

PSYCHOLOGY 262: BEHAVIORAL NEUROSCIENCE
Spring 2021 – Weeks 1-8 (01/11/22-03/03/22)

Instructor: Dr. Mitchell Roitman

Office: 1042C, Behavioral Science Building (BSB)

Office hours: Friday; 10-11 a.m. or by appointment

Join by going to Zoom → Start the session for each date listed

Email: mroitman@uic.edu

Teaching assistant: Elizabeth Wenzel

Office hours: Wednesdays, 10AM, BSB 1063

Join via Zoom:

Meeting ID: 856 5156 2328

Passcode: PSCH262!

email: ewenze4@uic.edu

Teaching assistant: Greeshma Job

Office hours: Tuesdays, 12PM, BSB 1073

Join via Zoom:

Meeting ID: 870 1495 1758

Passcode: PSYCH262

Required text: Biopsychology, 10th edition, John P.J. Pinel

Website: **uic.blackboard.edu**

Behavioral Neuroscience represents the merging of Psychology and Biology. At its core, Behavioral Neuroscience seeks to explain complex behaviors by the physiological processes that underlie them. During the first half of the semester, you will learn about how behavior is generated in response to events in the world around us. You will gain a significant understanding of the nervous system, how it is organized and how it communicates. We will cover how our bodies are built to receive information from the senses and turn that information into plans to move our bodies to react to those sensations. Dr. Pauline Maki will provide a separate syllabus for the second half of the course.

Executing the class as we return to in-person lectures

For the first two weeks of the semester, UIC has indicated that courses are to be delivered remotely. In PSCH262, pre-recorded lectures will be made available the day before the date indicated on the syllabus throughout the first half of the course. During our normally scheduled class, the professor will go 'live' via Zoom (see link on Blackboard) for a review of the key concepts described in the full, pre-recorded lecture. Attendance for these online review sessions is voluntary.

As we return to in-person activities, pre-recorded lectures will still be made available. During lecture time, the professor will deliver review sessions in person. Students are strongly encouraged to attend in-person. To incentivize a return to in-person attendance at lecture, demonstrations will take place during the review session for **five of the 10 lectures** for which we will be together. Students will be required to answer questions related to each demonstration for three of five demonstrations before leaving the lecture hall. Demonstration dates are denoted on the syllabus with an asterisk (*).

Critically, you are always responsible for the material covered in the full, pre-recorded lectures. A mandatory quiz at the end of **each week** will assess your knowledge of the pre-recorded lectures for that week.

Tentative Class Schedule

| Week | Date | Topic | Readings |
|--|-------|--|-------------------------|
| 1 | 01/11 | Introduction | Chapt. 1 |
| PART I: FOUNDATIONS OF BEHAVIORAL NEUROSCIENCE | | | |
| | 01/13 | Nervous system overview | Chapt. 3 |
| 2 | 01/18 | Functional anatomy of the nervous system | Chapt. 3 |
| | 01/20 | Neuronal membrane and potential | Chapt. 4; pages 77-81 |
| 3 | 01/25 | *Action potential | Chapt. 4; pages 81-88 |
| | 01/27 | *Neural transduction/Chemical signaling | Chapt. 4; pages 88-91 |
| 4 | 02/01 | *Chemical signaling | Chapt. 4; pages 91-94 |
| | 02/03 | Chemical signaling | Chapt. 4; pages 94-101 |
| 5 | 02/08 | Exam I | |
| PART II: SENSING AND DOING – INTERACTING WITH THE EXTERNAL ENVIRONMENT | | | |
| | 02/10 | Sensory systems: somatosensory | Chapt. 7; pages 176-182 |
| 6 | 02/15 | *Somatosensory | Chapt. 8; pages 195-203 |
| | 02/17 | *Motor systems | Chapt. 8; pages 203-215 |
| 7 | 02/22 | Sensory systems: vision | Chapt. 6; pages 134-144 |
| | 02/24 | Sensory systems: vision | Chapt. 6; pages 144-152 |
| 8 | 03/01 | Sensory systems: audition/balance | Chapt. 7; pages 169-176 |
| | 03/03 | Exam II | |

Evaluations

Weekly quiz: 5 points X 8 weeks = 40 points

Demonstration questions: 5 points X 3 of 5 demonstrations = 15 points

Essay exams: 25 points each X 2 = 50 points

Pop culture or pop press/on-line check-ins: 10 points X 2 = 20 points

Quizzes: 5 multiple choice questions; must be completed by 5pm on Friday of each week of the semester. A Quiz becomes available at 3:15pm each Thursday and you will have 15 minutes to complete it once you begin.

Demonstrations: Students must attend, in-person, 3 of 5 in class demonstrations. Questions will only be given during the demonstration and must be turned in before the end of class.

Essay exams: 3-4 prompts where you'll be asked to synthesize material across the "Part" of the course (see syllabus above for Parts). Exams become available 24hr before the date listed in the above syllabus and are due by 5pm the day after. Thus, you will have 51 hours to complete the exam and make use of all that time (although some of that time should be used for sleeping and eating!). Essays must be uploaded via SafeAssign (link will be provided). Submissions should be double-spaced 11pt font. Since exams are designed to be completed in the time allotment for a single lecture (75min), the ample extra time for exam completion means that due dates are not flexible...there will be **no make-up exams** except for the most serious of documented circumstances.

Check-ins: Behavioral neuroscience is all around you! Find an example of behavioral neuroscience within pop culture (e.g. movie or show clip; song) or the popular press (e.g. New York Times, Washington Post, CNN, etc.) that captures some small aspect of topics discussed in class. Write 3-4 sentences about the example and how it relates to a specific aspect of course material. You should identify a lecture and slide that relates to your Check-in and note it in your submission. Submit your Check-in as a word document via submission link on Blackboard. Additional instructions are in the Check-in folder.

There will be no opportunities for extra credit.

ALL quizzes, exams, demonstration reflections (3 of 5) and check-ins will be used to calculate your final grade.

Scores for late assignments will be reduced by 10% for each day the assignment is late. Importantly, the moment the deadline has passed constitutes the first 'day' that the assignment is considered late – with each 24hr period after constituting the next day.

It is my hope that each student learns the material and succeeds. Cheating will not be tolerated. Evidence of cheating on any quiz, exam or assignment will result in its disqualification and an entry of 0 points. The incident will also be reported to UIC's Dean of Students Office.

You will be tested on information from lecture material and the textbook. Lectures will not be a regurgitation of what is in the textbook. The lectures will only highlight some of the information covered in the textbook while going into greater detail on other topics. To succeed in this class - ***and we want you to succeed*** - you should view all the lectures and read the assigned material. If you do poorly on a quiz, exam or assignment, you should visit with the T.A.s or professors. Until exams are graded we cannot give grade-point cutoffs. However, **the overall class mean at the end of the semester, if below 80%, will be the lowest possible percentage to obtain a B in the course.** 10% increments above and below the overall class mean will be the cutoffs for the other letter grades. If the overall class mean is 80% or higher, then traditional cutoffs (A:100-90; B:89.9-80; C:79.9-70; D:69.9-60; F:59.9-0) will be used.

Accommodations are available for students with documented disabilities. Please notify the TAs and professors during the first week of class of any accommodation needed for the course. Students with disabilities who require accommodations for access and participation in this course must be registered with the Disability Resource Center (DRC; 312-413-2183). Disabilities may arise due to unanticipated medical emergencies or other traumatic events. In the case of such a situation please contact the DRC at the time when the problem occurs, so that a counselor can determine whether any accommodations are needed.

Best wishes for an enjoyable semester!!!!