

GMS 7795 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 4<sup>th</sup> 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](http://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**