

PSY 3310, Biological Psychology, 3 credits
Spring 2019, 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 10:00-11:00 am, or by appointment



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 basic 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 (89%), B (79%), C (69%), D (59%), F (<59%)



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 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

Similar to 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 available in D2L under the content folder “Online Activities.” 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. 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.

Learning Objectives

1. Summarize, analyze, and evaluate research methods of articles published in peer-reviewed journals.
2. Integrate material learned in the course with current empirical research.
3. Use electronic library resources (Booth Library, Google Scholar, etc.) to improve information literacy.
4. Earn course credit through critical writing as a complement to taking tests or other assignments.



Furthermore, this writing assignment helps fulfill six of the [Psychology Department Learning Goals](#) (1.1, 1.3, 1.4, 2.1, 2.2, and 3), which are based on the American Psychological Association’s [Guidelines for the Undergraduate Psychology Major v2.0](#).

View the complete instructions in the D2L module titled “Journal Critiques.”

The minimal requirements for this assignment do not meet the requirements for papers submitted to the electronic writing portfolio (EWP).

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. As long as 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 in order to enhance understanding of demonstrations, examples, and group discussions. Please note this schedule is subject to change.



Week	Date	Topic
1	7-Jan	Course Overview
		Online activity #1 due: Creative Robots
	9-Jan	Intro: Mind-Brain, Biological Explanations, Careers
	11-Jan	1.1 Cells of the Nervous System
2	14-Jan	1.2 Nerve Impulse
	16-Jan	1.2 Nerve Impulse
	18-Jan	2.1 Concept of the Synapse
3	21-Jan	MLK Birthday Observed
		Journal Critique #1 Due
	23-Jan	2.2 Chemical Events of the Synapse
	25-Jan	2.2 Chemical Events of the Synapse
4	28-Jan	2.2 Chemical Events of the Synapse
	30-Jan	3.3 Research Methods
	1-Feb	3.1 Structure of Nervous System
5	4-Feb	3.1 Structure of Nervous System
	6-Feb	3.2 Cerebral Cortex
	8-Feb	4.1 Genetics and Evolution
6	11-Feb	4.2 Development of the Brain
		Journal Critique #2 Due
	13-Feb	4.2 Development of the Brain

	15-Feb	Lincoln's Birthday Observed
7	18-Feb	4.3 Plasticity after Brain Damage
		Online activity #2 due: Could the Brain Repair Itself?
	20-Feb	4.3 Plasticity after Brain Damage
	22-Feb	MISTOP Conference
8	25-Feb	Midterm Review (Jeopardy)
	27-Feb	7.2 Brain Mechanisms of Movement
	1-Mar	7.3 Movement Disorders
9	4-Mar	8.1 Rhythms of Waking and Sleeping
		Online activity #3 due: Why Dream?
	6-Mar	8.2 Stages of Sleep
	8-Mar	8.2 Stages of Sleep
10	11-Mar	Spring Break
	13-Mar	Spring Break
	15-Mar	Spring Break
11	18-Mar	8.2 Stages of Sleep
	20-Mar	8.3 Why Sleep? Why Dreams?
	22-Mar	9.1 Temperature Regulation
12	25-Mar	9.2 Thirst
		Sleep Diary/Analysis Due
	27-Mar	9.2 Thirst
	29-Mar	9.3 Hunger
13	1-Apr	9.3 Hunger
		Online activity #4 due: Attraction
	3-Apr	10.1 Sex and Hormones
	5-Apr	10.2 Variations in Sexual Behavior
14	8-Apr	10.2 Variations in Sexual Behavior
	10-Apr	10.2 Variations in Sexual Behavior
	12-Apr	11.1 What is Emotion?
15	15-Apr	11.2 Attack and Escape
		Online activity #5 due: Stress & the Brain
	17-Apr	11.2 Attack and Escape
	19-Apr	11.3 Stress and Health
16	22-Apr	14.1 Substance Abuse
	24-Apr	14.2 Mood Disorders
	25-Apr	14.3 Schizophrenia
17	1-May	Final Exam, 10:15-12:15 pm

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

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.