

Behavioral Neuroscience Syllabus
Psyc 325 Spring 2024
Sections 1 & 2

Lecture: Sec 1, MWF 9-9:50 AM Rm D230 Sci Bldg
Sec 2, MWF 10-10:50 AM Rm D230 Sci Bldg

Instructor: Dr. Heather Molenda-Figueira

Email: hmolenda@uwsp.edu, I will respond the same day to any emails sent before 8 PM.

Office Hours: I will have a standing in-person meeting on Wednesdays from 11-12, but appointments can be made outside of that time, or via Zoom, if it doesn't work for your schedule.

Teaching Philosophy: What I enjoy most about teaching is sharing my knowledge and excitement about Neuroscience and Bio/Physiological Psychology and encouraging students to want to learn more about this subject. Ultimately, I hope to inspire students to consider this field for their future career. To achieve this goal, there are several criteria that I deem essential to successful teaching, and these objectives drive my teaching method: 1) creating an environment for optimal learning, 2) establishing supportive personal interactions and availability, and 3) fostering critical thinking skills. My role is to guide students through the material, while at the same time making sure that they are active participants in the learning process. My class will be structured as a combination of lectures, and active learning activities. My intention is to make the course material enjoyable, and easy to understand. It is my hope that you will find the material covered in this course interesting, and that you will be inspired to learn more about neural function in additional courses.

Course Learning Outcomes:

- Understand chemical, hormonal and electrical communication between neurons
- Become familiar with neuroanatomy and basic function of major brain structures
- Become familiar with methods used within the field of biopsychology including brain scans, cognitive tests and observational studies
- Gain an understanding of how the brain controls behaviors, including the neurotransmitters and hormones that are important for behaviors such as movement, reproduction and sensory perception
- Gain an understanding of how behavior can influence brain development and function
- Become familiar with the neurological changes associated with psychological disorders and treatment for these disorders

Course Resources:

Textbook: *Behavioral Neuroscience*, Breedlove & Watson, 10th Edition, Oxford University Press, 2023.

Useful Websites:

www.sfn.org

www.ncbi.nlm.nih.gov/sites/entrez

www.nimh.nih.gov

Class Preparation: Please complete assigned reading prior to attending or viewing lectures. This will provide you with background on the material that will be covered in lecture and class activities, and gives you an opportunity to make a list of concepts that you might find challenging. For exams, you will not be required to know material that was not covered during lectures or class activities.

Canvas: Please regularly check Canvas for course materials. The syllabus, exam study guides, lecture slides, handouts and other instructions can be found here.

Concept Review Worksheets: Concept Review Worksheets are posted on Canvas and will provide you with a review of the material covered in the lecture topic, as well as some questions prompting you to think further about the material. The worksheets can be used for additional exam preparation.

Exams: There are 5 exams, including the final. Exams will not be cumulative, and mainly multiple choice, but may occasionally contain short answer questions as well. Exam study guides will be posted to Canvas approximately 1 week before the exam, and we will go over the answers to study guide questions during the class period prior to the exam. You may only make up exams if you provide evidence of personal or medical emergencies. If this occurs, you must contact me prior to the exam, and you will have 5 days in which to complete the exam. (35 questions; 70 pts)

Application Assignments: You will have 3 application assignment to complete over the course of the semester. The purpose of these assignments is to assess your deeper understanding of material, but in a more fun/meaningful way. These assignments may require you to look outside of your book/lecture for additional information. More detailed information will be provided during the semester.

- **Psychoactive Drugs as Weapons Against Zombies:** You will answer a series of questions about drugs that could prevent a Zombie invasion. (30 pts)
- **Test Your Senses:** You will answer questions and perform activities that test several of your senses. (30 pts)
- **Psychological Disorder Diagnosis:** You will be given a series of case studies, and you will have to diagnose and answer questions about information provided from your “patients”. (30 pts)

Since analytical and critical thinking skills are part of the learning outcomes for the application assignments, all writing assignments should be prepared by the student. Developing strong competencies in this area will prepare you to better understand and critique scientific information. Therefore, AI-generated submissions are not permitted and will be treated as plagiarism. Students found to be using such tools will be considered as engaging in conduct aimed at making false representations of a student’s academic performance, and will receive a grade of zero for that assignment. Students will also be subject to disciplinary action as defined in the UWSP Academic Misconduct Policies.

Grading: Grades will be based on your performance on 5 exams and Application Assignments. You will not be graded on in-class activities which will be used to solidify your understanding of course materials and encourage deeper thinking about class topics.

Exam 1	14%	70 pts
Exam 2	14%	70 pts
Exam 3	14%	70 pts
Exam 4	14%	70 pts
Exam 5 Final	14%	70 pts
Zombie Drugs	6%	30 pts
Test Your Senses	6%	30 pts
Psychological Disorder Diagnosis	6%	30 pts
Total	100%	440 pts

Grading Scale:	Pts	Percentage
A	409 - 440	93%-100%
A-	396 - 408	90%-92%
B+	383 - 395	87%-89%
B	365 - 382	83%-86%
B-	352 - 364	80%-82%
C+	339 - 351	77%-79%
C	321 - 338	73%-76%
C-	308 - 320	70%-72%
D+	295 - 307	67%-69%
D	264 - 294	60%-66%
F	≤ 263	≤ 59%

Class Operation: It is essential that my classroom environment provides students with a level of comfort in which they feel free and are encouraged to ask questions and offer their individual perspectives on the topics at hand. I will use a variety of teaching techniques including standard lectures, videos, and discussions where lecture knowledge is applied to application problems or scientific questions.

I encourage you to attend office hours meetings during the course of the semester so that I can provide a comfortable atmosphere in which we can address any issues you may have with the class. These discussions will aid me in devising ways to assist you in understanding materials with which you are struggling. I am committed to your success in this course!

It is also imperative that as a member of my class, you treat others with respect. We all come from different backgrounds and hold different points of view. There may be topics within this course that many feel controversial. We must be open to all points of view as every individual has something important to contribute to our discussions.

Navigate Student App

For those of you looking to connect with other students in the course for study groups, the Navigate student app has a feature called **Study Buddies**. Here, you can find a list of other

students who have indicated they are interested in forming a study group. If you are the first, you will be sent notifications when other students join. You can select who you want to connect with and can leave the group at any time.

Additionally, the Navigate student app can help you with the following at UWSP:

- Schedule appointments
- Remove Holds from your account
- Find important resources
- Learn of key dates and important to-dos on campus
- View your class schedule with walking instructions to each building

Accessing the Navigate student app: For students who have already downloaded the Navigate smart phone app, choose the **Study Buddies** icon, and a full list of your courses will appear. Each section shows how many buddies are in the group. Instructions are also posted on Canvas under the Course Documents module.

UW-Stevens Point Classroom Policies

Using Electronic Devices: To maintain the integrity of in-class exams, the use of electronic devices will not be permitted during exams without prior documented approval from the Disability Services office or other pertinent offices on campus. This includes, but is not limited to, requests to use cellular or wireless network-enabled mobile devices for foreign language translation assistance. Students who are found using these devices will be dismissed and receive a zero for their exams. Other penalties will be considered under the misconduct policy.

UWSP Attendance Policy: Attend all your classes regularly. We do not have a system of permitted "cuts."

Students are expected to attend the first meeting of class, or have permission from the instructor or chair of the department to be absent. Those who do not attend the first one or two days of class may be required to drop the course if there are others who wish to add the course. **If required to drop the course, it is the student's responsibility to officially drop the course through the Registration & Records Office or on the web.**

If you enroll in a course and cannot begin attending until after classes have already started, you must first get permission from the department offering the course. Otherwise, you may be required to drop the course.

Your instructors will explain their specific attendance policies to you at the beginning of each course. Be sure to follow them. If you must be absent, tell your instructor why. If you can't reach your instructors in an emergency, visit the [Student Academic Advising Center](#), Room 103, SSC, or call them at 715-346-3361.

UWSP Rights and Responsibilities- Student Academic Standards and Disciplinary Procedures: UWSP values a safe, honest, respectful and inviting learning environment. In order to ensure that each student has the opportunity to succeed, we have developed a set of expectations for

all students and instructors. This set of expectations can be found in the Student Handbook. Click here/visit the site for more:

<https://www.uwsp.edu/dos/Pages/handbook.aspx>

Academic integrity is central to the mission of higher education in general and UWSP in particular. Academic dishonesty (cheating, plagiarism, etc.) is taken very seriously. So don't do it!! The minimum penalty for a violation of academic integrity is a failure (zero) for the assignment. For more information, see the UWSP "Student Academic Standards and Disciplinary Procedures" section of the *Rights and Responsibilities document*, Chapter 14, and can be accessed at the following site:

<https://www.uwsp.edu/dos/Pages/Student-Conduct.aspx>

Accommodations for Students with Disabilities: The Americans with Disabilities Act (ADA) is a federal law requiring educational institutions to provide reasonable accommodations for student with disabilities. For more information about UWSP's policies, check here:

<https://www.uwsp.edu/datc/Pages/law-regent-policy.aspx>

If you have a disability and require classroom and/or exam accommodations, please register with the Disability Services Office and then contact me at the beginning of the course. I am happy to help in any way that I can. For more information, please visit the Disability Services Office, located on the 6th floor of the Learning Resource Center (in the Library). You can also find more information on services provided at: <http://www4.uwsp.edu/special/disability/>

Title IX: Under several federal and state laws, and according to several university guidelines, I am required to report acts of a criminal or offensive nature. This includes acts of sexual harassment and assault, bias and hate crimes, illicit drug use, and acts of violence. Any disclosure or description of these incidents – both current and in the past – may be reported to the Dean of Students office (<http://www.uwsp.edu/dos/>) or the local authorities.

If you are reading this, email Dr. Figgy either a cute dog picture or a neuroscience-related meme for 5 points that will be added to your final grade!

Emergency Preparedness: In the event of a medical emergency, call 911 or use the red emergency phone located outside of room D230. Offer assistance if trained and willing to do so. Guide emergency responders to victim.

In the event of a tornado warning, proceed to the lowest level interior room without window exposure or any of the hallways in the Science Building. Avoid wide-span rooms and buildings. For floor plans showing severe weather shelters, see www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.

In the event of a fire alarm, evacuate the building in a calm manner. Meet across the street in front of the Health Education Center (HEC). Notify instructor or emergency command personnel of any missing individuals.

Active Shooter – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency responders.

For details on all emergency response plans at UW-Stevens Point See UW-Stevens Point, please view the Emergency Management Plan at www.uwsp.edu/rmgt.

Course Schedule

Date	Topic	Readings/Homework	Activities
1/22	Introduction to course and expectations		Online Introduction Discussion Board
1/24	Ch. 1 Lecture: Behavioral Neuroscience	Ch. 1	
1/26	Ch. 2 Lecture: Functional Neuroanatomy Part 1	Ch. 2	
1/29	Ch. 2 Lecture: Functional Neuroanatomy Part 2	Ch. 2	Neuroanatomy CRW
1/31	Ch. 3 Lecture: Neurophysiology Part 1	Ch. 3	
2/2	Ch. 3 Lecture: Neurophysiology Part 2	Ch. 3	Neural signaling CRW
2/5	Exam 1 Review	Exam 1 study guide	Bring your questions!
2/7	Exam 1: Ch 1-3		
2/9	Ch. 4 Lecture: Chemistry of Behavior Part 1	Ch. 4	
2/12	Ch. 4 Lecture: Chemistry of Behavior Part 2	Ch. 4	Neurochemistry CRW
2/14	Ch. 5 Lecture: Hormones and the Brain Part 1	Ch. 5	
2/16	Ch. 5 Lecture: Hormones and the Brain Part 2	Ch. 5	Hormones CRW
2/19	Catch-up Day		
2/21	Instructions for all Application Assignments		
2/23	Ch. 7 Lecture: Life-Span Development of Brain Pt. 1	Ch. 7	
2/26	Ch. 7 Lecture: Life-Span Development of Brain Pt. 2	Ch. 7	Development CRW
3/28	Exam 2 Review	Exam 2 study guide	Bring your questions!
3/1	Exam 2: Ch 4, 5 & 7		
3/4	Work on Zombie Drug Application Activity		
3/6	Ch. 8 Lecture: Sensory Processing, Touch, Pain Part 1	Ch. 8	
3/8	Ch. 8 Lecture: Sensory Processing, Touch Pain Part 2	Ch. 8	Senses CRW
3/11	Ch. 9 Lecture: Hearing, Taste & Smell	Ch. 9	Zombie Drug Application Assignment due!

3/13	Ch. 9 Lecture: Hearing, Taste & Smell	Ch. 9	Hearing, Taste and Smell CRW
3/15	Ch. 10 Lecture: Vision Part 1	Ch. 10	
3/16-24	NO CLASS-SPRING BREAK!!!		
3/25	Ch. 10 Lecture: Vision Part 2	Ch. 10	Vision CRW
3/27	Exam 3 Review	Exam 3 study guide	Bring your questions!
3/29	Exam 3: Ch 8-10		
4/1	Ch. 11 Lecture: Motor Control Part 1	Ch. 11	
4/3	Ch. 11 Lecture: Motor Control Part 2	Ch. 11	Motor Control CRW
4/5	Work on Testing Senses Application Activity		
4/8	Ch. 12 Lecture: Sex: Evol., Hormonal & Neural Bases Part 1	Ch. 12	
4/10	Ch. 12 Lecture: Sex: Evol., Hormonal & Neural Bases Part 2	Ch. 12	Sexual Behavior CRW
4/12	Catch-up Day		Testing Senses Application Activity due!
4/15	Ch. 14 Lecture: Biological Rhythms, Sleep & Dreaming Part 1	Ch. 14	
4/17	Ch. 14 Lecture: Biological Rhythms, Sleep & Dreaming Part 2	Ch. 14	Biorhythms CRW
4/19	NO CLASS-FIGGY AT APA CONFERENCE		
4/22	Exam 4 Review	Exam 4 study guide	Bring your questions!
4/24	Exam 4: Ch 11-14		
4/26	Ch. 15 Lecture: Emotions, Aggression, Stress Part 1	Ch. 15	Emotions and Stress CRW
4/29	Ch. 15 Lecture: Emotions, Aggression, Stress Part 2	Ch. 15	
5/1	Work on Psych Disorders Diagnosis Activity		
5/3	Ch. 16 Lecture: Psychopathology Part 1	Ch. 16	Psychopathology CRW
5/6	Ch. 16 Lecture: Psychopathology Part 2	Ch. 16	
5/8	Ch. 19 Lecture: Language	Ch. 19	Language CRW
5/10	Final Exam Review	Final Study Guide	Psychological Disorders Diagnosis Application Activity Due!
5/15	Final Exam: Ch 15, 16 & 19 (Sec 1) 12:30-2:30 PM Rm D230 Sci Bldg		
5/16	Final Exam: Ch 15, 16 & 19 (Sec 2) 2:45-4:45 PM Rm D230 Sci Bldg		