About PSY 330

Section Info	Section 09	Section 03	
Meeting Time	10:00 - 11:15 am Tues / Thurs	1:00 - 2:15 pm Tues / Thurs	
Meeting Location	ASH 2107	MAK D1221	
Final Exam	Thursday, December 12, 10:00 am - 11:50 am	Tuesday, December 10, 12:00 pm - 1:50 pm	

Office Hours (Zoom): Drop-in (Zoom Room) office hours are <u>9-11am on Mondays</u>. You can also make an appointment for a different day / time using <u>this form</u> to schedule.

Course Description: This course emphasizes the study of bodily structures, processes, and mechanisms related to various aspects of the organism's interactions with the environment. Topics covered include neurophysiological correlates (*aka biological basis*) of cognition, memory, motivation, emotion, attention, and sensory processes.

Learning Objectives: My goal is for each student to learn the structures and functions of neurons and neural systems, as well as skills, strategies, and ways of thinking about neuroscience.

- 1. Identify the structure and function of the major parts of the nervous system at a cellular and systems (functional neuroanatomy) level
- 2. Describe the process of action potentials
- 3. Describe the process of neurotransmission
- 4. Identify the behavioral function of major brain chemical systems
- 5. Discuss basic research in behavioral neuroscience
- 6. Relate biological processes to everyday behavior

Prerequisites and Required Resources

- 1. Prerequisite: PSY 101
- 2. Technology Requirements: MS Office; Zoom; Panopto

Textbooks: I've cut all ties with expensive textbooks! All reading assignments come from open access sources Most reading will come from the following source but please See BB modules for specific reading assignments.

• INTRODUCTION TO NEUROSCIENCE: https://openbooks.lib.msu.edu/introneuroscience1/

About the Instructor

Elizabeth Flandreau (she/her) (Please call me Dr. or Professor Flandreau.)

Background and Personal Life: I have a BA in Biology from Lawrence University in Appleton, WI and PhD in Neuroscience from Emory University in Atlanta. I did my postdoctoral work in La Jolla, CA at the Salk Institute and UCSD. I live in Allendale with my spouse. I have four daughters ages 11, 7, and 3, plus my angel baby, Georgia, who passed away at birth 8/12/2019. We also have an 80-pound labradoodle named Charger and cat, Bayern. When I'm not nerding-out about brains, I enjoy podcasts...about brains, listening to music, and reading books. **Complete List of Published Work in MyBibliography:**http://www.ncbi.nlm.nih.gov/sites/myncbi/16yhpycv5JeOW/bibliography/49569051/public/?sort=date&direction=ascending

Office Hours (aka 1:1 meeting with Flandreau) Sometimes students worry their questions are too small for an office hours appointment—I disagree, I enjoy meeting with students whether it's 30 seconds or 30 minutes. I will be most useful in these meetings if students arrive with a specific agenda. Any questions about grades should be addressed in an office hours meeting. Please complete this form to schedule a meeting.

POLICIES & RESOURCES

GVSU and Course Policies: https://www.gvsu.edu/catalog/navigation/academic-policies-and-regulations.htm

- The purpose of this course is to learn. Please treat your classmates and instructors with respect in face-to-face and online interactions and be respectful in your conversations about others. If you have any concerns, please contact me or the GVSU division of inclusion and equity (616) 331-3296). Please review GVSU's policy on Anti-Racism and Title IX
- Earning a degree from GVSU means you achieved knowledge, skills, and abilities worthy of that degree. Please do not short-change your education or compromise your integrity. <u>Instructors are required to report incidents of academic integrity violations</u>.
- To meet integrity standards, be sure that you know which resources you're allowed to use (if you're not sure, please ask!) and ALWAYS cite your sources. Using someone else's words as your own is plagiarism whether that 'someone' is a classmate, a textbook, or a predictive language model.

Email Policy: Questions about the course are relevant to all students and must be posted to the discussion board so everyone can benefit from the answer! <u>Please do email me if:</u> your question is urgent and hasn't been answered on the discussion board, you need a 1:1 outside my office hours availability, or you have a personal matter that can't wait for a 1:1 meeting. I typically respond to emails within 1 business day. <u>flandree@gysu.edu</u>

Own Voice Standard: This class requires integrating content across topics and demonstrating knowledge through application. *Everything* you submit must be in your own voice. Direct quotations or paraphrasing from original sources or predictive language models are incompatible with this standard. Students will have an opportunity for a replacement assignment and grade for a first own-voice violation. Additional submissions that do not meet this standard cannot be considered for credit. Here's how to meet the "Own Voice" Standard:

- 1. *Use Course Resources:* Center the learning objectives in your studying, use the content posted on Bb and, where relevant, attend face-to-face classes. Avoid predictive language models which pull from sources that may be inaccurate or simply not use the same terms we do.
- 2. *Take careful notes*: identify the source of the notes at the top of the page; do not copy down words or phrases directly from the source.
- 3. Avoid using notes while crafting your text. Ability to speak from memory is a great way to demonstrate that you've mastered the content and prevents most accidental plagiarism.
- 4. *Read your answers aloud*. Does it sound like something you would say? Do you understand every word you've written? If so, it's probably a good fit for your target audience! If not, take a step back, revise, and ask questions.
- 5. *Ask Questions:* Are you unsure what a question is asking? Unclear about how to approach the topic? Use the discussion board. Meet with a team or the instructor.

Missed Deadline Policy: Most assignments are officially due by 11:59 pm on Fridays. However, there is a 48 hr grace period. Assignments with Friday deadlines will not be considered late until after 11:59pm on Sundays. Most assignments are available well in advance of the due date and can be turned in early. Most assignments can still be submitted late, but I cannot guarantee I will have time to grade them or provide feedback. *If you're struggling to stay on top of content, please meet with me ASAP so we can come up with a strategy.*

Resources: No one can reach their greatest academic potential if basic needs are not being met. Please check out these resources if you are experiencing <u>financial hardship</u>, could benefit from a mental health <u>counseling appointment</u> or <u>wellness appointment</u>. The student <u>academic success center</u> also has excellent resources. Here's what else you need to succeed:

- **1.** *Time:* To meet the objectives of the course requires putting in the time for reading, lectures, studying, and practicing. If you have fewer than 10 hours per week to devote to this class, it will be difficult to succeed.
- 2. Technology: <u>Technology Requirements</u> and software through GVSU MS Office, Zoom, Panopto.
- **3.** *People:* Please use your instructor, classmates, and other resources within and beyond GVSU to support your learning. To the best of my ability, I design courses for inclusivity with opportunities for each student to reach their highest potential. It is my goal that each student meets all learning objectives. One of the most important resources for this course is me!!
- **4.** *Course Content:* I very carefully create and curate content for this course. I do not recommend using other sources as I cannot guarantee their accuracy or alignment with the assessments.

- **5.** *Library Resources*: The GVSU library has additional resources related to understanding and producing scientific writing as well as important information on how to cite sources and avoid plagiarism. https://www.gvsu.edu/library/km/
- **6.** Official Accommodations: Please work with DSR (https://www.gvsu.edu/dsr/) and communicate with me to make sure your needs are met in this course.

SCHEDULE & DUE DATES

Subject to change if needed during the semester

WEEK	DAY	DATE	Course Module / Folder	Do / Due (Everyone)	Collaborative Only
	Tues	8/27/24	Start Here		
	Thurs	8/29/24	Neuroanatomy		
	Fri	8/30/24		Optional Extra Credit Pre-Test	
Tı	Tues	9/3/24	Neuroanatomy		
2	Thurs	9/5/24	Neuron Structure & Function		
2	2 Fri	9/6/24		Are you ready quiz	Team Assignment Survey
7	Tues	9/10/24	Communication within neurons		
3	Thurs	9/12/24	Communication within neurons		
F	Fri	9/13/24		Homework 1	
4	Tues	9/17/24	Communication between neurons & NTs		
	Thurs	9/19/24	Communication between neurons & NTs		
	Fri	9/20/24		Reflection Survey 1	Team Contract
5	Tues	9/24/24	Catch up / REVIEW 1		
	Thurs	9/26/24	TEST 1		

WEEK	DAY	DATE	Course Module / Folder	Do / Due (Everyone)	Collaborative Only	
	Tues	10/1/24	Sensory Systems- General			
6 Thurs	Thurs	10/3/24	Vision- Retina			
	Fri	10/4/24				
	Tues	10/8/24	Vision-Retina ASYNCHRONOUS;	I will be presenting at the Sf	N conference in Chicago	
7	Thurs	10/10/24	Vision in the brain			
	Fri	10/11/24				
	Tues	10/15/24	Auditory System			
8	Thurs	10/17/24	Hearing & the brain			
	Fri	10/18/24		Homework 2	Complete with team	
	Tues	10/22/24	NO CLASS- FALL BREAK			
9	Thurs	10/24/24	Language & Aphasias			
	Fri	10/25/24		Reflection Survey 2		
Tues	10/29/24	Catch up / REVIEW 2				
10	Thurs	10/31/24	TEST 2	Extra credit for wearing a (s	a (safe-for-work) costume	
WEEK	DAY	DATE	Course Module / Folder	Do / Due (Everyone)	Collaborative Only	
WEEK	DAY Tues	DATE 11/5/24		Do / Due (Everyone)	Collaborative Only	
WEEK 11			Learning & Memory	Do / Due (Everyone)	Collaborative Only	
	Tues	11/5/24	Learning & Memory	Do / Due (Everyone)	Collaborative Only	
	Tues Thurs	11/5/24 11/7/24 11/8/24	Learning & Memory	Do / Due (Everyone)	Collaborative Only	
	Tues Thurs Fri Tues	11/5/24 11/7/24 11/8/24 11/12/24	Learning & Memory Basal Ganglia & Motor Disorders	Do / Due (Everyone)	Collaborative Only	
11	Tues Thurs Fri Tues	11/5/24 11/7/24 11/8/24 11/12/24	Learning & Memory Basal Ganglia & Motor Disorders Basal Ganglia & Motor Disorders	Do / Due (Everyone)	Collaborative Only	
11	Tues Thurs Fri Tues Thurs	11/5/24 11/7/24 11/8/24 11/12/24 11/14/24 11/15/24	Learning & Memory Basal Ganglia & Motor Disorders Basal Ganglia & Motor Disorders	Do / Due (Everyone)	Collaborative Only	
11	Tues Thurs Fri Tues Thurs Fri Tues	11/5/24 11/7/24 11/8/24 11/12/24 11/14/24 11/15/24 11/19/24	Learning & Memory Basal Ganglia & Motor Disorders Basal Ganglia & Motor Disorders Stress & HPA Axis	Do / Due (Everyone)	Collaborative Only	
11	Tues Thurs Fri Tues Thurs Fri Tues	11/5/24 11/7/24 11/8/24 11/12/24 11/14/24 11/15/24 11/19/24	Learning & Memory Basal Ganglia & Motor Disorders Basal Ganglia & Motor Disorders Stress & HPA Axis Psychiatric Disorders- Overview Psychiatric Disorders- MDD	Do / Due (Everyone) Homework 3	Collaborative Only Complete with team	
11	Tues Thurs Fri Tues Thurs Fri Tues Thurs	11/5/24 11/7/24 11/8/24 11/12/24 11/14/24 11/15/24 11/19/24 11/21/24 11/22/24	Learning & Memory Basal Ganglia & Motor Disorders Basal Ganglia & Motor Disorders Stress & HPA Axis Psychiatric Disorders- Overview Psychiatric Disorders- MDD	Homework 3	Complete with team	
11	Tues Thurs Fri Tues Thurs Fri Tues Thurs Fri Tues Thurs	11/5/24 11/7/24 11/8/24 11/12/24 11/14/24 11/15/24 11/19/24 11/21/24 11/22/24 11/26/24	Learning & Memory Basal Ganglia & Motor Disorders Basal Ganglia & Motor Disorders Stress & HPA Axis Psychiatric Disorders- Overview Psychiatric Disorders- MDD	Homework 3	Complete with team	
11 12 13	Tues Thurs Fri Tues Thurs Fri Tues Thurs Fri Tues Thurs	11/5/24 11/7/24 11/8/24 11/12/24 11/14/24 11/15/24 11/19/24 11/21/24 11/22/24 11/26/24	Learning & Memory Basal Ganglia & Motor Disorders Basal Ganglia & Motor Disorders Stress & HPA Axis Psychiatric Disorders- Overview Psychiatric Disorders- MDD Q&A / Homework re-do (EC for ask NO CLASS- THANKSGIVING	Homework 3	Complete with team	
11 12 13	Tues Thurs Fri Tues Thurs Fri Tues Thurs Fri Tues Thurs Fri Tues Thurs	11/5/24 11/7/24 11/8/24 11/12/24 11/15/24 11/15/24 11/19/24 11/21/24 11/22/24 11/26/24 11/28/24	Learning & Memory Basal Ganglia & Motor Disorders Basal Ganglia & Motor Disorders Stress & HPA Axis Psychiatric Disorders- Overview Psychiatric Disorders- MDD Q&A / Homework re-do (EC for ask NO CLASS- THANKSGIVING	Homework 3	Complete with team	
11 12 13	Tues Thurs Fri Tues Thurs Fri Tues Thurs Fri Tues Thurs Fri Tues Thurs	11/5/24 11/7/24 11/8/24 11/12/24 11/15/24 11/15/24 11/21/24 11/22/24 11/26/24 11/28/24 11/29/24 12/3/24	Learning & Memory Basal Ganglia & Motor Disorders Basal Ganglia & Motor Disorders Stress & HPA Axis Psychiatric Disorders- Overview Psychiatric Disorders- MDD Q&A / Homework re-do (EC for ask NO CLASS- THANKSGIVING	Homework 3	Complete with team	

HOW AM I GRADED?

It depends... there are two "pathways" through this course. I recommend the collaborative pathway because research shows that active learning improves comprehension and retention of content. That said, I also understand that we have a wide variety of schedules and responsibilities and not everyone can commit to being fully prepared in advance of regular meeting times with a team. Both pathways follow the *Prepare / Practice / Review* cycle but the details differ.

		Percent of Total Grade	
CATEGORY	ITEM	Collaborative Pathway	Independent Pathway
Practice Quizzes	Quiz for no points	0.0%	0%
	Are you ready		
Surveys (individual; graded	Reflection Survey 1	2.5%	5%
based on completion). Level = Metacognitive	Reflection Survey 2	2.3%	370
9 - 1 - 1	Reflection Survey 3		
Collab Only Surveys (Team	Team Assignment		N/A
assignment and evaluation surveys individually; Team	Team Evaluation Survey	2.5%	
contract together)	Team Contract		
Homework (graded based on	Homework 1 (Individual)		30%
content; Collab path complete written homework 2-3 as a	Homework 2	30%	
team). You'll have the option to re-do one.	Homework 3	3070	
Contribution to Class and Team	Based on self/peer/statistical data	10%	N/A
Exams (Individual) level = apply, analyze, evaluate, create	2 midterm exams; 1 final exam; all are cumulative. If your final exam score is higher than test 1 or 2, the lowest midterm test score is dropped.	55%	65%
	TOTAL	100.0%	100%

THE COLLABORATIVE PATHWAY

Choose this pathway if you can attend most class sessions plus weekly meetings with a team for studying and completing homework assignments. Here's my recommended strategy for success with this pathway...

Prepare: Before Class

- 1. Read the learning objectives to get a sense of the topic
- 2. Skim the reading, make note of acronyms and vocabulary terms

Practice:

- 1. Attend class and actively participate
- 2. Weekly team meetings for studying
- 3. Use textbook, instructor, and teammates to address areas of confusion
- 4. Work on homework in and outside of class
- 5. Answer "topic specific learning objectives" as if they are essay questions and flesh out outlines

Review: Complete each module

- 1. Memorize vocab terms
- 2. Generate ~ 1 page "cheat sheet" of the weekly notes for easy reference
- 3. With your team, look for connections across modules and topics; create scaffolded notes to literally see these connections and cause / effect relationships.

THE INDEPENDENT PATHWAY

Choose this pathway if you cannot commit to attending weekly meetings with a team, if you cannot arrive prepared *or* do not want to complete assignments collaboratively. Here's my recommended strategy for success in this pathway.

Prepare: Before Class

- 1. Read the learning objectives to get a sense of the topic
- 2. Skim the reading, make note of acronyms and vocabulary terms

Practice:

- 1. Though attendance is not required, it is highly recommended. We may cover content in class that is not available in the textbook.
- 2. Use textbook, instructor, and teammates to address areas of confusion
- 3. Work on homework in and outside of class
- 4. Answer "topic specific learning objectives" as if they are essay questions and flesh out outlines

Review: Complete each module

- 1. Memorize vocab terms
- 2. Generate ~ 1 page "cheat sheet" of the weekly notes for easy reference
- 3. Look for connections across modules and topics; create scaffolded notes to literally see these connections and cause / effect relationships.

DESCRIPTION of GRADED ITEMS

SURVEYS

- 1. "Are you ready" survey: a syllabus quiz to make sure we're all on the same page and where you'll decide if you want to select the collaborative or independent pathway.
- 2. **Reflection Surveys:** you'll answer a few questions about how the class is going for you- what is working well? In what areas are you struggling?
- 3. The following are not applicable for those in the independent pathway:
 - a. **Team Assignment Survey:** for those in the collaborative pathway you'll indicate your time availability so I can put groups together based on schedules.
 - b. **Team Evaluation Survey:** for those in the collaborative pathway, this survey will be used as part of how the contribution grade is determined.
 - c. **Team Contract:** for those in the collaborative pathway, you'll generate a contract to set expectations that ensure team success.

HOMEWORK: Homework assignments are designed to help make connections across topics. The first homework assignment is individual because we won't have teams set up in time. The written portions of homework must be completed with your team for those in the collaborative pathway.

CONTRIBUTION (Collab Path Only): Students in the collaborative pathway are graded not only based on meeting all content-based learning objectives but also based on the *effort and energy* students put in to the course. To ensure equal participation within a team, teams will complete a contract at the start of the semester. Students will also receive a grade for their contribution to the team (based on self and peer evaluations as well as instructor observations and LMS statistics).

EXAMS: Exam questions will ask students to apply course content in new ways (think alien neurons and brains) and connect topics across multiple modules. **Exams are individual assignments** regardless of pathway.