Psychology 209, section 002

**Brain and Behavior**

Fall 2024

Life Science A133

M/W/F 11:30 am -12:20 pm EST

# **Instructor**

Professor Alexa Veenema; Office Hours: by appointment through Zoom; aveenema@msu.edu

**Graduate TA**

Jamie Shi, BS; Office Hours: by appointment through Zoom; shijiami@msu.edu

# **Readings**

“Behavioral Neuroscience” 8th Edition, 2016, SM Breedlove and NV Watson, Sinauer press, available at the Student Book Store.

**Note that this class does not have an honors option**

# **Course description**

This course covers a range of issues related to the function, development, and evolution of the brain. We will discuss how single cells function within networks that enable us to think, feel and behave. The neural basis of motivational systems will be considered, as will the biology of sleep and rhythms, learning, memory and cognition. We will also discuss ways in which problems can arise in these neural systems and in the behaviors and mental processes that they regulate.

## **Live Lectures in Life Science A133 or through Zoom**

Lectures will be taught in person in Life Science A133 or will be taught synchronous through Zoom (See Class Schedule below for details). The Zoom link will be sent to you prior to the first class. **Class attendance will not be monitored**. However, it is strongly recommended to attend the live lectures to do well in this course. Lecture slides will be posted on D2L and on TopHat before each lecture. Top Hat in-class questions and the correct responses will be posted on TopHat after each lecture. Although not anticipated, an occasional lecture may be recorded rather than taught live. If this were the case, this recorded lecture will then be posted on D2L, but may not be reproduced, shared with those not in the class, or uploaded to other online environments and doing so may result in disciplinary action.

# **Exams**

There will be **four exams that will take place in Life Science A133 at the scheduled class time**. Exams are not cumulative. **There is no final exam**. Exams will cover material dealt with during the lectures. All questions will be multiple-choice. The exams will be available for you to look over after they have been graded. You can do this by making an appointment with Dr. Veenema or the TA. **There will be no make-up exams**, except for medical or family emergencies. If you missed an exam due to an emergency, you need to discuss your options with the instructor. Please be aware that it is against MSU policy for a professor to give any individual student a special opportunity that is not provided to all students. We will not be allowed to provide individuals special chances for extra credit or extra opportunities to make up exams, etc.

# **Top Hat**

This course requires the use of Top Hat ([www.tophat.com](http://www.tophat.com)), a classroom engagement tool that is designed to assess your understanding of course material in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message. *All student responses to in-class Top Hat questions will be graded on correctness* (See **Overall Grade** for further details).

You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

In addition to allowing for immediate response to questions in class through your device, this course will be using Top Hat to allow for *paperless online exams from any personal or mobile device* (i.e., your phone or laptop) in a secure testing environment. If you leave the browser during a test, you will be automatically locked out of the test.

If you signed up for the course, an email invitation from Top Hat will be sent to you by email. If you didn’t receive this email, you can register by visiting the PSY209 course website: **https://app.tophat.com/e/295109**

Note: The PSY209 Brain and Behavior Course Join Code is **295109**

Top Hat will require a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing.

Should you require assistance with Top Hat at any time, please contact their Support Team directly by way of email (support@tophat.com), the in-app support button, or by calling 1-888-663-5491. They would require specific user information to troubleshoot these issues.

# **Review sessions**

Exam review sessions will be held by the Professor or TA during class time. During these review sessions, there are no prepared lectures, but rather we will go over the most important slides and we will answer any questions you might have. You can ask questions through email in advance or while in class. Come prepared with questions to get the most out of these review sessions!

# **Grades**

Grades will be assigned according to 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.

# **Overall grade**

The four exams together will count for 100% (with each exam 25%). Each exam consists of 50 multiple choice questions, each worth 2 points for a total of 100 points. **You can earn bonus points for each of the four exams with your responses to in-class Top Hat questions**: If you answered 40-50% of the in-class TopHat questions correct, you will earn 2 bonus points; If you answered 51-60% of the in-class TopHat questions correct, you will earn 4 bonus points; If you answered >60% of the in-class TopHat questions correct, you will earn 6 bonus points.

**No other extra credit points will be given to any student in this course and emails from students asking for extra credit will not be answered.**

# **Course Schedule (Live lectures are either in Life Science A133 or through Zoom)**

|  |  |  |  |
| --- | --- | --- | --- |
| 8/26 | Introduction | Ch. 1 | Zoom |
| 8/28, 8/30 | Functional Neuroanatomy  | Ch. 2 | Zoom |
| *9/2* | *No class* |  |  |
| 9/4, 9/6 | Neurophysiology  | Ch. 3 | Zoom |
| 9/9, 9/11 | Neurochemistry  | Ch. 4 | Zoom |
| 9/13 | Review session  | Ch. 1-4 | A133 |
| **9/16** | **Exam #1**  | Ch. 1-4 | A133 |
| 9/18, 9/20, 9/23 | Hormones and the Brain | Ch. 5 | A133 |
| 9/25, 9/27 | Evolution | Ch. 6 | A133 |
| 9/30, 10/2 | Development  | Ch. 7 | A133 |
| 10/4, 10/7, 10/9 | Sex & gender  | Ch. 12 | A133 |
| 10/11 | Review session | Ch. 5-7,12 | A133 |
| **10/14** | **Exam #2** | Ch. 5-7,12 | A133 |
| 10/16, 10/18 | Sensory systems | Ch. 8  | Zoom |
| 10/21 | *Break day*  |  |  |
| 10/23, 10/25 | Motor control | Ch. 11 | Zoom |
| 10/28, 10/30 | Homeostasis | Ch. 13 | Zoom |
| 11/1, 11/4, 11/6 | Biological Rhythms & Sleep | Ch. 14 | Zoom |
| 11/8 | Review session | Ch. 8,11,13,14 | A133 |
| **11/11** | **Exam #3** | Ch. 8,11,13,14 | A133 |
| 11/13, 11/15,11/18 | Emotion | Ch. 15 | A133 |
| 11/20, 11/22 | Psychopathology | Ch. 16 | A133 |
| 11/25  | Learning & Memory | Ch. 17 | A133 |
| 11/27 | *Study Day* |  |  |
| 11/29 | *Thanksgiving*  |  |  |
| 12/2  | Learning & Memory | Ch. 17 | A133 |
| 12/4 | Review session | Ch. 15-17 | A133 |
| **12/6** | **Exam #4** | Ch. 15-17 | A133 |

**Office Hours**

Please contact Professor Veenema or the TA by email to make an appointment for office hours, which will occur remotely via Zoom.

# **Other issues**

## The professor and the TA are here to help you learn. We are happy to discuss with you any questions related to the brain and behavior, and to discuss material covered in class or in the text, as well as questions you might have that go beyond what we are able to cover in class. We also would like to help students that are having difficulties with the class and might like general advice about how to study more effectively.

Please email the professor if you have any concerns about your ability to succeed in this course due to challenges of online learning, technology, and the Tophat platform with differing availability by country. We will try to work with you so that you have full access to all course materials.

Please email the professor if you must miss class due to illness or self-isolation. We will try to work with you so that missed classes will not harm your performance or put you at a disadvantage in the class.

If you stay on MSU campus, please obey all MSU policies including those policies to slow the spread of COVID-19 (<https://msu.edu/together-we-will/keeping-spartans-safe/>).

**Use of generative artificial intelligence (AI) tools**

Students are **not permitted to use AI tools during in-class examinations**. The use of AI tools during in-class examinations is considered a violation of Michigan State University’s policy on academic integrity, the Spartan Code of Honor Academic Pledge and Student Rights and Responsibilities. However, students are permitted to use AI tools wisely and intelligently to prepare and study for exams when the use of AI tools is aimed to deepen understanding of subject matter and to support learning.

**Academic Honesty**

The Spartan Code of Honor states, "As a Spartan, I will strive to uphold values of the highest ethical standard. I will practice honesty in my work, foster honesty in my peers, and take pride in knowing that honor is worth more than grades. I will carry these values beyond my time as a student at Michigan State University, continuing the endeavor to build personal integrity in all that I do." In addition, Article 2.III.B.2 of the Student Rights and Responsibilities ([SRR](https://spartanexperiences.msu.edu/about/handbook/student-rights-responsibilities/article-two-academic-rights-and-responsibilities.html)) states that "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." The Psychology Department adheres to the policies on academic honesty as specified in [General Student Regulations 1.0, Protection of Scholarship and Grades](https://spartanexperiences.msu.edu/about/handbook/regulations/general-student-regulations.html); [the all-University Policy on Integrity of Scholarship and Grades](https://spartanexperiences.msu.edu/about/handbook/regulations/student-group-regs-rulings-policies-ordinances/integrity-of-scholarship-and-grades.html); and [Ordinance 17.00, Examinations](https://trustees.msu.edu/bylaws-ordinances-policies/ordinances/ordinance-17.00.html). Therefore, unless authorized by your instructor, you are expected to complete all course assignments, including homework, lab work, quizzes, tests and exams, without assistance from any source. You are expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course. Also, you are not authorized to use the [www.allmsu.com](https://urldefense.com/v3/__http%3A/www.allmsu.com__;!!HXCxUKc!1Nc74DWCir7y1NyY_pohBu2nfM9xqiNMim-_3x2OW5zwamK7CmJ4e1k4t_SSM9jPBNQ8gu2-qF2KHK4S$) Web site to complete any course work in this course. Students who violate MSU academic integrity rules may receive a penalty grade, including a failing grade on the assignment or in the course. Contact your instructor if you are unsure about the appropriateness of your course work. (See also the [Academic Integrity webpage](https://ossa.msu.edu/academic-integrity).)

**Inclusive Environment**

MSU is committed to creating and maintaining an inclusive community in which students, faculty, and staff can work together in an atmosphere free from all forms of discrimination. The Office of Institutional Equity (OIE) reviews concerns related to discrimination and harassment based on sex, gender, gender identity, race, national origin, religion, disability status, and any other protected categories under the University Anti-Discrimination Policy (<https://www.hr.msu.edu/policies-procedures/university-wide/ADP_policy.html>) and Policy on Relationship Violence and Sexual Misconduct (<https://civilrights.msu.edu/policies/rvsm.html>). If you experience or witness acts of bias, discrimination, or harassment, please report these to OIE: <http://oie.msu.edu/>.

**Limits to Confidentiality**

Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies.  However, students should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues to protect the health and safety of MSU community members and others.  As the instructor, I must report the following information to other University offices (including the MSU Police Department) if you share it with me:

· Suspected child abuse/neglect, even if this maltreatment happened when you were a child,

· Allegations of sexual assault or sexual harassment when they involve MSU students, faculty, or staff, and

· Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared.  In almost all cases, it will be your decision whether you wish to speak with that individual.  If you would like to talk about these events in a more confidential setting you are encouraged to make an appointment with the [MSU Counseling Center](https://caps.msu.edu/).

**Accommodations for Students with Disabilities**

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at [rcpd.msu.edu](https://www.rcpd.msu.edu/). Once your eligibility for an accommodation has been determined, you will be issued a Verified Individual Services Accommodation ("VISA") form. Please present this form to me at the start of the term and/or two weeks prior to the accommodation date (test, project, etc.). Requests received after this date may not be honored.  If you require testing accommodations (e.g., additional time.) you must contact the professor and present your VISA *at least two weeks before the exam date*to schedule an alternative exam.

**Disruptive Behavior**

Article 2.III.B.4 of the [Student Rights and Responsibilities (SRR)](https://spartanexperiences.msu.edu/about/handbook/student-rights-responsibilities/article-two-academic-rights-and-responsibilities.html) for students at Michigan State University states: "The student's behavior in the classroom shall be conducive to the teaching and learning process for all concerned." Article 2.III.B.10 of the [SRR](https://spartanexperiences.msu.edu/about/handbook/student-rights-responsibilities/article-two-academic-rights-and-responsibilities.html) states that "The student and the faculty share the responsibility for maintaining professional relationships based on mutual trust and civility." [General Student Regulation 5.02](https://spartanexperiences.msu.edu/about/handbook/regulations/general-student-regulations.html) states: "No student shall . . . interfere with the functions and services of the University (for example, but not limited to, classes . . .) such that the function or service is obstructed or disrupted. Students whose conduct adversely affects the learning environment in this classroom may be subject to disciplinary action.”

**Supportive resources for students**

A comprehensive list of support resources for MSU students is centralized on the Department of Psychology website (https://psychology.msu.edu/) with a direct link (https://psychology.msu.edu/undergraduates/student-resources.html). This list includes resources related to Academic Learning, Mental Health, Culture, and Identity. This list has been compiled and centralized to assist students in their search throughout the MSU website for these resources.

Additional resources for students:

[Spartan Code of Honor](http://splife.studentlife.msu.edu/spartan-code-of-honor-academic-pledge)

[Mental Health](https://caps.msu.edu/faculty-staff/Syllabus-Language.html)

[Tolerance and civility](https://hr.msu.edu/policies-procedures/university-wide/tolerance_civility.html)

[Religious Observance Policy](https://reg.msu.edu/ROInfo/Notices/ReligiousPolicy.aspx)

[Student Athletes](https://hr.msu.edu/policies-procedures/faculty-academic-staff/faculty-handbook/student_athlete_relationships.html)

[Pronouns](https://lbgtrc.msu.edu/home/resources-for-staff-and-faculty/)