

## **PSY 330: FOUNDATIONS OF BEHAVIORAL NEUROSCIENCE, WINTER 2021**

Section 02: Wednesdays, 9:00-9:50 AM, 174 Lake Ontario Hall  
Fridays, 9:00-9:50 AM, Zoom

Section 05: Wednesdays, 10:00-10:50 AM, 174 Lake Ontario Hall  
Fridays, 10:00-10:50 AM, Zoom

**Instructor:** Glenn R. Valdez, Ph.D.

**Office:** 1313 AuSable Hall

**Office hours:** MWF 11:30 AM-12:30 PM

<https://gvsu-edu.zoom.us/j/97944905474?pwd=cHBqMzJZTVhnd0dJWTFES1VEVTVRdz09>

**and by appointment**

<https://glenn-valdez.youcanbook.me/>

**Phone:** (616) 331-3798

**Email:** [valdezg@gvsu.edu](mailto:valdezg@gvsu.edu)

### **Priorities:**

Your health and the health of your family and loved ones should be your priority. If you are dealing with illness, sick family members, travel difficulties, a bad internet connection, increased anxiety, childcare challenges, or any other issues, please reach out and we will figure out accommodations.

### **Course Description:**

This course provides an introduction to Behavioral Neuroscience, the scientific study of the interaction between biological processes and behavior. Topics covered include the basic structure of the nervous system, research methods in behavioral neuroscience, psychopharmacology, and neural mechanisms involved in sensory and perceptual processes, and psychiatric disorders. Prerequisites: PSY 101 - Introductory Psychology. This course is subject to the policies listed at <http://www.gvsu.edu/coursepolicies>.

### **Learning Objectives:**

Upon successful completion of this course, students should be able to:

- Identify the structure and function of the major parts of the nervous system
- Describe the process of action potentials
- Describe the process of neurotransmission
- Identify the behavioral function of major brain chemical systems
- Discuss basic research in behavioral neuroscience
- Relate biological processes and concepts to everyday behavior

### **Technology Needs:**

This course is taught under the hybrid designation, meaning that more than 15% of the course is delivered online through Blackboard, and there will regular face-to-face class meetings. [Basic Technology Requirements](#) for Online and Hybrid courses can be found on the GVSU IT Online Education website. Also, please complete the [Four Steps for Readiness for Online Learning](#).

High-speed internet access.

Laptop, tablet, and/or smartphone with a video camera and microphone. If you do not have a laptop, you may be able to apply for financial aid to help cover the cost of one. Please visit the GVSU [Special Circumstance & Financial Hardship Requests](#) site for more information. Laptops may also be checked out from the Library for up to four hours with a photo ID.

Microsoft Office. As a GVSU student, you have access to Microsoft Office 365 for free. You will find the information on how to access this at <http://www.gvsu.edu/it/softwarehardware-discounts-31.htm>.

Zoom. I will be holding online office hours through Zoom. I will also use Zoom for live class sessions after Thanksgiving Break and in the event that face-to-face class sessions need to be moved online. All current term enrolled students are eligible to use the GVSU Zoom Business license. You can find more information at <https://www.gvsu.edu/it/gvsu-zoom-business-plan-247.htm>



Top Hat. We will be using the Top Hat (<https://tophat.com>) classroom response system in class. You will be able to submit answers to in-class questions using smartphones, tablets, laptops, or through text message. Top Hat will require a paid subscription (\$25 for the semester).



Flipgrid. We will be using Flipgrid (<https://info.flipgrid.com>) for online video discussions.



### **Communication:**

I will be sending emails regularly (once or twice a week) through Blackboard. You are expected to check your GVSU email regularly for course announcements and updates.

The best way to contact me is by email. Monday through Friday, I will check my email regularly between the hours of 9:00 AM-5:00 PM. I will generally respond to emails within 24 hours. If you do not receive a response after 24 hours, please feel free to follow up on the original email. I check my email occasionally during the weekend. However, I do reserve the right to limit my email access over the weekend so please do not expect a response until the following Monday. If your email is regarding an urgent matter (i.e. illness, family emergency, etc.), please include the word “URGENT” in the subject line, and I will do my best to respond to your email as soon as possible.

### **Face Coverings:**

Face coverings that cover the mouth and nose are required to be worn in the classroom and during face-to-face meetings. Face masks with vents will only be permitted if the vent is completely covered and sealed off. If you have forgotten your face covering, you may get a disposable mask at a campus office. The evidence is clear that [face coverings are a crucial part of keeping coronavirus at bay](#) and [support the university's commitment to providing all members of its community with an inclusive living and learning environment with equitable opportunities for success](#). [GVSU's policy on face coverings](#) is posted on the Lakers Together web site. If you are not able to wear a face covering due to a medical condition, [contact Disability Support Services \(DSR\)](#) to discuss your individual situation.

### **Office Hours:**

My regularly scheduled office hours will be held [online](#) on Mondays, Wednesdays, and Fridays, and can be accessed through the course website in Blackboard or at the link above. I am also available to meet online by appointment. Appointments can be scheduled through the “Book an Appointment” link on Blackboard, or at the link or QR code below.

<https://glenn-valdez.youcanbook.me/>



I am willing to meet face-to-face under special circumstances. Please email me if you would like to schedule a face-to-face meeting. Per GVSU policy, face coverings are required for these meetings.

**Course Blackboard Site:** <http://mybb.gvsu.edu/>

All relevant content can be accessed through the course website on Blackboard. When you first access the site, click on the “Start Here” link in the course menu for a video tour of the site. Links to course content, course tools, and other relevant information can be found in the course menu. A detailed weekly course schedule can be found at the end of the syllabus. New weekly content will be made available on **Sundays at 12:01 AM**, and most assignments will be due on **Saturdays by 11:59 PM**.

## Texts:

Neuroscience Online <https://nba.uth.tmc.edu/neuroscience/>

This is an open-access (free) textbook for the study of neuroscience is provided by current and former faculty of the Department of Neurobiology and Anatomy at The University of Texas Health Science Center at Houston, McGovern Medical School.

Carlson, N.R., Birkett, M. (2020) Foundations of Behavioral Neuroscience (10<sup>th</sup> edition).

This is the text that I have traditionally used for this course. However, given the current situation, **this book is completely optional**. Although it may be helpful in reviewing the material or for additional reading, **you are not obligated to buy the book, especially if it poses a financial burden**. You can also rent or purchase an electronic version of the text online.

Pearson (do not purchase the Revel Access code):

<https://www.pearson.com/store/p/foundations-of-behavioral-neuroscience/P100002609225>

RedShelf: <https://redshelf.com/book/1179636/foundations-of-behavioral-neuroscience-subscription-1179636-9780134641379-neil-r-carlson-melissa-birkett>

## Research Articles (available on Blackboard):

LeVay S. A difference in hypothalamic structure between heterosexual and homosexual men. *Science*. 1991;253(5023):1034-1037. doi:10.1126/science.1887219

Kraehenmann R, Preller KH, Scheidegger M, et al. Psilocybin-Induced Decrease in Amygdala Reactivity Correlates with Enhanced Positive Mood in Healthy Volunteers. *Biol Psychiatry*. 2015;78(8):572-581. doi:10.1016/j.biopsych.2014.04.010

## Learning Modules:

The course will be divided into learning modules based on each course topic. Video lectures and the accompanying PowerPoint slides with additional notes can be found in each module. You will be responsible for all material covered in these videos and on the PowerPoint slides (including any additional notes in the slides). Links to quizzes, readings, online discussions, and other relevant materials will also be found in these modules.

## Class Sessions:

There will be two class sessions per week on Wednesdays and Fridays. **I will be covering the same material on both days so you DO NOT need to attend both sessions.** Class sessions will focus mainly on discussion and review of content covered in the video lectures, quizzes, assignments, etc. The remainder of the course material will be delivered through online activities on Blackboard, and are to be primarily completed asynchronously.

### Wednesday Classes

Wednesday classes will meet in 174 Lake Ontario Hall. Please complete the required [self-assessment](#) before you come to campus. **Do NOT come to class if you are sick.** At any point in the semester if you cannot come to class because you have symptoms, have had a potential exposure, etc., you should contact me and we will work together to ensure you can still meet class requirements. **You WILL NOT BE PENALIZED for absences, and you DO NOT need to provide documentation for absences.** If you are unable to attend class for any reason, you are always welcome to join the class online on Friday through the Zoom link available in Blackboard. You do not need to notify me ahead of time if you plan to attend on Zoom. I will also record and post Friday class sessions to Blackboard for you to review later. I will not be recording or live-streaming Wednesday class sessions.

### Friday Classes

Friday classes will meet on Zoom through the link available on Blackboard. If you are unable to attend class, I will be recording these class sessions. **You WILL NOT BE PENALIZED for absences, and you DO NOT need to provide documentation for absences.** Video and audio recordings will be made available to all students currently enrolled in this course via Blackboard. I will not share recordings of class sessions outside of course participants, and students may not share recordings outside of this course. You may turn off your camera and microphone and participate via the chat feature if you prefer not to have your visual or audio included in the recording. If you regularly attend on Fridays but would like to attend in person on a Wednesday at any time, please email me prior to the Wednesday class to ensure that there is enough physical space in the classroom.

### **Quizzes:**

Each learning module contains an online quiz based on the topics covered in the video lectures, face-to-face class sessions, and readings. **The goal of these quizzes is to evaluate your basic understanding of the material.** These quizzes will consist of 10 multiple choice questions worth one point each, for a total of 10 points per quiz. **You will only have one attempt to submit the quiz.** Once you submit the quiz, you will no longer be able to revise your answers. You are free to use the video modules, notes, and readings to complete the quizzes. If a technical error occurs and your quiz is not submitted properly, please email me as soon as possible. **All quizzes will be due on a Saturday by 11:59 PM** (see specific dates in the weekly course schedule). **If you**

**complete the quiz after the deadline, your score will be reduced by 50% (Example: If you get an 8/10 on a quiz submitted after the deadline, your score will be a 4/10 in Blackboard).**

Your score will be available upon submission of the quiz. Correct answers will be available for you to review after the due date for the quiz. See the video tutorial on Blackboard for instructions on how to review your quizzes.

### **Research Article Assignments:**

There will be two assignments based specifically on the required research articles listed above. **The goal of these articles is to expose you to some of the classic and current research in the field of behavioral neuroscience, and assess your ability to critically examine them.** These assignments will consist of short answer questions. These assignments will be worth 25 points each.

Assignment sheets will be made available in the Article Assignment folder in Blackboard as Word Documents. They must be completed and uploaded to the same folder by the due dates listed below. **I will only accept assignments that are uploaded as Word Documents or PDF files. If you are using another program to complete the assignment (Pages, Google Docs, etc.), please export the file to a Word Document or PDF file (instructions for how to do so are posted in Blackboard).**

You will have two opportunities to submit the assignment in case you have a technical issue. If you are still having technical issues when after your second attempted upload, please contact me so that I can assist you in turning in the exam. **Only the most recent submission will be graded.** Feedback will be provided within the assignment and gradebook using comments through Blackboard's grading tool.



Your answers to the questions will be worth a total of 20 points. The number of questions and points per question will vary for each assignment. The remaining 5 points will be based on the following criteria:

- Formatting: The assignment was uploaded to Blackboard as a Microsoft Word Document or PDF file. The assignment was uploaded to Blackboard as a Microsoft Word Document or PDF file. Questions and instructions were not deleted and answers are single-spaced in standard 12-point font. The assignment does not exceed the 3-page maximum limit.
- Spelling and Grammar: Your assignment should be free of typos, spelling errors, and grammatical errors.

**All assignments will be due on a Saturday by 11:59 PM** (see specific dates in the weekly course schedule). **After the due date, 5 points will be deducted from the overall grade per calendar day that the assignment is handed in late.**

### **Flipgrid Discussions:**

There will be four graded discussions during the semester, worth 10 points each, using Flipgrid. Flipgrid is a video discussion platform that can be accessed through their website (<https://info.flipgrid.com>), directly through the link in Blackboard, or by downloading the free app. If you are accessing Flipgrid through the app, make sure you enter the correct join code or scan the correct QR code for your section.

Section	Join Code	QR Code
Section 02	valdez7796	
Section 05	valdez7821	

The topics for these discussions are:

- Introductions
- Non-Medical Use of Adderall
- Criminal Behavior and Biology
- Stigma and Psychiatric Disorders

**The goal of this assignment is to allow us to have more interactive discussions regarding contemporary topics in the field of behavioral neuroscience, and to help create more of a sense of community within the class.** For each topic, you will be required to record a post regarding the discussion topic that will be worth 10 points. These posts **will be due on a Saturday by 11:59 PM** (see specific dates in the weekly course schedule). **After the due date, 2 points will be deducted from the overall grade per calendar day for late submissions.**

After these initial posts are due, you may earn 5 points of extra credit by leaving a **substantive video reply** to at least one other student's original post. Although you are free to reply to more than one post, you will not receive additional extra credit points for the additional replies. **Replies will be due by the next Saturday at 11:59 PM. Late replies for extra credit will not be accepted.**

### **In Class Participation:**

50 points of your semester grade will be based on in-class participation. We will be using the Top Hat ([www.tophat.com](http://www.tophat.com)) classroom response system in class. You will be able to submit answers to in-class questions using a smartphone, tablet, laptop, or through text message. You can visit the [Student: Quick Start Guide](#), which outlines how you will register for a Top Hat account, as well as provides a brief overview to get you up and running on the system. After you register, you will be asked to find the course

with its join code. Please be sure to register for the correct section with the correct join code.

Section	Join Code
Section 02	225187
Section 05	918605

Unless I specifically ask that responses remain anonymous, I will be tracking responses to the in class questions. Your grade will be based on the percentage of questions answered throughout the entire semester as outlined below. If you are unable to attend class due to illness, quarantine, child care issues, etc., please contact me as soon as possible for alternate arrangements to make up any in class participation points.

Percentage of questions answered	Participation points
75-100%	50
50-74.9%	40
25-49.9%	25
0-24.9%	0

### Exams:

There will be three exams that will be worth 100 points each. The exam format will be short essays and will be based on **what is covered in the video lectures, PowerPoint slides, face-to-face class sessions, and readings.** The goal of the exams is to gauge your ability to integrate and explain concepts in a manner that goes beyond a simple repetition of facts and definitions. The number of questions and the point total for each question will vary between exams (likely between 5-8 questions). You will be required to answer all questions on the exam. Exams will be made available in an Exam folder on Blackboard as Word Documents on the dates listed in the schedule. The only time limit to the exams is that they must be completed and uploaded to the same folder by the due dates listed. **After the due date, 10 points will be deducted from the overall grade per calendar day that the exam is turned in late.**

**I will only accept exams that are uploaded as Word Documents or PDF files. If you are using another program to complete the exam (Pages, Google Docs, etc.), please export the file to a Word Document or PDF file (instructions for how to do so are posted in Blackboard).** You will have two opportunities to submit the exam in case you have a technical issue. If you are still having technical issues when after your second attempted upload, please contact me so that I can assist you in turning in the exam. **Only the most recent submission will be graded.** Feedback will be provided within the exam and gradebook using comments through Blackboard's grading tool.

All exams are open book/open note. You are free to use the video modules, notes, and readings to complete the exams. The only time limitation for the exam is that it must be



submitted by the due date. Due to this format, I will have higher expectations regarding accuracy and clarity of your answers than I would if these were in class, closed book exams. Minor grammatical errors will not be penalized. However, grammatical errors that make your answers difficult to understand and/or typos/spelling errors that change the meaning of the answer will result in point deductions. Obvious typos and errors will also be penalized. **See the weekly schedule for specific availability dates and due dates.**

### **Optional Discussion Boards:**

Each week, I will set up a weekly discussion forum regarding the material for the week. **These discussion board posts are completely optional and will not be graded.** The purpose of these forums is to provide a weekly check-in to see if you have any questions regarding the course and to help guide our synchronous class sessions. The discussion boards will also give you an opportunity to engage with your classmates about the course.

In general, posts may address the following questions:

- What did you struggle with this week?
- What would you like me to expand upon/clarify/review in our next synchronous class session?
- What questions do you have regarding the week's materials?

If you have a general question about the material, please post them to the discussion board rather than emailing me directly. This will allow others in the class to benefit from your questions. You are also free to answer any questions posed by other students.

### **Course Grades:**

Grades will be based on your performance on examinations, quizzes, research article assignments, discussion assignments, and in-class participation. **EXTRA CREDIT OPPORTUNITIES BEYOND REPLIES TO THE FLIPGRID POSTS WILL NOT BE LIKELY.** Grades are calculated based on the following point values.

Exam 1	100 points
Exam 2	100 points
Exam 3	100 points
Quizzes	110 points
Research Article Assignments	50 points
Flipgrid Discussions	40 points
In-class Participation	50 points
<b>Total Available Points</b>	<b>550 points</b>
Possible Extra Credit Points	20 points

Letter grades will be assigned according to the following scale. Final grades are calculated as the percentage of points based on the of the total points available and are rounded to the nearest whole number.

A	93-100%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D+	67-69%
D	60-66%
F	≤ 59

**Please consider this general description of what each grade means.**

F/D/D+: Despite your best efforts, you are struggling with the material and need help to understand why you are having difficulty. **Please set up an appointment so that we can determine the best course of action for you if you fall in this range.**

C-/C/C+: You did all the necessary work. You learned all the basic material and **know the correct answers.**

B-/B/B+: You did all the necessary work. You learned all the basic material, and you know the correct answers. Plus you really get the material. You **understand the correct answers** and could teach it to a friend.

A-/A: You did all the necessary work. You learned all the basic material, and you know the correct answers. You really get the material. You understand the correct answers and could teach it to a friend. Plus you can use it flexibly and adaptively. You **understand WHY the answers are what they are, and how this material can be applied to different situations.**

### **Academic Integrity:**

The principles of truth and honesty are recognized as fundamental to a community of teachers and scholars. The university expects that both faculty members and students will honor these principles and in so doing protect the validity of university grades. This means that **all academic work will be done by the student to whom it is assigned without unauthorized aid of any kind.** Compliance shall include compliance with the following specific rules:

1. No student shall knowingly, without authorization, procure, provide, or accept any materials which contain questions or answers to any examination or assignment.
2. No student shall, without authorization, complete, in part or in total, any examination or assignment for another person.
3. No student shall, without authorization, allow any examination or assignment to be completed, in part or in total, by another person.
4. No student shall knowingly plagiarize or copy the work of another person and submit it as their own.
5. No student shall submit work that has been previously graded or is being submitted concurrently to more than one course without authorization from the instructor(s) of the class(es) to which the student wishes to submit it.

**Accommodation for disability:**

If you are in need of accommodations due to a learning, physical, or other disability you must present a memo to me from Disability Support Resources (DSR), indicating the existence of a disability and the suggested reasonable accommodations. If you have not already done so, please contact the Disability Support Resources office (215 CON) by calling 331-2490 or email to [dsrgvsu@gvsu.edu](mailto:dsrgvsu@gvsu.edu). Please note that I cannot provide accommodations based upon disability until I have received a copy of the DSR issued memo. All discussions will remain confidential.

Furthermore, if you have a physical disability and think you will need assistance evacuating this classroom and/or building in an emergency situation, please make me aware so I can develop a plan to assist you.

## Weekly Course Schedule (Subject to change)

Week	Readings and Online Video Lectures	Assignments
<b>Week 1</b> <b>1/19-1/23</b>	<b>Learning Module</b> - Neurons and Neurotransmission <b>Required Videos</b> - Neurons and Neurotransmission Part 1 <b>Recommended Readings</b> - Neuroscience Online: Section 1, Chapter 1, 1.1-1.4 - Neuroscience Online: Section 1, Ch 6, 6.1, 6.2, 6.5, 6.6 - Carlson & Birkett: Chapter 2	<b>Saturday, by 11:59 PM</b> - Flipgrid: Introductions  <b>Optional</b> - Weekly Discussion Board Post: Neurons and Neurotransmission  <b>*No online quiz this week</b>
<b>Week 2</b> <b>1/24-1/30</b>	<b>Learning Module</b> - Neurons and Neurotransmission <b>Required Videos</b> - Neurons and Neurotransmission Part 2 <b>Recommended Readings</b> - Neuroscience Online: Section 1, Chapter 1, 1.1-1.4 - Neuroscience Online: Section 1, Ch 6, 6.1, 6.2, 6.5, 6.6 - Carlson & Birkett: Chapter 2	<b>Saturday, by 11:59 PM</b> - Neurons and Neurotransmission Quiz - Flipgrid: Replies to Introductions  <b>Optional</b> - Weekly Discussion Board Post: Neurons and Neurotransmission
<b>Week 3</b> <b>1/31-2/6</b>	<b>Learning Module</b> - Neuroanatomy <b>Required Videos</b> - Neuroanatomy <b>Recommended Readings</b> - Neuroscience Online: Section 2, Chapter 1 - Carlson & Birkett: Chapter 3	<b>Saturday, by 11:59 PM</b> - Neuroanatomy Quiz  <b>Optional</b> - Weekly Discussion Board Post: Neuroanatomy
<b>Week 4</b> <b>2/7-2/13</b>	<b>Learning Module</b> - Psychopharmacology <b>Required Videos</b> - Psychopharmacology <b>Recommended Readings</b> - Carlson & Birkett: Chapter 4	<b>Saturday, by 11:59 PM</b> - Psychopharmacology Quiz - Flipgrid: Non-Medical Adderall Use  <b>Optional</b> - Weekly Discussion Board Post: Psychopharmacology

Week	Readings and Online Video Lectures	Assignments
<b>Week 5</b> <b>2/14-2/20</b>	<b>Learning Module</b> - Neurotransmitter Systems <b>Required Videos</b> - Neurotransmitter Systems <b>Recommended Readings</b> - Neuroscience Online: Section 1, Chapter 11, 11.1, 11.4, 11.14, 11.16 - Neuroscience Online: Section 1, Chapter 12, 12.1, 12.5, 12.11 (only the subsections on DA, NE, and 5-HT), 12.27-12.33 - Neuroscience Online: Section 1, Chapter 13, 13.5, 13.7, 13.10, 13.13, 13.17, 13.18 - Neuroscience Online: Section 2, Chapter 8, 8.1 - Carlson & Birkett: Chapter 4	<b>Saturday, by 11:59 PM</b> - Neurotransmitter Systems Quiz - Flipgrid: Non-Medical Adderall Use Replies <b>Optional</b> - Weekly Discussion Board Post: Neurotransmitter Systems
<b>Week 6</b> <b>2/21-2/27</b>	<b>Exam 1</b> - <b>Neurons and Neurotransmission</b> - <b>Neuroanatomy</b> - <b>Psychopharmacology</b> - <b>Neurotransmitter Systems</b>  <b>Learning Module</b> - Visual Perception <b>Required Videos</b> - Visual Perception <b>Recommended Readings</b> - Neuroscience Online: Section 2, Chapter 14, 14.3-14.5 - Neuroscience Online: Section 2, Chapter 15 - Carlson & Birkett: Chapter 6	<b>Monday at 12:01 AM</b> - <b>Exam 1 Available</b>  <b>Tuesday, by 11:59 PM</b> - <b>Exam 1 Due</b>  <b>Saturday, by 11:59 PM</b> - Visual Perception Quiz  <b>Optional</b> - Weekly Discussion Board Post: Visual Perception
<b>Week 7</b> <b>2/28-3/6</b>	<b>Learning Module</b> - Auditory Perception and Somatosenses <b>Required Videos</b> - Auditory Perception - Somatosenses <b>Recommended Readings</b> - Neuroscience Online: Section 2, Chapter 12 - Neuroscience Online: Section 2, Chapter 13 - Carlson & Birkett: Chapter 7	<b>Saturday, by 11:59 PM</b> - Auditory Perception and Somatosenses Quiz  <b>Optional</b> - Weekly Discussion Board Post: Auditory Perception and Somatosenses
<b>Week 8</b> <b>3/7-3/13</b>	<b>Wednesday, 3/10 has been designated as a Mental Health break by the University. Because of the course structure, we will not be having class on Wednesday or Friday this week.</b>	<b>Watch something good on Netflix, get outside, sleep, etc.</b>

Week	Readings and Online Video Lectures	Assignments
<b>Week 9</b> <b>3/14-3/20</b>	<b>Learning Module</b> - Fear and Aggression <b>Required Videos</b> - Fear and Aggression <b>Recommended Readings</b> - Neuroscience Online: Section 4, Chapter 6, 6.5, 6.6 - Carlson & Birkett: Chapter 11	<b>Saturday, by 11:59 PM</b> - Fear and Aggression Quiz - Flipgrid: Criminal Behavior and Biology <b>Optional</b> - Weekly Discussion Board Post: Fear and Aggression
<b>Week 10</b> <b>3/21-3/27</b>	<b>Learning Module</b> - Sex and Sex Differences <b>Required Videos</b> - Sex and Sex Differences <b>Required Reading</b> - LeVay, 1991 <b>Recommended Readings</b> - Carlson & Birkett: Chapter 11	<b>Saturday, by 11:59 PM</b> - Sex and Sex Differences Quiz - Flipgrid: Criminal Behavior and Biology Replies - LeVay Article Assignment <b>Optional</b> - Weekly Discussion Board Post: Sex and Sex Differences
<b>Week 11</b> <b>3/28-4/3</b>	<b>Exam 2</b> - Visual Perception - Auditory Perception and Somatosenses - Fear and Aggression - Sex and Sex Differences  <b>Learning Module</b> - Learning and Memory <b>Required Videos</b> - Learning and Memory Part 1 <b>Recommended Readings</b> - Neuroscience Online: Section 4, Chapter 5, 5.6 - Neuroscience Online: Section 4, Chapter 7, 7.3, 7.4 (only the subsection on long-term potentiation) - Carlson & Birkett: Chapter 13	<b>Monday at 12:01 AM</b> - Exam 2 Available  <b>Tuesday, by 11:59 PM</b> - Exam 2 Due  <b>Optional</b> - Weekly Discussion Board Post: Learning and Memory  <b>*No online quiz this week</b>
<b>Week 12</b> <b>4/4-4/10</b>	<b>Learning Module</b> - Learning and Memory <b>Required Videos</b> - Learning and Memory Part 2 <b>Recommended Readings</b> - Neuroscience Online: Section 4, Chapter 5, 5.6 - Neuroscience Online: Section 4, Chapter 7, 7.3, 7.4 (only the subsection on long-term potentiation) - Carlson & Birkett: Chapter 13	<b>Saturday, by 11:59 PM</b> - Learning and Memory Quiz  <b>Optional</b> - Weekly Discussion Board Post: Learning and Memory

Week	Readings and Online Video Lectures	Assignments
<b>Week 13</b> <b>4/11-4/17</b>	<b>Learning Modules</b> <ul style="list-style-type: none"> <li>- Neurological Disorders</li> <li>- Psychiatric Disorders</li> </ul> <b>Required Videos</b> <ul style="list-style-type: none"> <li>- Alzheimer's Disease</li> <li>- Parkinson's Disease</li> </ul> <b>Recommended Readings</b> <ul style="list-style-type: none"> <li>- Neuroscience Online: Section 3, Chapter 6, 6.3</li> <li>- Neuroscience Online: Section 4, Chapter 10</li> <li>- Carlson &amp; Birkett: Chapter 15 (only the subsections on Dementia and Parkinson's Disease)</li> </ul>	<b>Saturday, by 11:59 PM</b> <ul style="list-style-type: none"> <li>- Neurological Disorders Quiz</li> <li>- Flipgrid: Stigma and Psychiatric Disorders</li> </ul> <b>Optional</b> <ul style="list-style-type: none"> <li>- Weekly Discussion Board Post: Neurological Disorders</li> </ul>
<b>Week 14</b> <b>4/18-4/24</b>	<b>Learning Module</b> <ul style="list-style-type: none"> <li>- Psychiatric Disorders</li> </ul> <b>Required Videos</b> <ul style="list-style-type: none"> <li>- Mood Disorders</li> <li>- Anxiety Disorders</li> <li>- Schizophrenia</li> </ul> <b>Required Reading</b> <ul style="list-style-type: none"> <li>- Kraehenmann et al., 2015</li> </ul> <b>Recommended Readings</b> <ul style="list-style-type: none"> <li>- Carlson &amp; Birkett: Chapter 16</li> </ul>	<b>Saturday, by 11:59 PM</b> <ul style="list-style-type: none"> <li>- Psychiatric Disorders Quiz</li> <li>- Flipgrid: Stigma and Psychiatric Disorders Replies</li> <li>- Kraehenmann et al. Article Assignment</li> </ul> <b>Optional</b> <ul style="list-style-type: none"> <li>- Weekly Discussion Board Post: Psychiatric Disorders</li> </ul>
<b>Finals Week</b>	<b>Exam 3</b> <ul style="list-style-type: none"> <li>- Learning and Memory</li> <li>- Neurological Disorders</li> <li>- Psychiatric Disorders</li> </ul>	<b>Monday, 4/26 at 12:01 AM</b> <ul style="list-style-type: none"> <li>- Exam 3 Available</li> </ul> <b>Wednesday, 4/28 by 11:59 PM</b> <ul style="list-style-type: none"> <li>- Exam 3 Due</li> </ul>

### Summary of Key Dates (Subject to change)

Saturdays throughout the semester by 11:59 PM	Learning Module Online Quizzes
Saturday, 1/23 by 11:59 PM	Flipgrid: Introductions
Saturday, 1/30 by 11:59 PM	Flipgrid: Replies to Introductions
Saturday, 2/13 by 11:59 PM	Flipgrid: Non-Medical Adderall Use
Saturday, 2/20 by 11:59 PM	Flipgrid: Replies to Non-Medical Adderall Use
<b>Monday, 2/22 at 12:01 AM</b>	<b>Exam 1 Available</b>
<b>Tuesday, 2/23 by 11:59 PM</b>	<b>Exam 1 Due</b>
<b>Wednesday, 3/10</b>	<b>Mental Health Break, No Class</b>
<b>Friday, 3/12</b>	<b>No Class</b>
Saturday, 3/20 by 11:59 PM	Flipgrid: Criminal Behavior and Biology
Saturday, 3/27 by 11:59 PM	Flipgrid: Replies to Criminal Behavior and Biology LeVay Article Assignment
<b>Monday, 3/29 at 12:01 AM</b>	<b>Exam 2 Available</b>
<b>Tuesday, 3/30 by 11:59 PM</b>	<b>Exam 2 Due</b>
Saturday, 4/17 by 11:59 PM	Flipgrid: Stigma and Psychiatric Disorders
Saturday, 4/24 by 11:59 PM	Flipgrid: Replies to Stigma and Psychiatric Disorders Kraehenmann et al. Article Assignment
<b>Monday, 4/26 at 12:01 AM</b>	<b>Exam 3 Available</b>
<b>Wednesday, 4/28 by 11:59 PM</b>	<b>Exam 3 Due</b>