

Syllabus for GMS6750- Molecular Pathobiology of Neural Disease
5 weeks, 1 credit, letter graded

COURSE FORMAT

Course Modules

This course is divided into 5 modules. You will be completing one module each week. Each module focuses on a specific neural disease and is broken down into 2 units. The first unit in each module will introduce you to the disease and its associated pathology. The second unit will introduce you to the etiology of the disease and emerging treatments. These two units each have VoiceThread lectures associated with them. In addition to these two units, each module also includes a resources page that provides links to assigned readings as well as to websites and videos related to the disease under discussion.

Essay Assignments

There is one essay assignment for each module in this course. Your grade for this course will be based on the sum of the scores you receive on each of the five separate essays. You will write one 800-1000 words essay for each module on a topic you will select from a list of possible topics that we will provide. Each essay will be graded using an established rubric.

TARGET AUDIENCE

This 5-week course has been specifically designed for students enrolled in the UF Biomedical Neuroscience Certificate or MSc Program. This course is designed to provide a working understanding of five relatively common neurological diseases.

REQUIRED PREREQUISITES

GMS 6007 and GMS 6705

COURSE INSTRUCTOR

Ron Mandel, Ph.D.
Professor of Neuroscience
Co-Director of the Online Biomedical
Neuroscience Certificate Program

Email rmandel@ufl.edu

TA: TBA

GENERAL COURSE SCHEDULE

This is a 5-week course. One course module will be completed each week. In addition to online lectures and assigned readings, students will complete one essay each week.

This course will provide students with up-to-date information on five different neural diseases:

- Alzheimer's disease
- Parkinson's disease,

- Huntington's disease
- Glioma
- Lysosomal storage disease.

One disease will be covered each week. The material presented will include the symptoms, pathology, etiology, and, because there are no significant disease modifying treatments for any of these disorders a brief review of currently emerging treatment strategies will also be presented.

At the end of this 5-week course students will be able to

- Describe the symptoms of each disease and its prevalence in the population
- Compare and contrast the neuropathological features of each disease
- Describe how the neuropathology contributes to the disease phenotypes
- Compare potential etiological similarities between the neurodegenerative disorders
- Describe the molecular bases for each disease if known
- Be able to suggest and discuss potential treatment approaches for these diseases

Students will submit weekly written papers covering aspects of the disease discussed during that week. The content, structure, and logic of these papers will be evaluated using a provided detailed rubric. Scores received on these papers will be used to determine the student's final grade in this course. By Wednesday of each week each student must submit a quiz which chooses a relatively precise topic. Unexcused late topic choices will lead to loss of 10 points on the essay. The goal is to have grading finished by Wednesday of each week.

Format of the weekly essays

As indicated, the essays must be between 800-1000 words in length and deviations from the word restrictions will result in reductions in scores as indicated in each rubric. There is a brief guide available on what is best practice for writing these short essays available [here](https://www.codot.gov/business/grants/safetygrants/assets/APStyleGuideCheatSheet.pdf). The essays should follow Associated Press (AP) style (<https://www.codot.gov/business/grants/safetygrants/assets/APStyleGuideCheatSheet.pdf>) with one exception. Because these are such short essays, in text citations that contain the format (Jones et al, 2022) will add too many words to your essay. Therefore, in text citations should be numbered in alphabetical order of the reference list; 1, 2, etc. and the reference list should contain numbers before each citation.

An example of an in text citation: "A cure for Alzheimer's disease has been recently described"¹. An example of the same citation in the reference list: 1. Mandel, R.J. A cure for Alzheimer's disease. *Nature* 301: 273-280, 2022.

The essays must be your own work product. These are not group projects. Each submitted essay will be evaluated by the Turnitin database for plagiarism (see academic integrity below). Similarly, your course instructor or the TAs are not your co-author and cannot provide feedback on drafts. Use the introductory VTs and the provided reading material to familiarize yourself with the material and then write your essay based on your own literature research and your own understanding of that subject matter. Each statement of fact must be referenced by a peer-reviewed publication in a reputable scientific publication or a press report if the subject of the sentence introduces a popular subject or controversy. Referencing of facts are strictly graded. Likewise, the accuracy of citations is important. If the citation does not support the statement in the essay, this will result in down-grading.

Dynamic Course Syllabus

The syllabus page in Canvas shows a table-oriented view of the course schedule, and the basics of course grading. You can add any other comments, notes, or thoughts you have about the course structure, course policies or anything else.

Course Schedule:

Date	Details	
June 27, 2022		
Assignment	Create VT user account (should already exist)	
Assignment	View VT tutorial and post comment (optional)	
Wed June 29, 2022		
Assignment	Introduction Quiz	due by 11:59pm
Thurs June 30, 2022		
Assignment	Alzheimer's - Choose Essay Topic	due by 11:59pm
Sun July 3, 2022		
Assignment	Alzheimer's - Write and Submit Essay	due by 11:59pm
Wed Jul 6, 2022		
Assignment	Parkinson's - Choose Essay Topic	due by 11:59pm
Sun Jul 10, 2022		
Assignment	Parkinson's - Write and Submit Essay	due by 11:59pm
Wed Jul 13, 2022		
Assignment	Huntington's - Choose Essay Topic	due by 11:59pm
Sun Jul 17, 2022		
Assignment	Huntington's - Write and Submit Essay	due by 11:59pm
Wed Jul 20, 2022		
Assignment	Lysosomal Storage Disease - Choose Essay Topic	due by 11:59pm
Sun Jul 24, 2022		
Assignment	Lysosomal Storage Disease - Write and Submit Essay	due by 11:59pm
Wed Jul 27, 2022		
Assignment	Glioma - Choose Essay Topic	due by 11:59pm
Sun July 31, 2022		
Assignment	Glioma - Write and Submit Essay	due by 11:59pm

POLICY RELATED TO GRADING

Each essay assignment contributes 20% to the final grade. This course is graded without a curve and **average final scores will not be rounded up or down:**

A = 92.6-100%
A- = 90-92.5%
B+ = 87.6-89.9%
B = 82.6-87.5%
B- = 80-82.5%
C+ = 77.6-79.9%
C = 72.6-77.5%
C- = 70-72.5%
D = 65-69.9%
E <= 64.99%

Students may request regrades on individual essays. This request must be made in a timely manner using respectful language. Argumentative or personal attacks will be ignored once. Repeated incidences of unprofessional regrade requests will be reported to the UF Student Conduct and Conflict Resolution site. Moreover, the regrade can only regard facts that must be documented at the time of the regrade request.

POLICY RELATED TO MAKE UP EXAMS OR OTHER WORK

Late submission of any assignments must be accompanied by documentation of the issue that caused the late submission such as a written doctor's excuse (see link below). Unexcused late topic choices will lead to a loss of 10 pts on the essay. Late essays will also lead to a 10 pt deduction. Excused late essays with documentation do not receive any deductions. Essays that are more than 1 week late with an unexcused absence will NOT be accepted and will receive a zero score (0).

Please note: Any requests for make-ups due to technical issues MUST be accompanied by the UF Computing help desk (<http://helpdesk.ufl.edu/>) correspondence. You MUST e-mail me within 24 hours of the technical difficulty if you wish to request a make-up.

POLICY RELATED TO REQUIRED CLASS ATTENDANCE:

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

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

Excused absences must be consistent with university policies in the Graduate Catalog (<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance>).

Additional information can be found here:

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

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 is particularly relevant to this course. We check every essay via the automated original work/similarity checker called Turnitin. You are strongly recommended to read about plagiarism at <https://guides.uflib.ufl.edu/copyright/plagiarism>.

We have detected minor incidences of plagiarism in the past regarding identical wording in a small portion of a submitted essay. A first instance of a minor infraction will incur a 10 point penalty and an explicit warning on the essay in question. A second infraction will lead to a zero (0) on that essay. A complete or majority copy of non-original work will lead to course failure and reporting to the University for official disciplinary action. It should be noted that Turnitin does not just detect copies of published work but has an enormous database of submitted papers to most Universities.

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/>.

Policy Related to Guests Attending Class:

Only registered students are permitted to attend class. However, we recognize that students who are caretakers may face occasional unexpected challenges creating attendance barriers.

Therefore, by exception, a department chair or his or her designee (e.g., instructors) may grant a student permission to bring a guest(s) for a total of two class sessions per semester. This is two sessions total across all courses. No further extensions will be granted. Please note that guests are not permitted to attend either cadaver or wet labs. Students are responsible for course material regardless of attendance.

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>. Online 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 career.ufl.edu/.

Library Support: Find various ways to receive assistance with respect to using the libraries or finding resources. uflib.ufl.edu/

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

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

Student Complaints

On-Campus Students: sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

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