationale for Placement in the Curriculum This course will be a required course for all PhD students in the Environmental Health and One health Concentrations of the PhD in Public Health program. The course provides broad opportunities for students to learn how to prepare grant proposals across multiple disciplines and funding agencies that faculty and students from the department of environmental and global health typically pursue. While another grant writing course currently exists within the college (PHC 7727), however, this course is heavily focused on grant writing for clinical and health research, specifically the F31 mechanism or other NIH mechanisms which often do not apply to students in EGH programs. This course has been taught twice previously as a special topics course and we very well received. After consultation with Dr. Hack, he suggested we submit for course approval and course number as this course will serve as an alternative course for student who wish to focus on other multidisciplinary funding mechanisms.

Syllabus Content Requirements All Items Included

University of Florida College of Public Health & Health Professions Syllabus

PHC 6XXX: Grant Writing and Evaluation in Multidisciplinary Sciences (2 credit hours)

Summer C 2025

Class meets Tuesdays 2:00 - 4:45 PM, Room 351 CGRC

Delivery Format: In-person

Instructor Name: Andy Kane

Office Location: Building T106, Room 146

Phone: (352) 213-8407 Email: kane@ufl.edu

Office Hours: 4:45 PM – 5:45PM or by appointment

Preferred Course Communications: The "Inbox" in Canvas is the instructor's preferred method of email communication for all course correspondence.

Prerequisites: Enrollment in a UF doctoral program or permission of the instructor; and Introduction to Biostatistical Methods (PHC 6052 or equivalent).

PURPOSE AND OUTCOME

Course Overview

Students engage in activities to cover grant funding mechanisms offered through multiple federal agencies germane to their respective fields of interest (e.g., NSF, USDA, NIH, EPA, Sea Grant). Students choose relevant funding opportunities and, throughout the course, develop all sections of a full proposal based on agency guidelines. Proposal products are evaluated through a series of student-led mock review panels.

Course Description

Engages students to learn about a range of grant opportunities and funding mechanisms relevant to environmental and public health research. Weekly class meetings cover different mechanical components of grant proposals, differences in funding priorities and types based on agency missions, targeting specific proposal opportunities, and the peer-review process. In-class discussions will focus on grantsmanship, the submission process, and grant review.

Relation to Program Outcomes

This course reinforces the following student learning outcomes for the PhD in Public Health program. We have indicated in the assignments where these learning outcomes are reinforced.

- 1. Generate new knowledge in the field of environmental and public health.
- 2. Apply problem-solving skills by applying, analyzing, and synthesizing content knowledge in their field of interest to be able to clearly articulate research questions and develop cogent specific aims.

3. Demonstrate behavior appropriate to scientific discourse, peer evaluations and developing constructive critiques.

Course Objectives and/or Goals

Upon completion of this course, students will be able to:

- 1. Evaluate the relevance of multiple funding mechanisms/opportunities, e.g., NSF, USDA, NIH, EPA, Sea Grant, as related to fields of interest
- 2. Analyze the grant writing process including all components of a full research proposal and the peer-review evaluation process
- 3. Critically review scientific literature as evidence to support developing a grant proposal
- 4. Develop a full grant proposal, including all relevant sections based on agency guidelines
- 5. Apply common terminology as used in fields of specialization
- 6. Critique and evaluate grant proposal applications based on agency guidelines
- 7. Interpret a peer-review summary statement

Instructional Methods

- 1. Class lectures and in-class discussions: Students are responsible for all the material presented in the course and assigned readings. This will be the main source of content in this course.
- 2. Readings and Resources: In addition to the required materials, supplementary readings and resources will be posted in the course website in Canvas. The reading list may be supplemented during the course.
- 3. Assessments: The primary assessments will be written assignments, presentations, and participation.

What is expected of you?

You are expected to attend each class in person, complete all readings/videos/materials, assignments, and papers. Additionally, you are expected to actively engage in the course throughout the semester. Your participation fosters a rich experience for you and your peers that facilitate overall mastery of the course objectives.

DESCRIPTION OF COURSE CONTENT

This course is taught as a series of mini-modules, each covering one specific aspect of grant writing and evaluation processes. Each topic may contain lectures, external links, videos, discussions and required readings as well as assignments. You are responsible for all course content regardless of the format. The topical Outline/Course Schedule below details the dates of content modules and assignments.

Topical Outline/Course Schedule:

Week	Dates	Topics	Class Activities	Assignments Due
1	May 13	Hypothesis generation; Background/Significance /Innovation	Cover testable Hypotheses, Significance, and Innovation sections of grants Review Assignment 1a: Hypothesis generation Review Assignment 1b: Intro/Significance/Innovation	-
2	May 20	Specific Aims & Objectives	Cover Specific Aims and Objectives sections of grants Review Assignment 2a: Sp Aims & Objectives bullets Review Assignment 2b: Sp Aims & Objectives page	Assignment 1a (5/19)
3	May 27	Approach	Cover approach section of grants Review Assignment 3: Approach (to be submitted with full 1st draft)	Assignment 2a (5/26)
4	June 3	Budget & IDCs	Cover budgets sections of grants Review Assignment 4: Budgets	Assignment 2b (6/2)
5	June 10	Biosketch/CVs	Cover Biosketch/CV formatting & content for grants Review Assignment 5: Biosketch/CV	Assignment 1b (6/9) Assignment 4 (6/9)
6	June 17	Other Sections (Environment, Animal, Equipment, etc.)	Cover other relevant sections often required for grants (not required for final proposal) Review Assignment 6: Full Proposal	Assignment 5 (6/16)
	June 24	Summer Break	-	-
7	July 1	Grant Review Process	Cover grant review process by multiple agencies including typical scoring criteria	Assignment 3 (6/26) [Full 1st draft]
8	July 8	Demonstration Mock Review Panel	Demonstration grant review panel (NIH video)	Assignment 6: Final Proposal (7/7)
9	July 15	Panel reviews (Group 1 applications) [3]	Group 1 grant review panel Group discussion	Group 1 Individual Review Summaries due for 1°and two 2° reviewers (7/14)
10	July 22	Panel reviews (Group 2 applications) [4]	Group 2 grant review panel Group discussion	Group 2 Individual Review Summaries due for 1°and two 2° reviewers (7/21)
11	July 29	Panel reviews (Group 3 applications) [4]	Group 3 grant review panel Group discussion	Group 3 Individual Review Summaries due for 1°and two 2° reviewers (7/28)
12	Aug 5	Panel reviews (Group 4 applications) [3]	Group 4 grant review panel Group discussion	Group 4 Individual Review Summaries due for 1°and two 2° reviewers (8/4)

Getting Started

- 1. Visit http://lss.at.ufl.edu and login to e-Learning in Canvas using your Gatorlink ID and password.
- 2. Find our course website. It will be listed as PHC6397- Grant Writing and Evaluation
- 3. Complete the "Getting Started" Module under the Modules Tool (left menu). This will prompt you to download and review the syllabus and review the materials on plagiarism.

If you have ANY difficulty, please send an email to the instructor using the Canvas "Inbox" as soon as possible.

Course Materials and Technology

Canvas site: There will be an online site for this course in Canvas, the learning management system supported by the University. Log in at https://lss.at.ufl.edu/ and go to course site for PHC6937- Grant Writing and Evaluation. Here, you will find the syllabus, lecture slides, and assignments. You will also turn in assignments through this site. Once the course begins, all communication will take place through the e-Learning in Canvas. This includes all emails. This will eliminate any issues with students not getting emails due to connection problems. It will be your responsibility to check the site on a routine basis to keep up with announcements, emails, and course modifications. For technical support related to course materials and links, please contact me and the online course coordinator.

For technical support for this e-Learning in Canvas, please contact the UF Help Desk at:

- helpdesk@ufl.edu
- (352) 392-HELP select option 2
- https://helpdesk.ufl.edu/

Additional Academic Resources

- <u>Career Connections Center</u>: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- <u>Library Support</u>: Various ways to receive assistance with respect to using the libraries or finding resources.
- <u>Teaching Center</u>: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- <u>Writing Studio</u>: 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: View the Distance Learning Student Complaint Process
- Enrollment Management Complaints (Registrar, Financial Aid, Admissions): <u>View the Student Complaint Procedure webpage for more information.</u>

ACADEMIC REQUIREMENTS AND GRADING

General information

Assignments are to be turned in as a Word document or PowerPoint file as directed, unless otherwise indicated. They will be returned to you with comments. If you have unexpected issues with Canvas, you may email the assignment to the course instructor directly. Assignments are normally intended as individual projects unless otherwise directed. Shared work may be treated as a form of plagiarism. Assignments may be required to be submitted via Turnitin in this course (this will be done automatically in the Canvas Assignment). This tool will pick up any passages in students' work that come from another source. Be sure to adequately cite your sources/references for these assignments to avoid plagiarism (see format below). Also please confirm that your work is not overtly plagiarized, the Turnitin system will give you a report.

Some similarity is expected and unavoidable, however if large portions are copied from other sources, this will be as considered plagiarism.

The Canvas assignment tool will notify you confirming the submission of your assignment. PLEASE check your UFL email on a regular basis, i.e., daily, for these and other email notices from the course site. If you do not receive an email confirmation within 2 hours of submission, please return to the site and resubmit your assignment. It is a student's responsibility to verify that they turn in assignments on time and that they turn in the CORRECT assignment attachment.

You will be graded in the course based on written assignments and participation.

Written Assignments

There will be 8 written assignments associated with your full proposal (100 points each; Total 800 points, 80% of final grade). These assignments are described below. Detailed instructions will be provided with each assignment but primarily reflect a write-up of various parts of a proposal grant document. Assignments are to be turned in as a Word document in the Canvas Assignment tool, unless otherwise indicated. They will be returned to you with comments. If you have unexpected issues with Canvas, you may email the assignment to the instructor directly. Assignments are intended as individual projects unless otherwise directed. Shared work may be treated as a form of plagiarism. Written assignments will be due in Canvas 5:00 PM on the due date unless instructed otherwise. Late submissions will be subject to the late assignment policy below.

Hypothesis generation (100 points, 10%)

Each student will submit testable hypotheses in association with their overarching research objective, aligned with funding agency missions. Objectives and hypotheses will be developed based on classroom instructions and discussions.

Background/Significance/Innovation (100 points, 10%)

Each student will submit a complete introductory background section based on funding agency specifications. This section will provide relevance, significance, and innovation constructs based on required agency format, supported by published, peer-reviewed literature. This assignment will be developed based on classroom instructions and discussions.

Specific Aims and Objectives, Bullets (100 points, 10%)

Each student will submit a bulleted list of specific aims and objectives based on overarching objective and hypotheses presented. This assignment will be developed based on classroom instructions and discussions.

Specific Aims and Objectives, Page (100 points, 10%)

Each student will submit specific aims and objectives formatted as per specific funding agency guidelines and specifications. This assignment includes a single-page complete draft of your

specific aims and objectives. This assignment will be developed based on classroom instructions and discussions.

Approach section (100 points, 10%)

Each student will submit a complete draft Approach section formatted as per specific funding agency guidelines and specifications. This assignment requires following funding agency guidelines to properly draft this section. This assignment will be developed based on classroom instructions and discussions.

Budget section (100 points, 10%)

Each student will submit a complete draft Budget and Budget Justification formatted as per specific funding agency guidelines and specifications. This assignment requires following funding agency guidelines to properly draft this section. This assignment will be developed based on classroom instructions and discussions.

Biosketch/CV (100 points, 10%)

Each student will submit a complete draft Biosketch formatted as per specific funding agency guidelines and specifications. This assignment will be developed based on classroom instructions and discussions.

Final proposal assignment (100 points, 10%)

Each student will submit a final proposal report which they will have worked on throughout the course. The final proposal will incorporate all edits and formatting changes to all components of the document and must be assembled as per agency specifications to meet assigned review criteria. The details for the final proposal report assignment will be provided by the instructor.

Review Panel Summaries/Presentations (150 points, 15%)

Each student will be assigned as the primary reviewer for one proposal and a secondary reviewer for two additional proposals. The primary reviewer is responsible for providing a brief introduction to the proposal followed by their critique of the proposed research. The secondary reviewer also provides their critiques of the proposed research in the summary but only present critiques that have not already been addressed by the primary or other secondary reviewers. All students will participate as discussants for all review panels, even if they are not assigned as a primary or secondary reviewer that week. All students will also score all proposals.

Review panel summaries and presentations will be graded using the following rubric:

Primary review written summary (40 points x 1 proposal)

Primary review presentation (20 points x 1 proposal)

Secondary review written summary (30 points x 2 proposals)

Secondary review presentation (15 points x 2 proposals)

Professionalism (50 points, 5%)

Students are expected to attend class, be on time and participate in class activates each class period. Professionalism will be evaluated based on preparedness for class and in-class

contributions, including coming to class prepared by reading assigned materials and being ready to engage self and peer evaluation discussions (25 points), and showing interest, and actively and respectfully contributing to in-class discussions and making thoughtful contributions that advance discussions (25 points). Students will be provided feedback on their participation effort midway through the semester and final participation grade will be averaged over all class meetings throughout the semester.

Exams: There are no formal exams for this course.

Grading:

Assignments	Points	Percentage
1a: Hypothesis generation	100	10%
1b: Background/Significance/Innovation	100	10%
sections 2a: Specific Aims & Objectives bullets	100	10%
2b: Specific Aims & Objectives page	100	10%
3: Approach section	100	10%
4: Budget section	100	10%
5: Biosketch/CV	100	10%
6: Final Proposal	100	10%
Assignments points:	800	80%
Review Panel Summaries and Presentation:	150	15%
Professionalism & Participation:	50	5%
Total Points	1000	100%

Point system used (i.e., how do course points translate into letter grades).

Points	93-	90-	87-	83-	80-	77-	73-	70-	67-	63-	60-	Below
earned	100%	92%	89%	86%	82%	79%	76%	72%	69%	66%	62%	62%
Letter Grade	А	A-	B+	В	B-	C+	С	C-	D+	D	D-	Е

Letter grades and Grade Points: Credit Earned

Passing Grade	А	Α-	B+	В	B-	C+	С	C-	D+	D	D-	Е
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

Letter grades of C-, D+, D, D- or E are not considered passing at the graduate level, although the grade points associated with these letter grades are in included in grade point average

calculations. In addition, a grade of C counts toward a graduate degree only if an equal number of credits in courses numbered 5000 or higher have been earned with an A.

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/UGRD/academic-regulations/attendance-policies/

Late Assignments and Make Up Work

Getting assignments turned in by the due date facilitates the timely review of materials by the instructor. Unless there are special circumstances (see below) assignments turned in up to 24 hours late will be discounted **10%** of the grade that they would otherwise received. An additional 10% grade discount will be incurred for each additional late day or fraction thereof.

Special Circumstances. In the event of special circumstances that may interfere with your ability to complete an assignment, meet a deadline, or come to class, contact the instructor as soon as possible, in advance of the deadline, if possible. Cases will be dealt on an individual basis by the instructor relative to making accommodations.

Please refer to UFs absence policy to ensure you meet UF policy on make-up work: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#absencestext and https://catalog.ufl.edu/UGRD/academic-regulations/examination-policies-readingdays/#excusedabsencestext]

Policy Related to Required Class Attendance

Students are expected to attend class to receive information and instruction to complete all assignments and engage in assignment discussions and reviews. 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

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT Expectations Regarding Course Behavior

You are expected to maintain a civil tone and respect the opinions of others. Engagement during class is encouraged and expected. The classroom environment should feel comfortable and supportive for engaging and learning.

Communication Guidelines

The instructor prefers that all communication for this course be through the "Inbox" in Canvas email or by directly emailing the instructor. Weekday daytime (US Eastern Time) emails have the best chances of being answered more quickly.

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/work/handbook/

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior. Plagiarism is especially damaging in an online learning environment and will be dealt with in an official way, according to University of Florida regulations. Incidents will be reported directly to the Office of Student Judicial Affairs and a formal procedure will be started in each and every case. There will be no informal incident resolution between student and instructor. Should you have any doubts on whether something constitutes plagiarism, please consult the many available resources on the topic, e.g. starting with http://web.uflib.ufl.edu/msl/subjects/Physics/StudentPlagiarism.html, or contact the instructor in advance. There is also a reference posted in the course site, in the Course Help link. As you submit assignments, you will have the opportunity to check it for unintentional plagiarism using Turnitin®, the same software that instructors will use to check your work. You are encouraged to take advantage of this option. If you turn in assignments that are plagiarized, you will receive zero points for that assignment.

You are expected to turn in original work in this course. This means that when answering assignment questions and writing papers you will be expected to write your responses in your own words. You MAY NOT copy answers word for word from any course materials or outside sources. On occasion it may be useful to provide a quote from course materials or outside sources in which case you must properly cite the source and place the quote in quotation marks. That being said we urge you to avoid excessive quotation as it does little to demonstrate you understanding of course material.

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, 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 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.

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: <u>Visit the Counseling and Wellness Center website</u> 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 <u>Student Health Care Center website</u>.
- University Police Department: Visit <u>UF Police Department website</u> or call 352-392-1111 (or 9-1-1 for emergencies).
- *UF Health Shands Emergency Room / Trauma Center*: For immediate medical care call 352733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the <u>UF Health Emergency Room and Trauma Center website</u>.
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the <u>GatorWell website</u> or call 3522734450.

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 nondiscrimination 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."

Course|New for request 21510

Info

Request: VME 6XXX Animal Reproduction and Population Health

Description of request: This is a course request (interdisciplinary seminar) for graduate students at

the UF.

Submitter: Pedro Monteiro pmonteirojr@ufl.edu

Created: 4/19/2025 11:19:47 PM

Form version: 1

Responses

Recommended Prefix VME

Course Level 6

Course Number XXX

Lab Code None

Course Title Animal Reproduction and Population Health

Transcript Title Sem Anim Repro & Popn' Health

Delivery Method PC - Primarily Classroom (0-49% of course content taught outside of classroom)

Effective Term Spring
Effective Year 2026
Rotating Topic No
Repeatable Credit? Yes
Multiple Offerings in a S

Multiple Offerings in a Single Semester No

If repeatable, # total repeatable credit allowed 2

Amount of Credit 1

S/U Only? No

Contact Type Regularly Scheduled

Course Type Seminar

Weekly Contact Hours 1 hour weekly

Course Description This seminar series is a forum for UF graduate students and faculty to exchange information that can advance reproduction and population health in livestock and other animal populations.

Prerequisites Must be a graduate student at the University of Florida.

Co-requisites N/A

Rationale for Placement in the Curriculum Degree level: Graduate.

Programs: Any graduate program at UF. Majors: Any graduate program at UF.

Intention: elective course.

Syllabus Content Requirements All Items Included

Revision: August 20, 2025



College of Veterinary Medicine Comparative and Biomedical Sciences Program

VME 6### Interdisciplinary Seminars in Animal Reproduction and Population Health 1 credit; Class

Course description. This seminar series is a forum for UF graduate students and faculty to exchange information that can advance reproduction and population health in livestock and other animal populations. Enrollment is limited to a maximum of 13 students per semester.

Course format. The class will meet Fridays (11.45am-12.35pm) in Deriso Hall Paul Nicoletti's conference room (see schedule below). In general, the course will consist of weekly seminar presentations (40 min each) by students, faculty members, or guest speakers, followed by group discussions (10 min each). Seminars will be open to any interested UF faculty or students to attend.

Student learning outcomes (SLOs)

- SLO 1. Students will enhance their ability to communicate their scientific ideas and research data concisely and cohesively via oral presentations—with a focus on reproduction and production medicine in animal populations.
- **SLO 2**. Students will assess their peers' presentations, provide feedback, and participate in group discussions.

Requisites

- No prerequisites are needed.
- Must be a graduate student at the University of Florida.
- Cannot have taken the course twice within the same graduation program cycle.

Schedule

Week	Topic	Presenter
1	Introduction, presentation schedule, assessment of peer-student	Monteiro
	presentations, and methods of evaluation	
2	Guidelines for the delivery of effective oral presentations	
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Revision: August 20, 2025

Course Coordinator

Pedro Monteiro
Assistant Professor

UF CVM Large Animal Clinical Sciences | Deriso Hall Rm 116 T 352 294 4313 (office)

E-mail: pmonteirojr@ufl.edu

Office hours

Fridays, 3.00pm to 3.50pm. Other days/times during the week can be arranged. Please e-mail to schedule an appointment.

Methods of evaluation

<u>Class attendance is required</u>. Absences from class must be arranged with as much advance notice as possible with course instructors. 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 at the following link: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Evaluation of SLO 1 will be conducted using Rubric No. 1 (Class Presentation; Pg 3);

Evaluation of SLO 2 will be conducted using Rubric No. 2 (Class Participation; Pg 4). Peer student evaluations will be performed using Rubric No. 1 (Class Presentation; Pg 3), using the same evaluation criteria used by the course coordinator.

The Class Presentation and Class Participation will constitute 50% + 50% = 100% of the grade.

Grading

Percent	Grade	Grade Points
90.0 - 100.0	A	4.00
87.0 - 89.9	A-	3.67
84.0 - 86.9	B+	3.33
81.0 - 83.9	В	3.00
78.0 - 80.9	B-	2.67
75.0 - 79.9	C+	2.33
72.0 – 74.9	С	2.00
69.0 - 71.9	C-	1.67
66.0 - 68.9	D+	1.33
63.0 - 65.9	D	1.00
60.0 - 62.9	D-	0.67
0 - 59.9	E	0.00

Rubric No.1: Class Presentation (50%)

Element	5 (Excellent)	4 (Proficient)	3 (Fair)	1-2 (Poor)
Quality of content	Student demonstrates a clear understanding and detailed mastery of the content of the presentation, without using undefined jargon	Student is proficient with the content, but does not provide adequate details at several points and / or uses undefined jargon	Student appears to be uncomfortable with the information that is presented and uses jargon that is often misunderstood	Student does not have a good grasp of the information that needs to be conveyed
Organization	Student presented all the key elements of a presentation in a clear, logical and interesting manner	Student presented all the key elements of a presentation in a clear and logical manner	Student presented most of the key elements of a presentation in a somewhat logical sequence but the audience had some difficulty following the topic	Audience was unable to easily understand the topic or follow the presentation
Delivery	Student used a clear voice and correct, precise pronunciation and /or annunciation of terms, demonstrating eye contact and engagement of the audience	Student used a clear voice and pronunciation and/or annunciation of terms is largely correct, with some eye contact	Use of a clear voice and eye contact is inconsistent	Audience could not hear the student and / or remain largely unengaged by the student
Quality of slides	Student followed all of the key guidelines presented by the instructor in the preparation of the slides (Lecture 1)	Student followed all of the key guidelines presented by the instructor in the preparation of the slides, but some slides were excessively crowded	Student followed most of the key guidelines presented by the instructor in the preparation of the slides	Student did not follow the guidelines of the instructor (Lecture 1)
Ability to answer questions	Student demonstrated a clear understanding of the question that was asked and answered appropriately. Questions were repeated back to the audience by the student.	Student understood the question that was asked but the answer was incomplete. Questions were repeated back to the audience by the student.	Student may not have understood the question that was asked, failed to ask for clarification but provided an answer nonetheless. Failed to consistently repeat questions back to the audience before answering.	Student may not have understood the question that was asked, failed to ask for clarification and did not try to provide an answer. Failed to consistently repeat questions back to the audience before answering.

Rubric No. 2: Class Participation (50%)

Element	5 (Excellent)	4 (Proficient)	3 (Fair)	1-2 (Poor)
Rubric No. 1 (20%)	Student provided a complete scorecard with constructive comments for the speaker	Student provided a complete scorecard with no comments for the speaker	Student submitted an incomplete scorecard	Student did not submit a scorecard
Engagement in group discussions (30%)	Student asked both primary and follow-up questions of the speaker consistently in every class	Student asked primary and sometimes follow-up questions of the speaker	Student asked a question of the speaker at least 3 times during the semester	Student never asked any questions



Revision: August 20, 2025

More information on UF grading policy may be found at:

<u>UF Graduate Catalog</u> 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 <u>Disability Resource Center</u>. 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 <u>Notification to Students of FERPA Rights</u>.

Revision: August 20, 2025

Campus Resources: Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: <u>counseling.ufl.edu/cwc</u>, 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.

<u>Library Support</u>, Various ways to receive assistance with respect to using the libraries or finding resources.

<u>Teaching Center</u>, 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