

# MEDICAL PSYCHOLOGY

Class Times: M/W/F 11:00-11:55am in Dana 219 | Office Hours: M 1:30-2:30pm/Th 4-5pm/by appointment

## Instructor

Dr. Justin Hulbert  
pronouns: he/his/him  
office: Carnegie Science 530  
e-mail: [jhulbert@bates.edu](mailto:jhulbert@bates.edu)

## Course Materials

Shapiro (2024). *Biopsychology: Fundamentals and Contemporary Issues* (v2.0). Boston, MA: FlatWorld. ISBN (Digital): 979-8-88794-311-4

A copy of this required text is on reserve at the Ladd Library circulation desk.

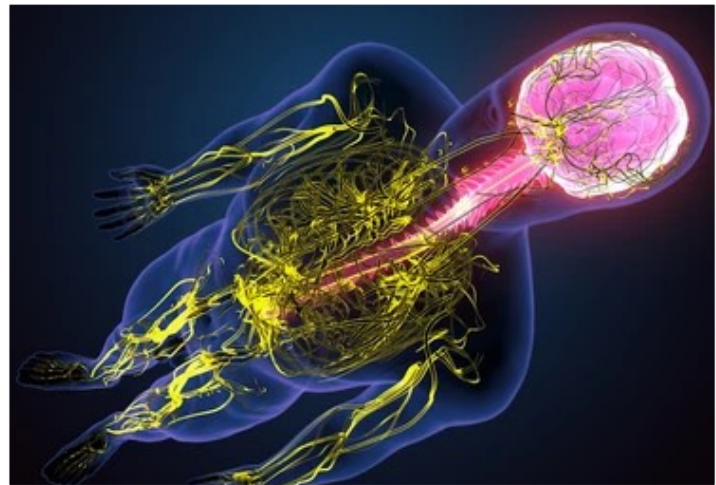
Additional materials will be posted on **Lyceum**.

## Prerequisite(s)

PSYC 101. Not open to students who have received credit for NS/PY 160.

## Assessments

- Quizzes: **52%** (4\*x13%)  
*\*lowest of 5 scores dropped*
- Article Spotlight: **10%**
- Case Presentation: **10%**
- Case Report: **5%**
- Final Reflection: **10%**
- Research Participation: **5%**
- Engagement: **8%**
- Extra Credit: **+4 extra % pts.**

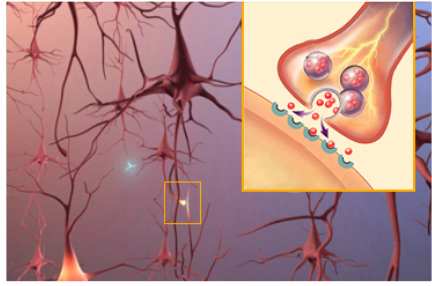


## Course Overview

This course explores the interplay between brain function and mental health, focusing on how neural processes shape—and are shaped by—psychological experiences and interventions. Beyond learning core concepts in neuroanatomy, neural communication, and psychopharmacology, you will investigate how disruptions in these systems contribute to neurological and psychiatric disorders, and how treatments work at the biological level. The course emphasizes applied, active learning through case workshops, miniature lab demonstrations, and structured debates. Through reading and summarizing empirical articles, presenting representative clinical cases, and debating policy and ethical issues, you will develop the skills to evaluate evidence and connect neuroscience to the complexities of medical and psychological practice.

## Joint Responsibilities

Achieving the broad aims of this course requires commitments from all of us. Below you will find an outline of some of those



## Learning Objectives

By the end of this course, you will be able to:

- Explain how neurons communicate at the cellular and systems level.
  - Analyze brain-behavior relationships by explaining the functions of major neural systems and evaluating how their disruption produces observable changes in cognition, emotion, or behavior.
  - Predict how structural (e.g., lesions), pharmacological, or stimulation-based (e.g., TMS, tDCS) perturbations alter neural signaling and system behavior, and use case-based reasoning to explain likely outcomes for cognition and behavior.
  - Evaluate treatment options by linking mechanisms to efficacy, risks, and ethical considerations.
  - Engage in the research process and communicate scientific ideas effectively.
- responsibilities. Did I leave something out? Let me know—we can discuss additional responsibilities/group norms as a class.
- **Your instructor agrees to...**
    - a) Make himself available outside of class during posted office hours (and by appointment, as necessary) to answer questions, provide extra help, and discuss matters related to the course of study.
    - b) Respond in a timely fashion to email queries. I encourage you to email me with questions, as this is often easier and faster than arranging a meeting. However, I aim to set healthy work-life boundaries, and I do not check email at home. Instead, I check email primarily once per day, usually around 5 or 6pm. This helps me give more focused attention to your messages (instead of fragmented replies throughout the day) and also models good practices for managing time and focus. You generally can expect a response within one business day, and often sooner if your message arrives before my daily email block. Messages sent in the evening or on weekends will be answered the next school day. Don't wait until the last moment (e.g., right before a quiz/deadline) to contact me. For questions that require more detailed discussion, I may suggest we meet in person during office hours.
    - c) Facilitate a thoughtful, considerate, and engaging learning environment.
    - d) Make available on Lyceum a skeleton of lecture slides, suitable for downloading/printing prior to class. Note that these skeletons are intended to supplement note-taking (e.g., by providing important/complicated figures) but are not a replacement for attending class. Classroom technology and circumstances permitting, a recording of the class will be posted to Lyceum's Kaltura Media Gallery within 24 hours of each lecture for the benefit of students who were ill or otherwise unable to attend class due to extenuating



## Best Practices

You are encouraged to:

- Let me know if I can clarify a concept or slow down
- Ask questions during lecture so that everyone benefits

To make the most of office hours, it is recommended that you:

- Avoid waiting until the last minute (e.g., before an quiz/ due date) to attend. Seeking help well in advance of deadlines will leave you plenty of time to act on advice discussed.
- Email the instructor in advance or bring with you a concise list of topics/questions you wish to discuss, if possible. Itemizing in this way helps ensure all your questions are addressed and saves you time in the long run. That said, *dropping by for a spontaneous, broader chat is also most welcome.*

circumstances. These recordings may also be used to review material covered in class.

- e) Provide adequate time to complete assignments, minimize changes to the published schedule/ assignments, and immediately notify students about any such changes.
  - f) Provide study/review guides in advance of each graded quiz to help direct studying.
  - g) Provide comprehensive and fair assessments of materials presented or assigned. Assignments, with a level of feedback commensurate with the nature and aims of the task, will be returned to students in a timely fashion.
  - h) Create and welcome opportunities for students to provide feedback on the course/teaching throughout the semester.
- **You are responsible for...**
    - a) Showing up to class regularly, on time, and prepared, as detailed in the below Attendance policy.
    - b) Checking your **Bates email** and **Lyceum** regularly for important announcements about the course, including alterations due to weather emergencies and other Unforeseen Events.
    - c) Giving your participation, readings, and assignments the time and effort they deserve. There is no substitute for a deep and focused consideration of the material, spaced out over time and considered actively.
    - d) Substantively participating in class discussions and other relevant activities. This could, for instance, involve asking/answering questions related to the offered course materials. Note that a top-notch level of participation does not necessitate responding to every question raised in class or online; active or passive efforts to welcome contributions from everyone in the class are also looked upon favorably. Though you are welcome to challenge your fellow

students' or your instructor's thoughts and conclusions, please do so in a fashion that is respectful. Challenge ideas, not the person raising them. More information can be found in the Diversity and Inclusion section, below.

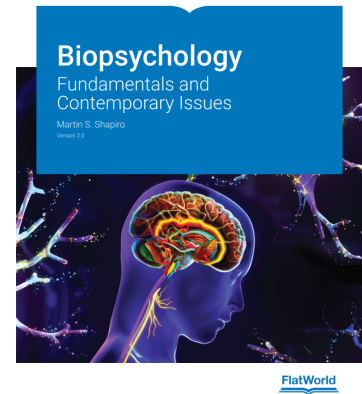
- e) Submitting assignments on time, digitally via Lyceum. Extensions may be granted for extenuating personal circumstances or illness. Please reach out as soon as you think you may need an extension so we can work out an arrangement. Otherwise, any late assignment will immediately be subject to a 10% penalty, with an additional 10% penalty leveled against that assignment's score for every 24 hours it remains late. *No late work will be accepted after 11:59pm on day final examinations end for the semester (according to the published academic calendar).* Make-up quizzes/exams for events explicitly described by Student Affairs (<https://www.bates.edu/accessible-education-student-support/makeup-exam-requests/>) will be given only when the student provides documentation substantiating the absence for the *precise day* of the quiz/exam (not the days leading up to it). Make-up quizzes/exams may be in the form of short essay, long essay, and/or oral defense, at the instructor's discretion. Information for students requiring alternative testing or other accommodations (e.g., due to disability) can be found under the Accessibility subheading, below.
- f) Using electronic devices wisely and respectfully. See section on In-Class Electronic Device Policy, below.
- g) Upholding academic integrity. See the sections on Academic Integrity and Use of Artificial Intelligence (AI), below.



### Textbook

- There are a number of high-quality textbooks on the market that would be suitable for a course like this. But the cost of such a comprehensive, up-to-date, engaging, peer-reviewed text that

links research to real-world applications tends to be astronomical these days, especially in a rapidly changing field like biopsychology. Fortunately, Flatworld publishes a full-featured textbook (ISBN: 979-8-88794-311-4) by Prof. Martin S. Shapiro that covers the bases at a much reduced price point. Note that we will be using **Version 2.0** of this textbook for our course. If you're still shopping for courses or getting your financial aid in order, it's possible to preview the first chapter for free by visiting <https://support.flatworldknowledge.com/en/articles/8796785-first-chapter-access>. A copy of the full, required text is on reserve on the 1st floor of Ladd Library at the circulation desk.



- Otherwise, to access the full, *required* text, you may purchase it through the Bates Bookstore or directly through the publisher by visiting <https://students.flatworldknowledge.com/engage/courses/2612418>. Note that it's typically cheaper to purchase directly through the publisher, as the Bookstore will likely charge a premium; however, the Bookstore will accommodate certain forms of financial aid. If you purchase the text through the Bookstore, you will receive a redemption code that you will need to enter at the bottom of the aforementioned website. This will give you access to the text and link you to our particular course.
- There are a number of different formats available for purchase, starting at \$36.95 (if purchased directly through the publisher). The least expensive "Basic" option will give you access to the online reader. This searchable, mobile-friendly format allows you to take notes directly in the digital text and comes with self-study tools like flashcards and practice quizzes, as well as the the AI-powered "SmartHelper" study tool. If you intend to read the textbook offline, there's an upgrade option to receive a downloadable .pdf along with the "Standard" online access (\$56.95). The Standard package also comes with "Audiobook" and "Podcast" features, making the text even more accessible. Or, if you prefer a hardcopy to go along with the online access, you can upgrade to packages that also come with a color printed textbook.
- If you have trouble accessing the text or using one of its functions, your issue may be answered by browsing the student FAQ (<https://support.flatworldknowledge.com/en/collections/461458-students>) or by using the chat feature found in the bottom-right corner of that webpage.
- More information about accessibility features associated with this text can be found here: <https://support.flatworldknowledge.com/en/collections/12300007-accessibility>.

## Assessments

- **Quizzes** (worth a total of 52% of your final grade based on four equally weighted quiz scores) are a relatively low-stakes way to assess and reinforce your understanding of course materials from both class sessions and assigned readings. Research shows that frequent quizzing is one of the most effective ways to enhance learning. There will be five graded quizzes during the semester (in addition to one ungraded take-home practice quiz), but only your *highest four scores* will count toward your final grade (i.e., I'll drop your lowest of five quiz scores). Quizzes will primarily be multiple choice, but may also include matching, fill-in, and/or short-answer questions designed to test both foundational knowledge, critical thinking, and application of concepts.
  - **Timing:** The first four graded quizzes will be administered during class time. The final quiz (Quiz #5) will take place during the *first 55 minutes* of your scheduled final exam period (i.e., not the full two-hour block the Registrar sets aside for final exams). Unlike the first four, the *final quiz will be cumulative*, covering material from the entire semester.
  - **Coverage:** Any material from assigned readings may appear on the quizzes, even if not discussed in class. That said, the best strategy is to prioritize class topics and use the readings to deepen and support your understanding.
  - **Open Notes Policy:** For each quiz, you may bring *one 8.5 × 11" sheet of notes (double-sided)*. You can *handwrite/type/draw* on this sheet whatever you think would help you most on the quiz. (Pro tip: Actively consolidating and organizing your notes before each quiz both improves your notes as a resource and itself serves as an effective study strategy.) Unless you have specific accommodations, digital resources and textbooks are not permitted. If your academic accommodation allows digital resources, please email me to arrange to take the quizzes in the testing center.
  - **Accessibility:** Students with testing accommodations should schedule quizzes with the Office of Accessible Education at least three business days in advance.
- **Article Spotlight** (10% of your final grade) offers a structured way to practice reading and writing about primary (empirical) neuroscience research articles. This assignment is designed to help you become more comfortable working with empirical research papers, a skill that will serve you well in upper-level courses and beyond. To do so, you will select one empirical article from a curated list provided below. Your task is to write a clear, accessible summary of about 2–3 double-spaced pages, plus a title page (not included in the page count) indicating which article you are spotlighting. The goal is not to summarize every detail of the paper but to demonstrate that you can extract and communicate the main ideas in your own words. Your Spotlight should be written for a peer audience—classmates who are smart and curious, but not experts. Aim for clear, accessible writing that explains the article's goals, methods, findings, and significance in

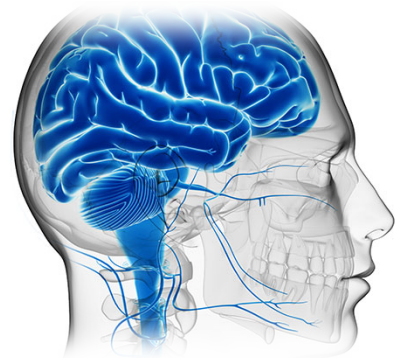


plain English, while still using and briefly defining key neuroscience terms. Think of this as telling the story of the research rather than producing a technical review. Midway through the semester, you will submit a *first draft*, for which I will provide feedback regarding clarity, accuracy, and organizational structure. Use this feedback to revise and resubmit your paper, which should specifically address the following points *without using any direct quotes* (i.e., you need to paraphrase/put everything into your own words):

- What primary question the researchers were asking and why it mattered—describe the knowledge gap or problem that motivated the study (the background and rationale)
- How they tested their question (i.e., the method in broad strokes—focus on the logic, not every technical detail)
- What they found (i.e., main results)
- Why the findings matter—explain how the results change our understanding of the topic, connect to broader issues in neuroscience, or suggest implications for future research or clinical practice (the interpretation and significance)

You should select the article to spotlight from the following list (.pdfs available on Lyceum):

1. Placebo-induced changes in fMRI in the anticipation and experience of pain (Wager et al., 2004; *Science*)
  2. Oxytocin increases trust in humans (Kosfeld et al., 2005; *Nature*)
  3. Intensely pleasurable responses to music correlate with activity in brain regions implicated in reward and emotion (Blood & Zatorre, 2001; *PNAS*)
  4. Navigation-related structural change in the hippocampi of taxi drivers (Maguire et al., 2000; *PNAS*)
- **Case Study Presentation** (10% of your final grade) will involve developing a representative case study to illustrate a clinical condition that will be randomly assigned to groups of 3-4 students. Cases may involve conditions such as neurodegenerative disorders, psychiatric illnesses, sensory and motor deficits, or the effects of brain injury. For this assignment, you will construct a fictional but representative case, drawing on empirical studies, clinical reports, and the broader scientific literature. This ensures your case is realistic, medically plausible, and grounded in neuroscience research, while still giving you the freedom to shape the narrative and highlight key features. To this end, you should conduct your own research to identify and integrate further relevant sources—this is an opportunity to practice extending beyond assigned readings and evaluating evidence independently. Each group will have 8 minutes to present their case at the end of the semester. With only 8 minutes, a little rehearsal will go a long way in helping you make the most of your



time. We'll be keeping to conference-style timing, so talks will end when the time is up. All group members are expected to play an active role in both the development of the case study and the in-class presentation. Contributions should include substantive involvement in researching, drafting, and presenting the material, rather than leaving all work to one or two students. The goal of these short presentations is to deepen understanding of how neuroscience and psychology intersect in applied, real-world contexts. A designated group member should be sure to *upload their group's presentation to Lyceum* (in PowerPoint, Keynote, or .pdf form—convert to one of these formats if you created your presentation using Google Slides) *by 10am* on their scheduled presentation day. While your presentation will be delivered in slideshow presentation format, you may find it helpful to review examples of written case studies. Resources for familiarizing yourself with the case study format are provided in the "Additional Resources" section of the syllabus. Your group's presentation should:

- **Summarize the case:** Provide a clear, concise account of the key background, presenting symptoms, and any relevant test results.
- **Analyze the condition:** Discuss potential diagnoses, differential diagnoses, and relevant neurobiological, psychological, or pharmacological mechanisms.
- **Integrate course concepts:** Draw on material from readings, lectures, and discussions (including neuroanatomy, neurotransmission, psychopharmacology, etc.) to frame the case in a broader medical psychology context.
- **Propose a treatment plan:** Recommend treatments supported by evidence, noting their benefits and risks. If no effective options are available, explain how symptoms might be managed in practice and highlight what future therapies or research could offer.
- **Highlight open questions:** Identify gaps in the research or aspects of the case that remain uncertain, showing awareness of the complexity of real-world cases.

Cases will be assigned to groups randomly, and may include:

- *Prosopagnosia* - The inability to recognize faces despite intact vision
- *Blindsight* - Visual responses without conscious awareness
- *Hemispatial Neglect* - Ignoring half of space after parietal damage
- *Split-Brain Syndrome* - Disconnection between hemispheres after callosotomy
- *Parkinson's Disease* - Motor dysfunction due to dopamine loss
- *Huntington's Disease* - Genetic disorder leading to involuntary movements and cognitive decline
- *Alzheimer's Disease* - Progressive memory loss and neurodegeneration
- *Wernicke's Aphasia* - Fluent but nonsensical speech due to temporal lobe damage
- *Broca's Aphasia* - Effortful, non-fluent speech after frontal lobe damage
- *Frontal lobe injury and personality change* - Sudden mood swings and impulsivity after an accident
- *Capgras Delusion* - Belief that loved ones are impostors

- *Synesthesia* - Cross-wiring of sensory experiences (e.g., colors with sounds)
  - *Locked-In Syndrome* - Conscious awareness but almost complete paralysis
  - *Narcolepsy* - Sudden sleep attacks and loss of muscle tone
  - *Temporal Lobe Epilepsy* - Seizures producing altered consciousness and unusual experiences
- **Case Report** (5% of your final grade) will ask you (individually) to compare and contrast two of the case presentations delivered by your classmates during the final weeks of the course. You may choose to include your own presentation as one of the two cases. The purpose of this assignment is to encourage you to listen closely to the presentations, take careful notes, and think critically about how the different cases we study relate to one another. By drawing comparisons, you will practice applying your knowledge to new contexts and gain a deeper appreciation for the complexity of real-world clinical and neuroscientific issues. If your chosen cases seem quite distinct, focus your comparison on the dimensions we've emphasized in class—such as underlying neural systems, symptom profiles, treatment approaches, or how the cases illustrate broader course themes. Your goal is not simply to point out differences, but to use those differences (and any similarities) to deepen your understanding of how the brain relates to behavior and clinical outcomes. Your report should be 2-3 pages (double-spaced) and should include the following elements:
- A brief summary of each of the two presentations you chose, highlighting their central focus and key takeaways
  - A comparison of the two cases, noting at least one meaningful similarity and one important difference. This might involve symptoms, underlying neural mechanisms, treatments, ethical concerns, or broader implications
  - A reflection on what this comparison reveals—what larger insights did you gain by putting these cases side by side?
- **Final Reflection** (8% of your final course grade) provides space to step back and evaluate what you learned in this course, including how well you met both the instructor's objectives and your own goals. Your reflection should be organized, go beyond simply parroting back course material verbatim, and include how some of the big lessons from this course could be applied to your education, personal life, and/or career going forward. While your submission should be a polished product, having been fine-tuned through careful editing, you are welcome to adopt a format that reflects your own preferred style. You could, of course, format this as a standard written term paper, but you could instead produce a video, animation, comic book, podcast, website, or interpretive dance... OK, it might be hard to fulfill the requirements of this assignment through purely interpretive dance. But you do have pretty wide latitude here. If you're unsure as to whether your plan is appropriate, check with me. To give you a general guideline, your submission should be roughly equivalent to a 2-3 page (double-spaced, 11-or 12-point font) paper with reasonable margins. It is OK to submit a link to your reflection (if, e.g.,

you posted a video to Youtube or created a website); however, you should not continue to edit the material after the deadline (at least until I've had a chance to grade it).

- **Research Participation** (5% of your final grade) is a valuable way to get first-hand exposure to the variety of research conducted within the Psychology and Neuroscience programs. There will be a number of student and faculty research projects recruiting participants this semester. You are expected to be involved in the equivalent of 2 credits worth of participation or do an alternative writing assignment. Additional participation credits will be considered for Extra Credit (see below). A brief video overview of the participation credit system can be found at <https://youtu.be/foLi2deanR8>. Importantly:
  - You only get credit for participating in approved studies. All eligible studies are listed on <https://www.bates.edu/psychology/participate-in-research/student-participation/>. Participation in any experiment that is not included in that list of approved experiments will *not* count for credit.
  - It will take some time for research studies to be posted as students finalize their thesis experiments, so do not worry if you don't see any experiments posted right away. Keep checking the website every week or so, and things will pick up around mid-semester.
  - Each study has a fixed number of units assigned to it based on the average length of time that it will take to participate. Typically, 1 hour worth of participation is equal to 1 credit, with each quarter hour represented by 0.25 credits. Be sure to check the number of credits when you sign up for the experiment. If an experiment is worth 0.5 credits, for instance, you will get 0.5 credits whether it takes you 25 minutes or 35 minutes to complete it.
  - Please note the restrictions listed for each experiment and do *not* sign up for studies for which you are not eligible.
  - To sign up for an experiment, please follow the link to the online appointment scheduler for that project. Please be respectful of the experimenter's time and make sure that you *keep your appointment and arrive punctually*. If you are unable to keep your appointment, please notify the experimenter as soon as possible.
  - Please note that, for online studies in which your participation is entirely Internet-based, you will be given the experiment number and a code word for that study at the end of the survey. You will then be asked to enter that information in another web form in order to get credit for the project (the separation is meant to maintain the confidentiality of your data). If you don't enter the correct experiment number and code word, you will not receive credit.
  - If you would prefer to opt out of this research participation requirement (or if you're not eligible for any available studies), you may instead complete alternative assignments designed to familiarize you with the other side of research participation: running a study involving human participants. Specifically, you would be asked to summarize chapters

from Ritter et al.'s (2012) "How to Run Experiments: A Practical Guide to Research with Human Participants." Each reasonable summary would yield the equivalent of 1 participation credit (i.e., you'd need to submit 2 solid summaries to earn 2 credits, participate in 2 credits worth of eligible research, or complete a combination of the two; note that no partial credit will be given for summaries). The goal is not to rewrite what has already been written; instead, you will be asked to summarize the chapter in another modality: *as a slideshow, as a video, or as a podcast*. Get creative—for instance, you could act out or sing a song about the dos and don'ts around interacting with participants. Further details for the "Research Participation Alternative Assignments" can be found under the "General" section at the top of our Lyceum page.

- For credit, you must have completed your research participation and/or alternative assignment(s) by 4pm on the last day classes are held for the semester—but don't wait until the last minute!
- **Engagement** (8% of your final grade) is critical for the success of this course. Your engagement grade reflects a holistic view of how you participate in our class community—through activities, discussions, and completion of in-class worksheets. Most of this work will be graded for completion rather than accuracy—i.e., if you put in a reasonable effort, you will receive full credit, even if your answers aren't perfect. Simply showing up to class is not the same as being engaged. Active engagement means being attentive, prepared, and contributing to the learning environment—whether that's through asking questions, sharing ideas, or collaborating with peers. The goal is to foster a classroom community where everyone is present, invested, and participating meaningfully.
- **Extra Credit**
  - **Additional research participation credits** (or alternative writing assignments) above the required 2 credits worth will be considered extra credit counted toward your final course grade (up to a maximum of 4 additional percentage points, 1 for each additional credit equivalent). While research participation will be accepted in increments of .25 credits, there is no partial credit for the alternative writing assignments; each satisfactory summary earns the equivalent of 1 credit (so don't try turning in half a summary and expect .5 credits ;-).

## Grading Scale

A+	≥97%
A	93-96.99%
A-	90-92.99%
B+	87-89.99%
B	83-86.99%
B-	80-82.99%
C+	77-79.99%
C	73-76.99%
C-	70-72.99%
D+	67-69.99%
D	63-66.99%
D-	60-62.99%
F	<60%

You can easily calculate your current grade by inserting the assignments/quizzes, grades received, and weights (given above, in percentages) by hand or using this handy calculator: <https://www.rapidtables.com/calc/grade/grade-calculator.html>. Note that any extra credit should be added on *after* that calculation is performed.

## Attendance

Your attendance and preparation are critical to your learning and, in turn, your grade in the course. As such, you are expected to attend each class having completed the assigned reading for the day. The more active your reading (by thinking deeply about the issues raised, connections to broader themes and examples, and identifying/answering questions arising) and engagement during class, the more you will be able to gain. So, even if I don't take formal attendance, it is to your advantage to be fully present and prepared in class on a regular basis.

Of course, I recognize that illness, serious family emergency, or other extenuating circumstances may sometimes keep you from attending class. Under normal circumstances (and classroom technology permitting), lecture recordings will be provided online within 24 hours of each lecture for anyone who may have missed class for these reasons (or if you simply want to review the recording later, in combination with the lecture slides that will be posted to Lyceum). To access the recordings, click the "<" at the top-right corner of your Lyceum screen, click on the Kaltura Media Gallery link, and then select the lecture you would like to view. Be advised, however, that the recordings and slides do not capture the full in-class experience and should *not* be used as a substitute for attendance unless absolutely necessary.

If you are going to miss more than one class in a row, please provide me with official notification from the Health Services, Counseling and Psychological Services, or the Office of Student Support and Community Standards. Again, you remain responsible for working with me to address missed work under these

circumstances. For additional information on the Bates College policy regarding course attendance and student responsibilities in cases of expected and unexpected absence, please consult <https://www.bates.edu/dof/course-attendance-policy-guideline-for-absences/>.

All Bates students are expected to take the final examinations (or, in our case, final quizzes) at the time scheduled by the Registrar's office. Exceptions are made for students who have two exams at the same time or three exams in one day. Final examinations cannot be rescheduled to accommodate the travel plans of students. Students should not make any travel plans until they have full knowledge of their final examination schedule. For more information or to submit a request to move a final examination, please visit the college's policy on final exams <https://www.bates.edu/accessible-education-student-support/request-to-move-a-final-examination/>).

### *Religious Holiday Observance*

Bates recognizes the right of students to fulfill their religious obligations and practices. In recognition of Bates' commitment to a diverse and inclusive student body and the variety of religions observed and practiced by our students, I have consulted the Multifaith Calendars posted online by the Office of the Multifaith Chaplain when developing this syllabus so that conflicts between in class examinations and major religious holidays may be avoided. Given the range of faiths embraced by members of our community, however, it may not be possible to avoid all conflicts between scheduled examinations and religious holidays. *Please let me know within the first three weeks of the semester if there is a conflict between a scheduled examination, paper, or project due date and a significant religious holiday you observe.* The Office of Accessible Education will continue to be available to proctor makeup exams for students who miss an exam due to observance of a significant religious holiday.

### *Unforeseen Events*

Should an unforeseen event (e.g., a weather emergency) force us to cancel class or alter the venue, I will inform you via the class email list as soon as possible. Please check your Bates email regularly, as important class-related communications will come through this channel.

### *Accessibility*

Bates College is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with me.

If you have a disability, or think you may have a disability, you may also want to meet with the Director of Accessible Education, to begin this conversation or request an official accommodation. You can find more information about the Office of Accessible Education and Student Support (AESS), including contact

information, here: <https://www.bates.edu/accessible-education/>. Note that processing time for new accommodation requests is generally 2 weeks according to the AESS website. And, once approved, some types of accommodations may take several weeks to fulfill, so it is important to make the request as soon as possible. Once approved through the Office of Accessible Education, AESS will email me an official Letter of Accommodations (copying you). Although accommodations may be approved at any point in the semester, they are *not* retroactive.

## *Diversity and Inclusion*

It is essential that our classroom be a place in which people feel comfortable expressing their thoughts, feelings, and opinions without fear of unduly critical or judgmental responses. Everyone in the classroom (students and instructors, alike) are expected to be respectful of the widely varied experiences and backgrounds represented by the classroom members as a group. Disrespect or discrimination on any basis will not be tolerated. Whether inside or outside the classroom, if you encounter sexual harassment, sexual violence, or discrimination based on race, color, religion, age, national origin, ancestry, sex, sexual orientation, gender identity/expression, or disability, you are encouraged to report it to Gwen Lexow, Director of Title IX and Civil Rights Compliance at Bates, at [glexow@bates.edu](mailto:glexow@bates.edu) or 207- 786-6445. Additionally, please remember that Bates faculty are concerned about your well-being and development, and we are available to discuss any concerns you have. Students should be aware that faculty are legally obligated to share disclosures of sexual violence, sexual harassment, relationship violence, and stalking with the college's Title IX Officer to help ensure that your safety and welfare are being addressed.

## *In-Class Electronic Device Policy*

Although there are many benefits to taking handwritten notes and potential distractions associated with the use of devices like laptops, tablets, and phones in class (e.g., Mueller & Oppenheimer, 2014; Fried, 2008), you may still opt to use a laptop or tablet in this class *as long as it contributes to learning*. If it is seen to invite distraction to you or others, however, you may be asked to refrain from using it in class. There will be some class sessions where we will use technology together, and in those instances, all students should make arrangements to bring a laptop or tablet to class (smartphones may not be suitable for some of these in-class activities). If you do not have access to such a device or have any questions or concerns, please email me so that we may find a suitable workaround. For example, the library has several Chromebooks available to check out to Bates students for 1-week loan (with a 1-week renewal). And students who don't own a laptop have the option of checking out a long-term loaner (either laptop or Chromebook) from the IT Service Desk.

## *Academic Integrity*

Academic integrity isn't just a policy—it's about building trust and fairness in our learning community. All members of the Bates community benefit from an environment of trust, honesty, fairness, respect, and

responsibility. You are expected to present your own work and acknowledge the work of others in order to preserve the integrity of scholarship. Your academic work is governed by The Bates College Statement on Academic Integrity (<https://www.bates.edu/student-conduct-community-standards/student-conduct/academic-integrity-policy/>) and by any additional standards I set in this syllabus or in individual assignments.

Academic integrity includes:

- Following quiz/exam/assignment rules
- Using only permitted materials during an quiz/exam/assignment
- Viewing quiz/exam materials only when permitted by your instructor
- Keeping what you know about a quiz/exam to yourself
- Incorporating proper citation of all sources of information
- Submitting your own original work
- Not submitting work produced for another course—even if it is entirely your own—without prior, explicit permission from the instructor

Academic misconduct includes, but is not limited to, the following:

- Disclosing quiz/exam content during or after you have taken an quiz/exam
- Accessing quiz/exam materials without permission
- Copying/purchasing any material from another student, or from another source including generative Artificial Intelligence, that is submitted for grading as your own
- Plagiarism, including use of Internet material without proper citation
- Using cell phones or other electronics to obtain outside information during a quiz/exam or assignment without explicit permission from the instructor
- Submitting your own work in one class that was completed for another class (self-plagiarism) without prior permission from the instructor

Violations of academic integrity are serious and can result in severe consequences at both the course and College levels. Depending on the circumstances of the violation, I will assign a failing grade for the assignment and/or the course, require work to be redone, and/or impose other consequences; in addition, I will refer the matter to the Dean of Students for possible institutional action. The Bates College Statement on Academic Integrity and procedures for suspected violations can be found here: <http://www.bates.edu/student-affairs/student-conduct/academic-integrity-policy/>.

### *Use of Artificial Intelligence (AI)*

Artificial intelligence (AI) tools (e.g., ChatGPT, Copilot, Claude) can be powerful aids for brainstorming, fact-checking, and learning. However, AI must be used thoughtfully and responsibly in this course. You are expected to:

- Use AI as a learning partner, not a shortcut: AI can help clarify concepts or spark ideas, but it should not replace your own critical thinking, writing, or data analysis.
- Maintain academic integrity: Submitting AI-generated work as if it were your own original writing or analysis is *not* allowed. AI tools can make mistakes, fabricate references, and lack critical nuance—you are responsible for verifying all information.
- Be transparent: If you use AI to help generate ideas, outlines, or drafts, you must acknowledge it (e.g., “I used ChatGPT to brainstorm topic ideas for this assignment”).

You may use AI for:

- Brainstorming and refining your ideas
- Fine tuning your research questions
- Finding information on your topic (noting that AI is subject to hallucinations)
- Drafting an outline to organize your thoughts
- Checking grammar and style
- Generate practice quiz questions or concept checks

The use of generative AI tools is *not* permitted in this course for the following activities:

- On timed quizzes/exams for any purpose
- Submitting AI-written responses or analyses as your own (even if you introduce superficial changes to the writing)
- Using AI to generate citations or references without verifying their accuracy
- Relying on AI to replace your own critical thinking or engagement with the material

Remember that *you* are responsible for any work you submit, and you may be asked to explain the points you raised in contexts that do not afford you the support of AI (e.g., on a quiz/exam, in discussion).

## Student Services

- **The Student Academic Support Center (SASC)** provides peer-led support for introductory and intermediate level courses in mathematics, statistics, programming, natural sciences, life sciences, and quantitative social sciences. Additionally, SASC provides support for students using a variety of quantitative skills required for courses across the curriculum. The Student Academic Support Center also provides a variety of workshops in quantitative skills, time management, note-taking, and study skills. Course-Attached Tutors (CATs) are embedded in courses with the highest demand for tutoring. CATs provide assistance outside of class in the form of weekly help sessions and private appointments. SASC is located in the Peer Learning Commons (PLC) on the Ground Floor of Ladd Library. Students are invited to stop by, without an appointment, to the drop-in hours in Ladd to meet with a tutor, study independently, meet up with classmates, or to discuss learning strategies. Students who wish to set up an individual

appointment can discuss options with a Resource Representative at the PLC check-in desk. For more information go to [www.bates.edu/sasc](http://www.bates.edu/sasc) or email [sasc@bates.edu](mailto:sasc@bates.edu).

- **The Student Writing & Language Center (SWLC)** empowers Bates students in becoming more effective writers, speakers, language-users, and language-learners. Tutors provide a supportive environment for you to understand and generate ideas for your writing assignments in any subject or course; to draft, revise, and edit your writing for any purpose, context, or audience; to practice and get feedback on your oral presentations; and to study or practice writing and communicating. SWLC tutors are Bates students just like you, trained to listen to and guide you in using writing and language to achieve your personal and academic goals. Drop in to the SWLC anytime we're open to meet with a writing or language tutor. They're located in the Peer Learning Commons on the Ground Floor of Ladd Library. You can also search for subject-specific support hours or make appointments with a tutor using the Penji app: <https://web.penjiapp.com/>. For more information about the SWLC please visit [www.bates.edu/swlc](http://www.bates.edu/swlc) or email [swlc@bates.edu](mailto:swlc@bates.edu).
- **Bates Counseling and Psychological Services (CAPS)** offers assistance and referral to address students' personal, social, career, and study skills needs. Services for students include:
  - Crisis and same-day emergency mental health consultations
  - Confidential assessment, counseling services (individual and small group), and referrals
- CAPS is located on the second floor of the Health Services Building (31 Campus Ave). You can contact them at 207-786-6200 for assistance M-F from 9:00 to 5:00 (out of hours emergency assistance can be obtained via Campus Security at 207-786-6254 or by calling 988). For additional information, see: <https://www.bates.edu/counseling-psychological-services/>.

## Course Planning

This course requires you to spend a good amount of time outside of our class meetings reading, studying, completing major assignments, and otherwise preparing to participate fully and get the most out of the experience (and a commensurate grade). Federal guidelines specify that you spend at least 2 hours outside of class for every hour spent in class. With our schedule of 3 × 55-minute classes (2.75 hours per week), that alone would mean planning to spend at least 5–6 hours outside of class. But this is Bates, which has its own standard of 10–15 hours of academic work per week per course credit—that figure includes class time, meaning you should expect to spend roughly 7–12 hours per week outside of class doing the reading, assignments, studying, etc. Some weeks (e.g., before a quiz or major deadline) may require more of your time outside class, but if you plan in advance and commit to dedicating regular outside time to your studies each week, it will be more manageable, with fewer week-to-week fluctuations.



The material we cover in class and the types of assigned readings (which include peer-reviewed research articles) may be unfamiliar to many students and therefore take extra time to grasp fully. If you find you need

to read the material slowly and multiple times, that's not a bad sign—it means you're putting in the effort required to succeed and retain the knowledge/skills for later (go you!). If you are worried about falling behind or want more advanced work, please email me and/or drop by office hours so we can discuss the way forward. I am happy to discuss study/reading strategies and/or find additional materials to support your journey through the course and toward your personal goals.

Prospective memory involves remembering to carry out some intended action in the future. There's no reason you can't take steps now to improve your ability to carry out the appropriate actions on time, even before we cover the topic. So please, please, please take the time to review all the deadlines provided in the schedule at the end of this syllabus. Transfer them to your personal calendar immediately (and add reminders). Doing so will help you avoid scheduling conflicts and allow you to carve out the necessary time to perform your best.

### *Additional Resources*

There are treasure troves of information about neuroscience, psychology, and related disciplines sprinkled around the interwebs—much of it can be accessed for free. If you find yourself struggling to understand a concept, I'd encourage you to search around, carefully evaluate the quality of the sources, and share useful finds with the rest of the class. Below are some resources I have identified:

- APA formatting and general reference:
  - Purdue Online Writing Lab (OWL): [https://owl.purdue.edu/owl/research\\_and\\_citation/apa\\_style/apa\\_formatting\\_and\\_style\\_guide](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide)
    - I posted some additional reference materials inside the "APA Style/Scientific Paper Writing Tips" submodule inside of the "Course Introduction" of Lyceum.
  - Middlebury Library: <https://middlebury.libguides.com/citation/apa7>
  - ECU Library: <https://libguides.ecu.edu/c.php?g=982594&p=7463742>
  - Video Tutorials: <https://apastyle.apa.org/instructional-aids/tutorials-webinars>
  - APA Dictionary of Psychology: <https://dictionary.apa.org>
- Searchable article databases (and tutorials):
  - Neuroscience: <https://libguides.bates.edu/neuroscience>
  - Psychology: <https://libguides.bates.edu/psychology>
  - Psychology Resources: <https://www.bates.edu/psychology/resources-for-students/technical-resources/>
  - APA Database Tutorials: <https://www.apa.org/pubs/databases/training/tutorials>
  - Google Scholar: <https://scholar.google.com>
- Free textbooks & related resources:
  - Neuroscience/Biological Psychology/Medical Psychology:
    - Introduction to Neuroscience (Hutchins): <https://uen.pressbooks.pub/introneuro/>

- Introduction to Neuroscience (Hedges): <https://openbooks.lib.msu.edu/introneuroscience1/>
- Interdisciplinary Explorations of Neuroscience (May): <https://opentextbooks.rug.nl/interdisciplinaryexplorationsofneuroscience/>
- Open Neuroscience Initiative (Lim): [https://drive.google.com/file/d/1n08ggzhG5-RgkoqL\\_Aa4y1UBSycUcy5g/view](https://drive.google.com/file/d/1n08ggzhG5-RgkoqL_Aa4y1UBSycUcy5g/view)
- Neuroscience Online: <https://nba.uth.tmc.edu/neuroscience/toc.htm>
- Neuroanatomy Online: <https://nba.uth.tmc.edu/neuroanatomy/index.html>
- Neuroscience (Ju): [https://med.libretexts.org/Bookshelves/Pharmacology\\_and\\_Neuroscience/Neuroscience\\_\(Ju\)](https://med.libretexts.org/Bookshelves/Pharmacology_and_Neuroscience/Neuroscience_(Ju))
- Foundations of Neuroscience (Henley): [https://med.libretexts.org/Bookshelves/Pharmacology\\_and\\_Neuroscience/Foundations\\_of\\_Neuroscience\\_\(Henley\)](https://med.libretexts.org/Bookshelves/Pharmacology_and_Neuroscience/Foundations_of_Neuroscience_(Henley))
- Psychology as a Biological Science (Lindberg): <https://nobaproject.com/textbooks/psychology-as-a-biological-science>
- Biological Psychology (Hove & Martinez): <https://open.umn.edu/opentextbooks/textbooks/biological-psychology>
- Introduction to Biological Psychology (Hall): [https://socialsci.libretexts.org/Bookshelves/Psychology/Biological\\_Psychology/Introduction\\_to\\_Biological\\_Psychology\\_\(Hall\\_Ed.\)](https://socialsci.libretexts.org/Bookshelves/Psychology/Biological_Psychology/Introduction_to_Biological_Psychology_(Hall_Ed.))
- Biological Psychology (Keys): [https://socialsci.libretexts.org/Courses/Sacramento\\_City\\_College/Psyc\\_310:\\_Biological\\_Psychology\\_\(Keys\)](https://socialsci.libretexts.org/Courses/Sacramento_City_College/Psyc_310:_Biological_Psychology_(Keys))
- The Nervous System in Action (Mann): <https://michaeldmann.net/The%20Nervous%20System%20In%20Action.html>
- Neuroscience for Pre-Clinical Students (<https://open.umn.edu/opentextbooks/textbooks/neuroscience-for-pre-clinical-students>)
- Computational Cog Neuro (O'Reilly et al.): <https://compcogneuro.org/>
- Science of Sleep (Shook): <https://open.umn.edu/opentextbooks/textbooks/the-science-of-sleep>
- Society for Neuroscience's Brain Facts: <https://www.brainfacts.org/>
- Research methods:
  - Crump et al.: <https://crumplab.github.io/ResearchMethods/index.html>
  - Cuttler et al.: <https://open.umn.edu/opentextbooks/textbooks/75>
  - University of Minnesota: <https://open.lib.umn.edu/psychologyresearchmethods/>
  - Bhattacharjee: [https://scholarcommons.usf.edu/oa\\_textbooks/3/](https://scholarcommons.usf.edu/oa_textbooks/3/)
- Statistics:
  - De Anza: <https://openstax.org/details/introductory-statistics>
  - Saylor: <https://open.bccampus.ca/browse-our-collection/find-open-textbooks/?uuid=929d4a8d-30b2-4ced-8b50-c39447dc0b74>

- Brown University Statistics Visualizations: <https://seeing-theory.brown.edu>
- VassarStats: <http://vassarstats.net>
- Effect Size Calculator: [https://katherinemwood.shinyapps.io/lakens\\_effect\\_sizes/](https://katherinemwood.shinyapps.io/lakens_effect_sizes/)
- Jamovi Open Stats: <https://www.jamovi.org>
- Power analysis guide using G\*Power: [https://www.psychologie.hhu.de/fileadmin/redaktion/Fakultaeten/Mathematisch-Naturwissenschaftliche\\_Fakultaet/Psychologie/AAP/gpower/GPowerManual.pdf](https://www.psychologie.hhu.de/fileadmin/redaktion/Fakultaeten/Mathematisch-Naturwissenschaftliche_Fakultaet/Psychologie/AAP/gpower/GPowerManual.pdf)
- Help choosing an appropriate statistical test:
  - <http://www.statsflowchart.co.uk>
  - <https://stats.idre.ucla.edu/other/mult-pkg/whatstat/>
  - <https://www.statstutor.ac.uk/resources/uploaded/tutorsquickguidetostatistics.pdf>
  - [https://www.central7.net/wp-content/uploads/2015/09/stats\\_flow\\_chart\\_v2014.pdf](https://www.central7.net/wp-content/uploads/2015/09/stats_flow_chart_v2014.pdf)
- Cognitive neuroscience methods/tools:
  - Functional Neuroimaging: <https://imaging.mrc-cbu.cam.ac.uk/imaging/Cbulmaging>
  - FSL fMRI Analysis (free, multi-platform software and tutorials):
    - <https://fsl.fmrib.ox.ac.uk/fsl/fslwiki>
    - [https://open.win.ox.ac.uk/pages/fslcourse/website/online\\_materials.html](https://open.win.ox.ac.uk/pages/fslcourse/website/online_materials.html)
  - Brain viewers:
    - Allen Brain Atlas: [http://human.brain-map.org/mri\\_viewer](http://human.brain-map.org/mri_viewer)
    - Gallant Lab: <https://gallantlab.org/brain-viewers/>
    - Neurosynth: <https://neurosynth.org/>
  - Event-related potentials (ERPs): <https://erpinfo.org>
  - Neurofeedback: Open-source Python/Matlab framework (OpenNFT): <http://opennft.org/>
- Videos:
  - 2-Minute Neuroscience: <https://www.youtube.com/channel/UCUgZq9PkDp1xaEivtcfJPSg>
  - TED Studies: <https://www.ted.com/read/ted-studies/neuroscience>
  - Khan Academy: <https://www.khanacademy.org/test-prep/mcat/behavior#concept-intro>
- Effective studying:
  - <https://www.samford.edu/departments/academic-success-center/how-to-study>
- Neuropsychiatric conditions:
  - A list of more than 400 neurological disorders from the National Institute of Neurological Disorders and Stroke can be found here: <https://www.brainfacts.org/diseases-and-disorders/neurological-disorders-az>

- The Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR) is available for reference at the Ladd Library (RC455.2.C4 A48 2022)
- How-to guides for writing case reports:
  - <https://portal.clas.ufl.edu/writing--wddb-v1/discipline/writing-psych-case-reports/>
  - [https://www.fmhs.auckland.ac.nz/assets/fmhs/som/psychmed/docs/writing\\_a\\_psychiatry\\_case\\_study.pdf](https://www.fmhs.auckland.ac.nz/assets/fmhs/som/psychmed/docs/writing_a_psychiatry_case_study.pdf)
  - <https://jmedicalcasereports.biomedcentral.com/articles/10.1186/s13256-016-0867-x>
  - <https://www.care-statement.org/checklist>
  - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9999217/>
- Example case reports:
  - <https://www.tandfonline.com/action/showOpenAccess?journalCode=nncs20>
  - <https://practicalneurology.com/resources/case-reports>
  - <https://karger.com/crn/issue/16/1>
  - <https://onlinelibrary.wiley.com/journal/1604>
  - Many more can be found running the relevant PsychInfo, PubMed, or Google Scholar search

### *About the Instructor*

Well, hello there! I'm excited to be your instructor for this course. In case you're wondering who's lecturing excitedly about action potentials and cats multiple times a week, here's a bit about me (I'll save you the trouble of Googling since your coursework will likely keep you busy enough). I joined Bates College in 2024 after spending nine years at Bard College, where I served as chair of the Psychology Program. My background is in psychology, with a focus on the cognitive neuroscience of human memory—especially the fascinating (and often misunderstood) process of forgetting. I earned my bachelor's degree from the University of Pennsylvania in 2005 on full scholarship, completing two theses: one on memory consolidation during sleep and another on how children learn mentalizing verbs like "to think." While at Penn, I also worked as a wedding videographer and held several research positions, including clinical research at the Children's Hospital of Philadelphia. My path through graduate school was quite the adventure—both literally and figuratively (ask me about it sometime!). I received my Ph.D. from the University of Cambridge, where I was affiliated with St John's College and the Medical Research Council's Cognition and Brain Sciences Unit. Afterward, I returned to New Jersey (where I grew up) for a postdoc at the Princeton Neuroscience Institute (I didn't actually grow up *in* the Institute) before joining the faculty at Bard. It was in Princeton that I found my two cats, Mandy and Jerri (sisters from the same litter). They quickly became my inspirations, portable space heaters, and sage meditation teachers. Two more tidbits about me: I have aphantasia and severely deficient autobiographical memory (SDAM)—conditions that are only starting to be explored in neuroscience. Regardless, I have no doubt that we'll find ways to make this semester memorable for everyone!

### Tentative Course Schedule

Week	Date	#	Topic	Readings/Viewings/ Listeenings <i>(come prepared for class)</i>	Assignments
1	9/3 (w)	1	<b>Course Introduction</b>		By 11:59pm tonight have completed the <b>Getting-to-know-you Google Form</b> : <a href="https://forms.gle/WK9N7wDFEWR4446W9">https://forms.gle/WK9N7wDFEWR4446W9</a>
	9/5 (f)	2	<b>Functional Neuroanatomy &amp; Case Studies</b>	<ul style="list-style-type: none"> <li>• Have read (by class today):               <ul style="list-style-type: none"> <li>• Syllabus</li> <li>• Chapter 1</li> </ul> </li> <li>• <i>Optional (&amp; useful!) reading:</i> <ul style="list-style-type: none"> <li>• Putnam et al. (2016)—on Lyceum</li> </ul> </li> </ul>	
2	9/8 (m)	3	<b>Fun with Brains</b> <ul style="list-style-type: none"> <li>▶ Muse-S demo</li> <li>▶ Model brain practicum</li> <li>▶ Take-home practice quiz released (Lyceum)</li> </ul>	<ul style="list-style-type: none"> <li>• Have read:               <ul style="list-style-type: none"> <li>• Chapter 2</li> </ul> </li> </ul>	
	9/10 (w)	4	<b>The Many Faces of Blindness</b> <ul style="list-style-type: none"> <li>▶ Take-home practice quiz answers released</li> </ul>		
	9/12 (f)	5	<b>Visual Pathways (Part 1)</b>	<ul style="list-style-type: none"> <li>• Have read:               <ul style="list-style-type: none"> <li>• Chapter 6, Sections 6.1-6.3</li> </ul> </li> </ul>	
3	9/15 (m)	6	<b>Visual Pathways (Part 2)</b> <ul style="list-style-type: none"> <li>▶ Reading empirical articles &amp; graphs</li> </ul>	<ul style="list-style-type: none"> <li>• Have read:               <ul style="list-style-type: none"> <li>• Chapter 6, Sections 6.4-6.5</li> <li>• Quiroga et al. (2005)—on Lyceum</li> </ul> </li> </ul>	
	9/17 (w)	7	<b>Resting Membrane Potential</b> <ul style="list-style-type: none"> <li>▶ Quiz #1 study guide released</li> </ul>	<ul style="list-style-type: none"> <li>• Have read:               <ul style="list-style-type: none"> <li>• Chapter 3, Section 3.1</li> </ul> </li> </ul>	

Week	Date	#	Topic	Readings/Viewings/ Listenings <i>(come prepared for class)</i>	Assignments
	9/19 (f)	8	Action Potential (Part 1)	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 3, Section 3.2</li> </ul> </li> </ul>	
4	9/22 (m)	9	Action Potential (Part 2)		
	9/24 (w)	10	Quiz #1		
	9/26 (f)	11	Synaptic Transmission	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 3, Sections 3.3-3.6</li> </ul> </li> </ul>	
5	9/29 (m)	12	Psychopharmacology and Addiction	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 14</li> <li>Chapter 15, Section 15.1</li> </ul> </li> </ul>	
	10/1 (w)	13	Pain	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 8, Section 8.2</li> </ul> </li> </ul>	
	10/3 (f)	14	Neuromuscular Disorders ▶ Quiz #2 study guide released	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 8, Sections 8.6-8.7</li> </ul> </li> </ul>	By 11:59pm tonight have submitted Article Spotlight Rough Draft
6	10/6 (m)	15	Motor Movement	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 8, Sections 8.3-8.5</li> </ul> </li> </ul>	
	10/8 (w)	16	Quiz #2		
	10/10 (f)	17	Stress & Trauma (Part 1) ▶ iWorx GSR Demo (HP-02)	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 12, Section 12.3</li> </ul> </li> </ul>	
7	10/13 (m)	18	Stress & Trauma (Part 2) ▶ iWorx Relaxing Music Demo (HP-20)		
	10/15 (w)	--	NO CLASS / FALL BREAK		
	10/17 (f)	--	NO CLASS / FALL BREAK		
8	10/20 (m)	19	Amnesia	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 13, Sections 13.3; 13.6-13.7</li> </ul> </li> </ul>	

Week	Date	#	Topic	Readings/Viewings/ Listenings <i>(come prepared for class)</i>	Assignments
	10/22 (w)	20	Memory Consolidation	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 13, Sections 13.4-13.5</li> </ul> </li> </ul>	
	10/24 (f)	21	Mission: PTSD Intervention Panel	<ul style="list-style-type: none"> <li>Have watched:                             <ul style="list-style-type: none"> <li>16-minute video: <a href="https://youtu.be/ZK7ih4V0erc?si=0ST1N-UwLh_R0mEM">https://youtu.be/ZK7ih4V0erc?si=0ST1N-UwLh_R0mEM</a></li> <li>8-minute video: <a href="https://youtu.be/GgCPnFQPs-k?si=svt9NZTgj7FbYwCB">https://youtu.be/GgCPnFQPs-k?si=svt9NZTgj7FbYwCB</a></li> </ul> </li> </ul>	By 11:59pm tonight have completed the Lyceum <b>Course Feedback</b> survey (anonymous)
9	10/27 (m)	22	Alzheimer's Disease ▶ Course feedback results discussed	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 16, Sections 16.2</li> </ul> </li> </ul>	
	10/29 (w)	23	Mission: Alzheimer's Policy Brief		
	10/31 (f)	24	Brain Injuries ▶ Quiz #3 study guide released ▶ Debate teams formed	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 16, Sections 16.5-16.8</li> </ul> </li> </ul>	
10	11/3 (m)	25	Quiz #3		
	11/5 (w)	26	Debate 1: The Future of Football		
	11/7 (f)	27	Depression & Bipolar Disorders ▶ Debate teams formed	<ul style="list-style-type: none"> <li>Have read:                             <ul style="list-style-type: none"> <li>Chapter 15, Sections 15.3; 15.5</li> </ul> </li> </ul>	

Week	Date	#	Topic	Readings/Viewings/ Listenings <i>(come prepared for class)</i>	Assignments
11	11/10 (m)	28	<b>Debate 2: Psychedelic Medicine</b>	<ul style="list-style-type: none"> <li>• Have listened to/ watched:</li> <li>• 46-min podcast: <a href="https://podcasts.apple.com/us/podcast/intelligence-squared/id708371900?i=1000447014730">https://podcasts.apple.com/us/podcast/intelligence-squared/id708371900?i=1000447014730</a></li> </ul>	
	11/12 (w)	29	<b>Sleep</b> ▶ Quiz #4 study guide released	<ul style="list-style-type: none"> <li>• Have read:</li> <li>• Chapter 9</li> </ul>	
	11/14 (f)	30	<b>Schizophrenia</b> ▶ Case Study groups formed/topics assigned	<ul style="list-style-type: none"> <li>• Have read:</li> <li>• Chapter 16, Sections 16.1; 16.10</li> </ul>	<b>By 11:59pm tonight have submitted Article Spotlight Final Draft</b>
12	11/17 (m)	31	<b>Quiz #4</b>		
	11/19 (w)	32	<b>Mission: Dream Research Proposal</b>	<ul style="list-style-type: none"> <li>• Have read:</li> <li>• Shook (2022, <i>Science of Sleep</i>) "Dreams"</li> </ul>	
	11/21 (f)	33	<b>Brain Lateralization</b> ▶ Quiz #5 study guide released	<ul style="list-style-type: none"> <li>• Have read:</li> <li>• Chapter 7, Sections 7.6-7.7</li> <li>• Have watched:</li> <li>• 18-min video: <a href="https://www.ted.com/talks/jill_bolte_taylor_my_stroke_of_insight">https://www.ted.com/talks/jill_bolte_taylor_my_stroke_of_insight</a></li> </ul>	<b>By 11:59pm tonight have submitted Final Reflection</b>
13	11/24 (m)	--	<b>NO CLASS / THANKSGIVING</b>		
	11/26 (w)	--	<b>NO CLASS / THANKSGIVING</b>		

Week	Date	#	Topic	Readings/Viewings/ Listeenings <i>(come prepared for class)</i>	Assignments
	11/28 (f)	--	<b>NO CLASS / THANKSGIVING</b>		
14	12/1 (m)	34	<b>Case Study Final Prep</b> ▶ <a href="#">ROLE survey</a>		
	12/3 (w)	35	<b>Case Study Presentations 1</b>		Have a designated group member upload your <b>Presentation slides</b> to Lyceum by <b>10:00am</b> on your presentation day
	12/5 (f)	36	<b>Case Study Presentations 2</b>		Have a designated group member upload your <b>Presentation slides</b> to Lyceum by <b>10:00am</b> on your presentation day  By <b>4:00pm today</b> have completed <b>Research Participation</b> or submitted to Lyceum <b>Alternative Assignments</b>
	12/8 (m)	--	<b>NO CLASS / EXAM WEEK</b>		
	12/10 (w)	37	<b>Cumulative Quiz #5 (during final exam period in Dana 219) from 1:15-2:10pm</b>  <i>Possible Case Study Presentation spillover (from 2:30-3:15)</i>		
	12/12 (f)	--	<b>NO CLASS / EXAM WEEK</b>		By <b>4:00pm today</b> have submitted <b>Case Report</b>

*Schedule is subject to change to improve pacing and/or accommodate unforeseen events (e.g., severe weather, pandemic, alien abduction). Check announcements over email.*