

UNIVERSITY OF FLORIDA
COLLEGE OF MEDICINE SYLLABUS

NEUROSCIENCE
GMS 6910 Capstone Project (1-3
credits)

Delivery Format: Online

Instructors Names:

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Office Hours: Students request and schedule online Zoom meetings

Preferred Course Communications: Email through Canvas course platform

Prerequisites: Completion of GMS 6007 or consent of instructor. Designed for graduate students in online MSc program.

Course Overview:

This 1-3 credit course is a required course in the online Master's program in Biomedical Sciences with a concentration in Biomedical Neurosciences. This course will cover the steps necessary for successful creation of one of the two chapters needed for a complete capstone project required for graduation: Typically, the course is completed through three separate enrollments including one for the first chapter, one for the second chapter, and a third in the semester students intend to defend and graduate. By the end of the capstone, students will be able to present contemporary research content (key data) in the context of the work immediately preceding its publication (background) as well as make inferences about follow-up experiments necessary to logically extend the contemporary work and advance the field (novel experiment).

Course Objectives and/or Goals:

To showcase the student's scholarship and mastery of topics under active research in the field of neuroscience. Such mastery is exhibited through their ability to interpret, present, and make inferences about the content of contemporary neuroscience research published in high-impact, academic journals. By the end of this course, students will be able to interpret the content of recent neuroscience research (key data) and teach the content of said research to non-expert audiences in the form of an audiovisual presentation. In addition, they will be able to contextualize the content of the work by teaching the audience about the research that immediately preceded the work (background) and making informed predictions about what direction work in the field may take in the near future (novel experiment).

Instructional Methods:

All assignments and interactions within this course will be asynchronous and will take place within the online course platforms Canvas and VoiceThread. The assignments will include written presentation transcripts which will be uploaded to Canvas and the text boxes of individual slides in VoiceThread. They will also require creation of visual media (slides) and spoken, audio transcripts in VoiceThread. Use of the doodle-tool will be required in conjunction with creating audio transcripts so that you may walk the audience through schematic image and figure image content. When completed, your finished capstone chapters will resemble cohesive lectures in which you are instructing your audience on topics based on the key data identified from recent (featured) studies.

Description of Course Content:

The course is a 14-week course and contains 8 total assignments. One complete capstone chapter will be assembled within each section. The first two assignments will serve as outline material for the first two chapter sections (background and key data) and will each be reviewed once. The next six assignments will be one first draft and one revised draft of each of your three chapter sections (background, key data, and methods). Each chapter section assignment will be reviewed twice by your instructor: once upon initial submission and again upon resubmission following a round of revisions incorporated based on the content of the first review. To get the most from your instructor's feedback, it is imperative that you submit work to VoiceThread that contains all required elements as described in the assignment directions and grading rubrics. These include well laid-out slides with high-resolution images and detailed titles. Also, text transcripts with appropriate internal citations, hyperlinked references in J Neuroscience format, and well-presented audio transcripts. Featured studies on which the chapter is based will be chosen from a pre-selected pool of articles representative of a broad cross-section of the major fields in Neuroscience. Featured studies are basic research articles focusing on mechanistic content that relates to topics covered in courses in the online master's program.

Course Schedule:

Week and Assignment

- 1 Create and Share Your Capstone Project VoiceThread Shell / Review a Featured Study and Identify the Primary Research Question and Key Data
- 2 Generate Slide Titles for your Background and Key Data Sections, and Select Figures for your Background and Methods Slides
- 3 Generate the Background Section for your Chapter
- 4 Generate the Background Section for your Chapter
- 5 Revision of Background Section
- 6 Revision of Background Section
- 7 Present Relevant Methods and Give a Walk-Through Style Presentation of the Study's Key Data Figures
- 8 Present Relevant Methods and Give a Walk-Through Style Presentation of the Study's Key Data Figures
- 9 Revision of Key Study Section
- 10 Revision of Key Study Section (Spring Break)
- 11 Generate a Novel Experimental Plan to Expand on the Work of your Featured Study
- 12 Generate a Novel Experimental Plan to Expand on the Work of your Featured Study
- 13 Optional Make-Up Assignment (Mean Scores < 84%)
- 14 Optional Make-Up Assignment (Mean Scores < 84%)

Course Materials and Technology:

Course Materials

- All reading assignments are assigned from the primary literature. No textbook is required.
- Recorded VoiceThread lectures are accessible through the Canvas course website. Students are required to email questions about coursework directly to instructors through the Canvas email interface.
- Weekly assignments and presentation content will be uploaded to Canvas and VoiceThread, respectively.
- Online, scheduled synchronous meetings between individual students and the instructor will be available by request throughout the semester using Zoom Conferences.

Required Technology

- Laptop or desktop computer equipped with microphone and video camera. The microphone will be used to create the audio transcript content of the capstone project, and the camera will be used for video conferencing related to project preparation. There are VoiceThread apps that are available for free for iOS and Android devices that can be used to view the VT and comment on them. I strongly recommend that you use a laptop or desktop computer when working on your capstone project for this course.
- 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 all course assignments in advance of the deadline since network speeds can slow significantly during periods of high-volume 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.

- 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://helpdesk.ufl.edu>

WHEN DO I CONTACT THE UF HELPDESK?

In the event that you have technical difficulties with E-learning (CANVAS), 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 assignment 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. Their hours are posted at <http://helpdesk.ufl.edu/about/business-hours/>

Academic Requirements and Grading

Assignments

Assignments will include presentation transcripts uploaded to Canvas in addition to presentation materials assembled in VoiceThread. Note: only materials uploaded and included in your VoiceThread project shell will be assessed and graded as part of your assignment reviews. Materials included in submissions to Canvas but omitted from VoiceThread will not be considered during assignment grading. Students will select from a list of pre-approved publications to feature in chapters of their capstone by presenting material from the studies in the VoiceThread interface.

Grading

This course is an S/U course. To receive a passing grade on an individual assignment, students will be required to score 84% or greater based on the criteria outlined in each assignment's associated rubric. To earn an "S" for this course, students will be required to earn an aggregated mean score of 84% or greater based on the three, final "revision" assignments: one for each of 3 chapter sections (background, key data, and novel experiment). Students should expect to receive no more than two reviews per chapter segment assignment in the capstone course; however, students who keep pace with their assignment submissions will have the opportunity to make up one incomplete assignment or re-do one assignment that was scored under the 84% passing threshold during the final two weeks of the term.

To ensure success in chapter composition and earn a satisfactory grade for the capstone course, it is imperative that students submit fully-drafted work with all required section components, organizational requirements, and formatting standards COMPLETED. Submission of incomplete, partially-drafted content, or assignments featuring substandard work will ultimately result in drafting of chapter content that does not meet the requirements for inclusion in your capstone project and will necessitate taking the course over

in a subsequent term. Lastly, even content that meets the standards for passing the capstone course with an “S” may need further revision and additions prior to submission for editorial review at the beginning of the semester in which you intend to graduate.

Students should be working diligently and continuously to improve the

quality of their presentation materials throughout the time spent in the program.

Late assignments

We recognize that personal circumstances arise that may interfere with your ability to meet a deadline. If you anticipate missing a deadline, please let the instructor know as soon as possible and they will work with you to resolve the issue. Your emails sent through Canvas will be responded to within 1 business day (typically sooner). Please see the UF Attendance Policies concerning

absences, religious holidays, and illness. In general, late assignments, quizzes, and tests will not be accepted unless you have obtained a deadline extension from the instructor. If you encounter technical difficulties with assignments, 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. More information on UF grading policy may be found at:

<https://catalog.ufl.edu/graduate/regulations/#text>

COURSE EVALUATION

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at the end of the course. You will receive an email from UF when your evaluation is ready to be completed. These evaluations are very important to instructors since they help instructors to identify areas of a course that are working well and those that might require improvement. 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 student evaluations are available to students at <https://evaluations.ufl.edu/results/>.

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:

1. Quoting oral or written materials including but not limited to those found on the internet, whether published or unpublished, without proper attribution.

2. Submitting a document or assignment that in whole or in part is identical or substantially identical to a document or assignment not authored by the student.

Student whose assignments/presentation content exhibit evidence of plagiarism will receive zeros on those assignments 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

Students found to be involved in collaborating on assignments will receive zeros for those assignments and receive a warning. Students who continue to engage in this behavior after the warning will be reported to the UF Dean of Students Office.

HOW TO SUCCEED IN ONLINE COURSES

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 work when drafting or revising presentation materials. These challenges are exacerbated when a student is not a 'self-starter' or if they do not possess good time management skills including use of reminders. 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 assignment deadline). Rushing to complete assignments before the 11:59 pm deadlines on Fridays is NOT a good strategy because you miss out on instructor feedback and drafting revisions that are necessary to improve your assignment content. This is particularly true of your Capstone project content as the planning, construction, and presentation of quality multimedia content is a long process requiring multiple days of work each week. You are expected to adhere to the posted assignment deadlines but you may submit assignments before the deadlines. There are two things you can do to ensure that you are informed of deadlines. First, it is important that you take advantage of the notification features of Canvas so that you receive reminders when assignments are due and can receive notices when new information is posted in the course. You should take a moment to modify your notification

preferences so that you can take advantage of what Canvas offers. Your preference settings can be accessed by clicking on your account icon in the left menu panel on the Canvas page (your photo or icon on top of icon listing) and by selecting Notifications from the list. Second, it is important that you check your ufl.edu email on a daily basis which is the email address that Canvas and I will use to communicate with you.

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 enrolled students are expected to follow the University of

Florida Honor Code (excerpt above). The full text can be found at:

<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

Student guidelines for ethical behavior can be found at:

<https://catalog.ufl.edu/UGRD/student-responsibilities/>

Please also review the use of copyrighted materials, which can be found on the Health Science Center Library's web page: <https://library.health.ufl.edu/>

Given the likelihood that your Capstone project will contain materials that are protected by copyright provisions (e.g. published figures) it is important that you do not post your project on social media outlets or publish them in other forms that may violate the copyright held on referenced materials.

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.
- The Student Health Care Center at UF Health is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at UF Health offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: <https://shcc.ufl.edu/>
- UF Health Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32698, ufhealth.org/emergency-room-trauma-center.
- University Police Department: Visit police.ufl.edu/ or call 352-392-1111 (or 9-1-1 for emergencies).
- Crisis intervention is always available 24/7 from: Alachua County Crisis Center: (352) 264-6789
<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

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

Academic Resources

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

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

Library Support: <https://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. <https://academicresources.clas.ufl.edu/>

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. <https://writing.ufl.edu/writing-studio/>

Student Complaints On-Campus: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

On-Line Students Complaints: distance@dce.ufl.edu