

**PSB 3340: Behavioral Neuroscience**  
**University of Florida**  
**Department of Psychology**

**Course: 22442; Section: 16F9**

**Spring 2024**

**Meeting Times:** T Period 3 (9:35-10:25) MCC 100; Th Periods 3/4 (9:35-11:30) NRN 1020

**Lectures are available live and recorded on Zoom**

**Instructor:** Lori Knackstedt, Ph.D.  
Email: [knack@ufl.edu](mailto:knack@ufl.edu)  
Office: Psychology 322

Office hours: Tuesday 10:45-11:45 pm & by request  
Location: Psychology Bldg. Rm. 322/Zoom link in Canvas  
Phone: 352-273-2185

<b>Graduate TA's</b>	<b>Office Hours</b>	<b>Office location</b>
Trevor Caruso	Monday 9 -11 am	Psychology Bldg. 236-c
Liz Martinez Margolis	Monday 11 am – 1 pm	Psychology Bldg. 056
<b>Undergraduate TA's</b>	<b>Office Hours</b>	<b>Office location</b>
Jacob Kaufman	Monday 12:50 to 1:40 pm	Psychology Bldg. 136
Diego Roman	Wednesday 12:50-1:40 pm	Psychology Bldg. 136
Grace Winny	Tuesday 1 -2 pm	Psychology Bldg. 136
Elizabeth Verwest	Wednesday 9:35-10:25 am	Psychology Bldg. 136

**\*Use Canvas messaging to communicate with Dr. Knackstedt and the TA's**

**\*\*Please reach out to a TA if you prefer to join their regularly scheduled office hours via Zoom.**

**Learning Objectives:** This course is designed to introduce you to basic concepts of Behavioral Neuroscience.

After covering the anatomy & physiology of the nervous system, we will be discussing topics of behavior such as sensory perception, learning, sleeping, and motivation. We will also learn about psychological disorders and their treatments. By the end of this course, students should be able to:

- Describe the major features of the brain and spinal cord.
- Understand the electrical and chemical properties of neurons.
- Understand the mechanisms of action for different drugs.
- Understand the basic principles of sensory stimuli.
- Describe the paths of sensory information.
- Describe how motor actions are generated.
- Explain how complex behaviors are studied by neuroscientists.
- Understand the neuroscience behind sleeping, learning, emotion and motivation.
- Understand the causes and symptoms of psychiatric disorders such as schizophrenia and depression.
- Understand the hormonal regulation of the stress response and feeding.
- Develop skills for conducting literature review and summarizing the results of published papers.

**Instructional Methods and Class Format:** Class format will primarily be lecture. While lecture powerpoint slides are posted on Canvas, it is strongly advised that you take detailed notes.

**Textbook:** Biological Psychology 9<sup>th</sup> edition by Breedlove and Watson

## Course Policies:

**Attendance:** Attendance will not be factored into your grade but you will not do well in this class if you do not attend/listen to lectures and take notes. Powerpoints will be posted online but the majority of information will need to be written down by YOU. If you have a family emergency or lengthy illness that requires a long absence from the class please send me an excuse from the Dean of Students Office (DSO).

**Electronic Devices:** Use of a laptop/tablet is acceptable. However, if your use of electronic devices is distracting to the class you will be asked to stop.

**Missed exams or assignments:** An excuse from the DSO is needed to schedule a make-up exam. This excuse must be sent to Dr. Knackstedt on the day of the exam. Makeup exams will consist of a different exam than the one administered on the regularly scheduled exam day and may have a different format. Make-up exams will be given on Tuesdays in the Psychology Building during regularly scheduled class time, unless you have scheduled to take the exam at the Disability Resource Center. As lectures are recorded and posted on Canvas, this will not result in missing course material.

**Legibility of exams or assignments:** \*Handwritten exams that are illegible will not be graded\*.

**Academic dishonesty:** Guidelines for this course will follow the University of Florida Student Honor Code, see <http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php>. DO NOT CHEAT - WE WILL CATCH YOU. Anyone caught cheating on an exam will fail the class, period.

**Disabled Students:** Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. The student is responsible for scheduling a room at the Disability Resource Center (DRC) to take their exams. For this class, it is required that the exam be scheduled for the exam date and time (and can start no more than 30 minutes prior to or after the regularly scheduled class exam). This ALSO applies to make up exams. It is strongly suggested that you book your exam room early. If a regularly scheduled exam date is changed, it is the student's responsibility to change the exam date with the DRC. If you cannot schedule your exam at the DRC at the proper time, you will need to take it in the classroom. No late or early exams will be accepted from the DRC.

**On a personal note...** Courses which discuss psychological disorders can touch on personal issues, and may make you more sensitive to difficulties in your own life. Please feel free to talk to me about anything, anytime. If you feel like you could benefit from professional counseling, contact the Counseling and Wellness Center at 392-1575

### **Learning Assessment and Grading:**

**1. EXAMS:** This course will have five exams. Each exam will be composed of approximately 30 multiple choice or T/F questions and one essay question. Each of the exams will cover only the text and lecture material from the chapters that have been covered since the last exam. Each exam must be completed within 50 minutes of starting it, after which time the exam will be automatically submitted, and any unanswered questions will be counted as incorrect.

**\*Each exam is worth 20% of your final grade.**

**\*The lowest exam grade will automatically be dropped from your final grade calculation**

You will need to bring an official photo ID (Gator1, driver's license) to take exams. You will be required to display the ID on your desk during the exam. You will also need a #2 pencil to take exams.

**Note – If you arrive late for an exam, you may be refused. If you arrive after any student has completed the exam and left, you will not be permitted to write the exam.**

**2. WRITING ASSIGNMENT.** The purpose of the writing assignment is to identify one neuroscience topic that is especially interesting to you, and then spend some extra time learning and thinking about this topic. The end product will be a brief paper (~2 pages pages, plus a reference page) on a neuroscience topic of your choice. Full assignment description can be found on Canvas.

**3. SONA research pool participation.** There is a Psychology Department requirement that all students enrolled in any 3000-level class participate in the SONA participation pool or complete an equivalent alternate assignment. Deadlines and number of hours for fulfilling this requirement will be posted on Canvas by the second week of class. Do NOT wait until the last minute to complete this requirement. The longer you wait the harder it will be to get all the credits you need! Full details on Canvas by week 2.

### **Final Grade Calculation**

Highest exam score x 0.20 \_\_\_\_\_

2<sup>nd</sup> highest exam score x 0.20 \_\_\_\_\_

3<sup>rd</sup> highest exam score x 0.20 \_\_\_\_\_

4<sup>th</sup> highest exam score x 0.20 \_\_\_\_\_

Writing Assignment score x 0.15 \_\_\_\_\_

Research Requirement score x 0.05 \_\_\_\_\_

Final grade = sum of the above values x 100: \_\_\_\_\_

The grading scheme is the UF grading scheme:

A	(outstanding)	94-100	C	(slightly below average)	74-76.99
A-	(superior)	90-93.99	C-	(below average)	70-73.99
B+	(excellent)	87-89.99	D+	(well below average)	67-69.99
B	(very good)	84-86.99	D	(poor)	64-66.99
B-	(above average)	80-83.99	D-	(very poor)	61-63.99
C+	(average)	77-79.99	E	(failure)	<61

**IF** any curve is applied to the grades, it will be done at the end of the semester to the Final course grade. If the average final course grade is lower than a 75%, points will be added to everyone's grade until the average is a 75%. This is very uncommon; the last time I taught this course, ~25% of the class earned  $\geq$ A- and ~25% earned a B (B-, B, B+), with a final course grade class average of 81%.

PLEASE DO NOT ASK ABOUT A CURVE. YOU WILL BE NOTIFIED IF THERE IS A CURVE. WE DON'T KNOW IF THERE WILL BE A CURVE UNTIL THE FINAL COURSE GRADES ARE CALCULATED.

Please see the following website for UF policy on grades:

**<https://catalog.ufl.edu/ugrad/current/regulations/info/grades>**

Week	Dates	Topic	Reading
1	1/9 1/11	Introduction to the course and to neuroscience The neuron & action potential	Ch. 1.1 and 1.4 Ch. 2.1, Ch. 3.1
2	1/16 1/18	Neurotransmission & Psychopharmacology Neurotransmission & Psychopharmacology	Ch. 3.2-3.3, 4.1-4.5 Ch. 3.2-3.3, 4.1-4.5
3	1/23 1/25	Neuroanatomy Neuroanatomy	Ch. 2.2-2.5 Ch. 2.2-2.5
4	1/30 2/1	<b>Exam 1</b> Research Methods in Neuroscience	Ch. 1.2-1.3, 2.5, 3.4
5	2/6 2/8	Sensation & Perception: Intro & Somatosensory System Sensation & Perception: Hearing & Balance Sensation & Perception: Smell & Taste	Ch. 8 Ch. 9.1-9.7 Ch. 9.8-9.9
6	2/13 2/15	<b>Exam 2</b> Sensation & Perception: Vision	Ch.10.1-10.5
7	2/20 2/22	Motor System Sleep & Circadian Rhythms	Ch. 11.2-11.6 Ch. 14
8	2/27 2/29	Learning & Plasticity Learning & Plasticity	Ch. 17 Ch. 17
9	3/5 3/7	<b>Exam 3</b> Psychopathology: Anxiety & Affective Disorders	Ch. 16; Ch. 4.6
10	3/12 3/14	<b>Spring Break</b> <b>Spring Break</b>	
11	3/19 3/21	Psychopathology: Schizophrenia ( <b>Recorded</b> ) Psychological Disorders	Ch. 16; Ch. 4.6
12	3/26 3/26 3/28	Emotion <b>**Writing Assignment Due</b> Motivation and Addiction	Ch. 15.1-15.4 Ch. 4.6-4.8
13	4/2 4/4	<b>Exam 4</b> Hormonal Control of Behavior: Introduction	Ch. 5
14	4/9 4/11	Hormonal Control of Behavior: Stress Hormonal Control of Behavior: Eating	Ch. 15.5 Ch. 13.4-13.6
15	4/16 4/18	Hormonal Control of Behavior: Reproductive Systems Catch up day	Ch. 12
16	4/23	<b>Exam 5</b>	

**There is NO Final Exam for this course.**

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.

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.bluer.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.