Brain and Behavior – PSY 209

When: Tuesday and Thursday, 10:20 – 11:40 AM

Where: 118 Psychology Building

Disclaimer: Please note that elements of this syllabus are subject to change at the discretion of the professors. Any changes will be provided to students via email or on the course D2L website.

Course Description

In this course we will discuss how the brain works to influence behavior, and how behavior and our environment alter the brain. This includes basic physiological mechanisms, in which cells in the brain communicate with one another to allow all species to interact and navigate their environment, to more evolutionary advanced processes, which allow humans to use complex cognitive strategies. We will also discuss how mechanisms of the brain can go wrong and lead to maladaptive consequences and conditions, such as those seen in mental illness.

Instructor and Office Hours

Dr. Alex Johnson (instructor)
Office hours zoom: Fridays 10-11AM (or by appointment)
Zoom meeting ID = 945 4157 6765; passcode = 569149 **E-mail:** awj@msu.edu

Hanna Dobson (graduate student TA)
Office hours zoom: Tuesdays 1-2PM (or by appointment)
Zoom meeting ID = 973 0123 2497; **E-mail:** dobsonh1@msu.edu

Sarah Hetner (undergraduate assistant)

Reading Material

"Biological Psychology" 7th Edition, 2013, SM Breedlove and NV Watson, Sinauer press, available at the Student Book Store.

More recent versions are also acceptable

Attendance

It is expected that you attend each lecture. You are responsible for all information presented in class, including any announcements and class discussions. Lectures will also include material not presented in the book. You should prepare for each class by reading the assigned chapter prior to class. Course information, syllabus, review guides, announcements will be posted using D2L. Abbreviated versions of the PDF files used for lecture will be posted before or after each lecture.

Questions and Exam Preparation

ALL E-mail inquiries should initially be directed to the graduate TA, Hanna Dobson. There are many students in this class, therefore we appreciate your patience when receiving responses from the course instructor and graduate TA. We will endeavor to respond to e-mails within a 48 hr window.

you are having difficulty with the material, have questions or other concerns, you may come to office hours or make an appointment. You are encouraged to ask questions and utilize the service of the assistants who are available to help you learn.

Review sessions: Exam review sessions will be held by the TA several days prior to the exam. These sessions will be organized virtually, and the TA will advertise the zoom link via the D2L website. During these sessions, the TA will answer your questions, but will not be giving a prepared lecture. If there are no questions, the review session will end early. These review sessions are not required.

Exams and Grading

Four Midterm Exams: (45 questions each, 5 points/question = **225 points/exam**).
These exams will cover material dealt with during lecture periods (lectures, movies, discussion…etc) or contained in the readings. **They will be multiple-choice tests administered during class time (see class schedule).**

Final Exam: (75 questions, 3 points/question, **225 points**).
There will be a final exam that covers material dealt throughout the semester. It will be the same format as the midterms. **This exam will be administered on 12/12/24 at 10AM (see class schedule).**

Class participation: (**120 points**).
There will be at least 6 in class discussions or activities. During several class periods we will set aside time to discuss an issue in biological psychology that is either controversial, directly relevant to important social issues or has wide-reaching implications for the field of science. You will then be asked to write a paragraph or two in response to a few questions about the issues discussed. Your responses will be uploaded through D2L and must be received within one week of the activity being administered. Students will receive up to 20 points for participation in each discussion periods. There may be questions on

midterms or the final exam that deal with material brought up during these periods of discussion.

Neurotransmitter assignment: (**60 points**).
For this assignment you will describe an important life event and the potential neurotransmitter systems that were engaged as you experienced this event. A grading rubric will be provided and time to complete the assignment will also be allocated during class (**see class schedule**). The assignment must be submitted by **Fall Break, midnight on 10/21/24 via D2L TurnItIn.**

Attendance: (5 points/class, **95 points**).
Attendance will be monitored throughout the semester; many classes will have overlapping themes, which are designed to help with conceptualizing the topics discussed. Students will receive 5 points when attending each class. **If you are unable to attend class, you must contact the TA Hanna Dobson (dobsonh1@msu.edu) prior to the start of class and provide a valid reason for your absence in order to be credited any missed points.**

Top hat questions: (40 questions, 3 points/question, **120 points**).
We will be using Top Hat Pro (www.tophat.com) for in class questions. During each class, approximately two questions will be administered based on the material being discussed. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message. For instructions on how to create a Top Hat account consult Top Hat's Getting Started Guide (https://bit.ly/31TGMlw). **If you are unable to submit your response through TopHat due to any technical issues, you must contact the TA Hanna Dobson (dobsonh1@msu.edu) on the day of class and provide your response to receive credit.**

To connect to Top Hat complete the following:

- Go to https://app.tophat.com/register/student
- Click "Search by school" and input the name of our school
- Search for our course with the following join code: **852430**

Grades will be assigned on the following scale:

90-100% = 4.0	75-79% = 2.5	60-64% = 1.0
85-89% = 3.5	70-74% = 2.0	< 60% = 0
80-84% = 3.0	65-69% = 1.5	

Make-up Exams

Make-up exams will **only be given in extreme cases such as**: 1) a documented serious medical or family emergency, or 2) a documented scheduled conflict, such as a religious

holiday or required participation in a university-sanctioned event. No makeup exams will be given unless you have a valid, documented excuse (e.g., a note from the dean, a note from your doctor recommending that you not attend class). If you cannot get a note or if your excuse involves something that is personal and that you want to keep private, you must get a note from the Dean. If you cannot take the exam because of a university-scheduled event (e.g., a commitment for a sports team), a religious holiday, or some other acceptable event that you could have been foreseen, you must notify the TA **at least one week before the exam**. If you cannot take the exam because of a sudden illness or because of a family emergency, you must notify the TA **by the end of the day of the exam.** Absence from an exam for any other reason will result in a grade of 0 for that exam.

Academic Honesty

Article 2.3.3 of the Academic Freedom Report states that "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the Department of Psychology adheres to the policies on academic honesty as specified in General Student Regulations 1.0, *Protection of Scholarship and Grades;* the all-University Policy on *Integrity of Scholarship and Grades*; and Ordinance 17.00, Examinations. (See *Spartan Life: Student Handbook and Resource Guide* (http://www.vps.msu.edu/SpLife/index.htm) and/or the MSU Web site: http://www.msu.edu.). At MSU, General Student Regulation 1.00 states in part that "no student shall claim or submit the academic work of another as one's own." (For the complete regulation, see Protection of Scholarship and Grades.) You are expected to complete all course assignments, including homework, lab work, quizzes, tests and exams, without assistance from any source. You may not assist anyone or be assisted by anyone on an exam, and you may not use the text or any notes during an exam. Your written work must be your own and you are not authorized to use the www.allmsu.com web site to complete any course work in this course. Any student caught cheating, plagiarizing or otherwise violating the MSU academic integrity policy may receive the maximum punishment, including a grade of 0.0 in the course.

Please note that any material provided on D2L in this course should not be published elsewhere and disseminated to students that are not part of this class.

The use of generative AI tools (such as ChatGPT, DALL-E, etc.) is not permitted in this class; therefore, any use of AI tools for work in this class may be considered a violation of Michigan State University's policy on academic integrity, the Spartan Code of Honor Academic Pledge and Student Rights and Responsibilities, since the work is not your own. Any student caught using generative AI tools may receive the maximum punishment, including a grade of 0.0 in the course.

Diversity Statement

As students and faculty, it is incredibly important to emphasize that research supports the idea that diverse and inclusive environments enhance learning (e.g., Griffin et al, 2015;

Pascarella & Terezini, 2005). It is my intent that students from all diverse backgrounds and perspectives feel comfortable in the classroom setting and be provided with discussion and material that will enhance their scholarly learning. Moreover, the diversity that students provide to PSY209 will be perceived as a strength and resource that enhances the academic environment for all those enrolled in this course.

Classroom Behavior

Classes begin on time. Students are expected to put away all distractions before class begins, and turn off cell phones, iPods etc. It is not appropriate to answer phone calls or text message during lecture. If you arrive late or leave early, plan to sit near the back and by an aisle to minimize the disruption to others. **Please stop talking to your neighbor during the lecture.** Please respect your instructors and fellow students by turning off electronic communication devices during class. Laptop use is permitted. However, distracting activities such as instant messaging, writing e-mail, social networking, or playing games is **strictly prohibited during class time.** These behaviors are disruptive and are not conducive to the learning process.

Accommodations for Disabilities

Students with disabilities should contact the Resource Center for Persons with Disabilities (RCPD) to establish clear and reasonable accommodations. For an appointment with a counselor, call 353-9642 (voice) or 355-1293 (TTY). If you require testing accommodations as specified from RCPD, contact your TA with the appropriate paperwork at least one week prior to the exam date.

Class Schedule

Date	Seminar	Reading
8/29	Introduction*	Ch. 1
9/3	Functional Neuroanatomy	Ch. 2
9/5	Functional Neuroanatomy	Ch. 2
9/10	Functional Neuroanatomy*	Ch. 2
9/12	Neurophysiology	Ch. 3
9/17	Neurophysiology*	Ch. 4
9/19	Neurophysiology	Ch. 4
9/24	Neurophysiology	
9/26	**Exam #1**	
10/1	Chemical basis of behavior*	Ch. 4
10/3	Chemical basis of behavior	Ch. 4
10/8	**No class – Neurotransmitter Assignment**	Ch. 4
10/10	Drugs and behavior*	Ch. 4
10/15	**Guest lecture**	Ch. 6
10/17	**Exam #2**	
10/19	Development	Ch. 7
10/22	**No class – Fall Break**	Ch. 7
10/24	Development*	Ch. 9
10/29	Homeostasis	Ch. 12
10/31	Taste*	
11/5	**No class – Election Day**	
11/7	**Exam #3**	
11/12	Emotion, stress and aggression	Ch. 15
11/14	Psychopathology*	Ch. 16
11/19	Psychopathology*	Ch. 16
11/21	Learning and Memory	Ch. 17
11/26	Learning and Memory	Ch. 17
11/28	**No class - Thanksgiving**	
12/3	**Exam #4**	
12/5	**Review Session**	
12/12	**Final exam @ 10:00AM--12:00 PM**	

* = indicates in class discussion or activity