

PSY 3310, Biological Psychology, 3 credits
Spring 2022, MWF 12:00 – 12:50 pm

Course Description: Overview of the mediating role of the brain and other parts of the nervous system in behavior. Topics may include function of neurons, sensation, brain development, movement, sleep, reproduction, language, emotion, and psychological disorders.

Course Overview: This course begins with important theoretical perspectives on the brain and behavior, followed by the cellular mechanisms of the nervous system. We then explore the research methods used to study the brain and get a brief exposure to the gross anatomy and development of the brain. In the second part of the course, we evaluate the role of the brain in specific behaviors including sleep, motivation, reproduction, emotion, and abnormal behavior.

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Office Hours:	MW 9:00-10:30 am, T 11:00-Noon, or by appointment. Sign up here



Course Materials

Biological Psychology, 13th edition (2019), by James W. Kalat.

Learning Objectives

1. Compare the major concepts, theoretical perspectives, empirical findings, and historical trends in biological psychology.
2. Evaluate the strengths and weaknesses of research methods in biological psychology.
3. Use scientific reasoning to interpret phenomena in biological psychology.
4. Demonstrate effective written and oral communication skills.
5. Recognize, understand, and respect the complexity of individual differences related to biological causes.
6. Enjoy learning about biological psychology!

Teaching Philosophy

The mind is not a vessel to be filled, but a fire to be kindled - Plutarch

Chapter-specific objectives are listed in the description of each chapter module in Brightspace D2L.



Requirements and Grading

Requirement	Points	% of Final Grade
Quizzes and Exams		
Chapter Quizzes	250	50%
Final Exam	50	10%
Assignments and Activities		
Journal article critiques (2 x 40 points)	80	16%
Online activities (5 x 10 points)	50	10%
Sleep Diary/Analysis	40	8%
Class Participation	30	6%
Total	500	100%

Grading scale: A (90%), B (80%), C (70%), D (60%), F (<60%)



Chapter Quizzes

- **You may use your book, notes, Internet, and any other resources except other people when taking your quizzes. Collaborating with others on the quiz is considered academic misconduct.**
- Quizzes are designed to assess your fulfillment of the course objectives. Questions on the chapter quizzes are multiple choice and short answer from material covered in lecture and the textbook. The questions are based on the application of the information you have learned and will test your critical thinking skills.
- Chapter quizzes will be administered online. They will be available for 3 to 4 days after we complete the associated chapter in class. Quiz questions are randomly selected from a set of questions. Thus, you may end up with 2 questions that test similar concepts and you will not have the exact same questions as another student. Across all the quizzes, the average difficulty for everyone in the class will be very similar.
- As part of a cumulative testing strategy, each quiz contains questions from each of the prior chapters. As such, each subsequent quiz will have more questions and you will have more time to complete them.
- You will have two attempts at each quiz. Your grade will be the higher of the two attempts. The quizzes are timed, approximately 2 minutes per question. The timer begins once you open the quiz. Save each answer as you go. Don't wait until the end when you submit the quiz!
- After the quiz has been submitted, you can immediately view the correct answers to the multiple-choice questions you missed.
- The short answer question is the same for both attempts on every quiz. Thus, I will accept only your first answer on that question and will transfer your score from the first attempt to your second attempt (you don't need to answer it on your 2nd attempt). The short answer question is intended to assess your ability to analyze and evaluate information in a novel manner.
- If you have technical problems while taking a quiz, please complete the quiz at the next possible time. You may have a warning that your time has expired, but don't worry, your

answers will be saved. Then, send me an e-mail explaining why your time went over. Brightspace D2L records all quiz times.

- Quiz deadlines will be adjusted for students with University-approved absences.

Final Exam

Like the quizzes, the final exam is comprehensive and will contain questions randomly selected from each of the prior chapters.

Online Exercises (ed.ted.com)

There are five online exercises linked from within D2L. Each one requires you to view a short video (3-5 minutes), then complete a 5 multiple-choice item quiz. The online exercises are located at <http://ed.ted.com> and will require you to register (the first time) and login **prior** to completing the online exercise.

To access the online quiz, click on “Think” to the right of the video. Your performance on your **FIRST** attempt of the online quiz will count toward your grade (2 points for each correct answer). However, you can watch the video as many times as you want before you take the online quiz.

Journal Article Critiques

This assignment helps students gain skills necessary to read, interpret, and synthesize original research, which will be applicable in research methods, capstone courses, and other courses in the major.

View the complete instructions in D2L.

Class Participation

Using mobile devices for classroom polling can promote student participation and engagement. The benefits of using classroom polling include:

1. All students can respond to questions posed in class.
2. Students give more honest answers of what they are thinking and learning because their responses are anonymous to other students.
3. Students and instructors get immediate feedback about learning.
4. It works well with peer instruction, which has also been shown to increase student learning.



A portion of your grade will depend on audience participation using the polling software. If you participate in at least 70% of the class periods that I record participation, you will receive the full participation points. Below that, your participation points will be reduced accordingly. Tracking individual participant responses is done for the purposes of grading, instructional research, and course development.

Technology Policy

- Cell phones should not be used during class, except with the instructor's permission. Texting or talking on cell phones disrupts the learning environment, especially for the person doing it :)
- Laptops may be used in class only for taking notes.



Reading Schedule, Important Dates



Please read the chapters in the textbook before class to enhance understanding of demonstrations, examples, and group discussions. Please note this schedule is subject to change.

Week	Date	Chapter Topic	Assignment Due
1	10-Jan	Course Overview	
	12-Jan	Intro: Mind-Brain, Biological Explanations, Careers	Ed.ted online activity: Creative Robots
	14-Jan	1.1 Cells of the Nervous System	
2	17-Jan	MLK Birthday Observed	
	19-Jan	1.2 Nerve Impulse	
	21-Jan	1.2 Nerve Impulse	
3	24-Jan	2.1 Concept of the Synapse	
	26-Jan	2.2 Chemical Events of the Synapse	Journal Critique #1
	28-Jan	2.2 Chemical Events of the Synapse	
4	31-Jan	2.2 Chemical Events of the Synapse	
	2-Feb	3.3 Research Methods	
	4-Feb	3.1 Structure of Nervous System	
5	7-Feb	3.1 Structure of Nervous System	
	9-Feb	3.2 Cerebral Cortex	
	11-Feb	Lincoln's Birthday Observed	
6	14-Feb	4.1 Genetics and Evolution	
	16-Feb	4.2 Development of the Brain	Journal Critique #2
	18-Feb	4.2 Development of the Brain	
7	21-Feb	4.3 Plasticity after Brain Damage	
	23-Feb	4.3 Plasticity after Brain Damage	Ed.ted online activity: Could the Brain Repair Itself?
	25-Feb	4.3 Plasticity after Brain Damage	
8	28-Feb	Midterm Review (Jeopardy)	
	2-Mar	8.1 Rhythms of Waking and Sleeping	
	4-Mar	8.2 Stages of Sleep	
9	7-Mar	8.2 Stages of Sleep	Ed.ted online activity: Why Dream?
	9-Mar	8.2 Stages of Sleep	
	11-Mar	Guest Lecture	
10	14-Mar	Spring Break	
	16-Mar	Spring Break	

	18-Mar	Spring Break	
11	21-Mar	8.3 Why Sleep? Why Dreams?	
	23-Mar	9.1 Temperature Regulation	
	25-Mar	9.2 Thirst	
12	28-Mar	9.2 Thirst	
	30-Mar	9.3 Hunger	Sleep Diary
	1-Apr	9.3 Hunger	
13	4-Apr	10.1 Sex and Hormones	
	6-Apr	10.2 Variations in Sexual Behavior	Ed.ted online activity: Attraction
	8-Apr	10.2 Variations in Sexual Behavior	
14	11-Apr	10.2 Variations in Sexual Behavior	
	13-Apr	11.1 What is Emotion?	
	15-Apr	11.2 Attack and Escape	
15	18-Apr	11.2 Attack and Escape	
	20-Apr	11.3 Stress and Health	Ed.ted online activity: Stress & the Brain
	22-Apr	14.1 Substance Abuse	
16	25-Apr	14.2 Mood Disorders	
	27-Apr	14.3 Schizophrenia	
	29-Apr	Last lecture, final review	
17	4-May	Final Exam 10:15 a.m.-12:15 p.m.	

View the [university's academic calendar](#) for add, drop, and withdrawal deadlines.

Diversity Statement

Each of us comes from a unique cultural background influenced in many ways by the people with whom we interact and the surrounding structures of society. Diversity provides the opportunity to learn from one another and deepen our understanding and empathy for one another. Differing viewpoints are acceptable, but we can be inclusive by respecting, supporting, and valuing people who possess ideas different from our own. Students in this course should feel comfortable sharing their personal views without fear of reprisal. Discriminatory behaviors based on an individual's race, color, religion, sex, gender identity, sexual orientation, national origin, disability, age, marital status, political affiliation or other personal characteristics are not acceptable and may be referred to the Office of Civil Rights and Diversity.

Late Work Policy

Late work submitted after the deadline may be penalized by up to 20% of the points for the assignment. Requests for extensions of deadlines may be made for university-excused absences or for extenuating circumstances.

Academic Integrity

Students are expected to maintain principles of academic integrity and conduct as defined in [EIU's Code of Conduct](#). Violations will be reported to the Office of Student Standards. Cheating, plagiarism, and other forms of academic misconduct will not be tolerated. As a student, you have a personal responsibility to maintain high standards of academic conduct to preserve

academic integrity. Academic misconduct will result in zero points for the assignment and appropriate disciplinary action, according to university guidelines.

Students with Disabilities

If you are a student with a documented disability in need of accommodations to fully participate in this class, please contact the Office of Disability Services (ODS). All accommodations must be approved through ODS. Please stop by Ninth Street Hall, Room 2006, or call 217-581-6583 to make an appointment.

Student Success Center

Students who are having difficulty achieving their academic goals are encouraged to contact the [Student Success Center](#) for assistance with time management, text taking, note taking, avoiding procrastination, setting goals, and other skills to support academic achievement. The Student Success Center provides individualized consultations. To make an appointment, call 217-581-6696, or go to 9th Street Hall, Room 1302.

Early Alert System

Eastern maintains an Early Alert System (EAS) to help students know when they are not performing up to academic standards. Alerts may be given for poor attendance, not turning work in on time, or doing poorly on an assignment or test. EAS staff will contact you to help you find resources to help you be a successful student. Resources may include time management, study skills, test-taking, finding tutors, or other resources related to academic issues. I will use the EAS if I believe you could benefit from talking to a success coach about these issues.

Booth Library

Located in the center of campus, Booth Library is the best place to do research, find expert help, or study in a calm, distraction-free environment. In addition to the many print resources, Booth provides access to high quality e-books, journals and scholarship not freely available on the Web. Stop by the Reference Desk or go to <http://library.eiu.edu> to explore library resources. Get expert help with your research by contacting the Booth Library reference librarians. Visit, call 581-6072, or go to <http://booth.eiu.edu/ask> to connect with a librarian.

COVID-19 Practices & Expectations on EIU's Campus

The University is asking all of us to take precautions to prevent the spread of COVID-19. EIU's policy is intended to protect all of us on campus, as well as the community, your roommates, and loved ones at home. All students, regardless of vaccination status, are required to wear face coverings during class. Students may sit in any classroom seat where they are most comfortable. All reasonable efforts will be made to provide modifications to classroom seating arrangements if needed; however, this may not be possible in all situations. Students should not attend class if they are ill and should consult the student health clinic if they have any COVID-19-like symptoms. EIU's COVID-19 campus practices including face coverings, when and where required, avoiding campus if sick, sanitizing surfaces, social distancing, and hand washing all of which are based on the best available public health guidance. Everyone in the campus community is responsible for following practices that reduce risk. If you have a health

condition that may require a potential classroom accommodation or variation from current EIU COVID-19 policy, please contact Student Disability Services (studentdisability@eiu.edu or 581-6583) to determine what options may be available based on current CDC guidance. If you are unable to follow EIU's COVID-19 guidelines, you may be asked to leave class or office hours as compliance with public health guidance is essential. Accommodations for instruction and make-up work will be made for students with documented medical absences according to [IGP #43](#). To view the latest EIU COVID-19 related information and any policy updates, please visit <https://www.eiu.edu/covid/>.