

## **Brain and Behavior – PSY209**

**When: Tuesday and Thursday, 8:00 – 9:20 AM**

**Where: 128 Natural Sciences Building**

### **Course Description**

In this course, we will discuss how the brain works to influence behavior, as well as 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 species to interact and navigate their environment, up to more evolutionarily advanced processes such as the use of complex cognitive strategies in humans. Additionally, we will discuss how brain mechanisms can become pathological, leading to maladaptive consequences and conditions such as those seen in mental illness.

**Instructor:** Ben Fry, M.A.

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**Office hours:** Tuesdays 11am - 12pm

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**Graduate TA:** Henry Yang

**Office:** 1402 ISTB

**Office hours:** Monday 2pm - 3pm (or by appointment)

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**Undergraduate Assistants:** Sarah Broida

**Office:** 349 Giltner

**Office hours:** Tuesdays 230pm - 330pm

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### **Reading Material**

*Behavioral Neuroscience* 8<sup>th</sup> Edition, 2016, SM Breedlove and NV Watson, Sinauer press, available at the Student Book Store. Companion website to this textbook:

<https://www.bn8e.com> This website features chapter summaries, tutorials, flash cards and other study aids as well as links to recently published news articles on topics relevant to each of the chapters in the text. *You are not required to purchase any code/accounts or extras with the textbook in order to complete this course.*

Note: The 7th edition of the text is also acceptable; however, the title is *Biological Psychology* (if you intend to buy the 7th edition, make sure the text is authored by Breedlove & Watson;

*there are other textbooks with this same title!*). If you have questions regarding the text before purchase, please direct your inquiries to the TA.

## **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 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 after each lecture.

## **Questions and Exam Preparation**

**ALL E-mail inquiries should be directed to Henry Yang.** If 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 during normal class hours. 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.

## **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. Bring your student ID with you to the exams. The exams will not be returned to you, but they will be available for you to look over after they have been graded. You can do this at the office hours of the TA. **Be on time**—No exam will be given if you are late and a completed exam has already been turned in.

**Final Exam:** (75 questions, 3 points/question, **225 points**). There will be a final exam that covers material discussed throughout the semester. This will be the same format as the midterms.

**Class participation: (120 points).**

There will be at least 6 in class activities. During several class periods we will set aside time to discuss an issue in biological psychology that is controversial and/or is directly relevant to important social issues. You will then be asked to write a few sentences in response to questions about the issues discussed. Students will receive up to 20 points for participation in

each discussion period. There may be questions on midterms or the final exam that deal with material brought up during these periods of discussion. We may also have a quiz in class during the time when no class discussion is scheduled. You will be asked to take short answer questions and will receive up to 20 points for each quiz.

**Grades will be assigned on the following scale:**

90-100% = 4.0

85-89% = 3.5

80-84% = 3.0

75-79% = 2.5

70-74% = 2.0

65-69% = 1.5

60-64% = 1.0

< 60% = 0

## **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.

There are no make-up exams without a written valid excuse AND permission from the TA. **Permission must be obtained immediately before or after the missed exam (within 1 day).**

## **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](http://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.

## **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.

## Schedule

<b>Date</b>	<b>Seminar</b>	<b>Reading</b>
7-Jan	Introduction	Ch. 1
9-Jan	Functional Neuroanatomy	Ch. 2
14-Jan	Functional Neuroanatomy	Ch. 2
16-Jan	Functional Neuroanatomy	Ch. 2
21-Jan	Neurophysiology	Ch. 3
23-Jan	Neurophysiology	Ch. 4
28-Jan	Neurophysiology	Ch. 4
30-Jan	Neurophysiology	Ch. 4
4-Feb	<b>Review Session</b>	
6-Feb	<b>Exam #1</b>	
11-Feb	Chemical Basis of Behavior	Ch. 4
13-Feb	Chemical Basis of Behavior	Ch. 4
18-Feb	Drugs & Behavior	Ch. 4
20-Feb	Hormones & Behavior	Ch. 5
25-Feb	Evolution	Ch. 6
27-Feb	<b>Review Session</b>	
3-Mar	<b>Exam #2</b>	
5-Mar	Development	Ch. 7
10-Mar	Spring Break - No Class	
12-Mar	Spring Break - No Class	
17-Mar	Development	Ch. 7
19-Mar	Taste	Ch. 9
24-Mar	Sex: Evolutionary & Hormonal Basis	Ch. 12
26-Mar	Homeostasis	Ch. 13
31-Mar	<b>Review Session</b>	
2-Apr	<b>Exam #3</b>	
7-Apr	Emotion, Stress, & Aggression	Ch. 15
9-Apr	Psychopathology	Ch. 16
14-Apr	Learning & Memory	Ch. 17
16-Apr	Learning & Memory	Ch. 17
21-Apr	<b>Review Session</b>	
23-Apr	<b>Exam #4</b>	
28-Apr	<b>Final, 128 Natural Sciences Building @ 7:45 - 9:45 AM</b>	