

NEUROBIOLOGY OF LEARNING AND MEMORY I

GMS 7795

2 CREDIT HOURS

SPRING 2024

INSTRUCTOR: *Ron Mandel and Nicholas Musselwhite*

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OFFICE HOURS : *By request via zoom.*

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

COURSE COMMUNICATIONS: *via email directly or via Canvas*

REQUIRED OR RECOMMENDED TEXTBOOKS : **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 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 figures 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 quizzes.*

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 (REQUIRED): Make-up exams will be made available if

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 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: 100% via Chapter tests

INFORMATION ON CURRENT UF GRADING POLICIES FOR ASSIGNING GRADE POINTS:

There are 11 chapter quizzes in this course and their grades count equally towards the final grade.

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