About PSY 330

Office Hours: My availability varies week by week, please fill out this form to find a time that works for everyone!

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

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 one of the following sources but please See BB modules for specific reading assignments.

- INTRODUCTION TO NEUROSCIENCE: https://openbooks.lib.msu.edu/introneuroscience1/
- NEUROSCIENCE: Canadian 1st Edition http://neuroscience.openetext.utoronto.ca/

SCHEDULE & DUE DATES

Subject to change if needed during the semester

https://docs.google.com/spreadsheets/d/1AA0F73JoXNMZRyU1844zGzoNbVjPoZ--ltrzcOjj6vs/edit?usp=sharing

Weeks 1 and 2

Module / Folder	WEEK 1	(Recommended order of) ACTIVITIES	DUE 11:59pm (48hr grace period)	
Start Here; Extra Credit Opportunities	Monday	Review Bb site; read syllabus & identify any schedule conflicts		
		Select grading pathway		
		Skim: Resources for students, how to be successful. Read: The Own Voice Standard		
	Tuesday	If you've selected the collaborative pathway, review teamwork resources		
Neuron Structure and Function	Weds	Learning Objectives		
		Watch Lecture Videos & Do Reading	Recommended completion date for	
		Memorize vocab terms. Use office hours, discussion board, etc. to clear up areas of confusion.	"Are you Ready" quiz"	
	Thurs	Complete Practice Questions		
Start Here;	Friday		Are you ready Quiz (ALL).	
Assignments; Neuron Structure			Team Assignment Survey (Collab Path Only)	
& Function			Optional Extra Credit Pre-Test.	
Module / Folder	WEEK 2	Do	DUE	
Communication within a neuron	Monday	Learning Objectives		
		Lecture Videos & Reading		
		Memorize Vocab Terms		
	Tuesday	Address Areas of Confusion		
	Weds	Complete practice questions	Collab Path: Contact team, set up meeting, work on team contract.	
Review	Thurs	Review content; visit discussion board / office hours to resolve lingering confusions	Recommended completion date for "Meeting with Flandreau"	
Assignments	Friday		HOMEWORK 1	
, toolgilliloitto			Reflection Survey #1	

Weeks 3 and 4

Module / Folder	WEEK 3	Do	DUE	
Communication between neurons	Monday	Learning objectives; Lecture videos & required reading (particular attention to vocab terms and figures)	Collaborative Pathway: Meet with team to study	
	Tuesday	Look for patterns and exceptions to patterns; draw connections with other content. Work on memorizing vocab.		
Neuroanatomy	Weds	Learning objectives; lecture videos or required reading	Collaborative Pathway: Meet with team to study; Recommended completion date for team contract.	
	Thurs	Required reading or lecture videos; revisit learning objectives.		
Review &		Review Week 1 - 3 content (up to neuroanatomy)	HOMEWORK 2	
Assignments	Friday		Collaborative Pathway: Team Contract	
Module / Folder	WEEK 4	Do	DUE	
Neuroanatomy	Monday	Finish / review neuroanatomy content	Collaborative Pathway: Meet with team to study	
Sensory Systems- Vision	Tuesday	Learning objectives; lecture videos or reading		
	Weds	Finish lecture videos / reading; memorize vocab terms; resolve areas of confusion	Collaborative Pathway: Meet with team to study	
Review & Assignments	Thurs	Review week 1 - 4 content (up to visual system)		
Sensory Systems - Auditory	Friday	Learning objectives; lecture videos or reading	HOMEWORK 3: Reflection Survey #2	

Weeks 5, 6, and Exam

Module / Folder	WEEK 5	Do	DUE	
Sensory Systems - Auditory	Monday	Finish lecture videos / reading; memorize vocab terms; resolve areas of confusion	Collaborative Pathway: Meet with team to study	
Language and Aphasias	Tuesday	Learning objectives; lecture videos or reading		
	Weds	Lecture videos / reading; memorize vocab; resolve areas of confusion	Collaborative Pathway: Meet with team to study	
Review & Assignments	Thurs	Review week 1 - 5 content (up to Aphasias)	Last chance to sign up for required "meeting with Flandreau"	
Stress & HPA Axis	Friday	Learning objectives; lecture videos or reading	HOMEWORK 4	
Module / Folder	WEEK 6	Do	DUE	
Stress & HPA Axis	Monday	Reading / videos; memorize terms; address areas of confusion	Collaborative Pathway: Meet with team to study	
Psychiatric Disorders- Anxiety and Depression	Tuesday	Learning objectives; lecture videos or reading		
		Lecture videos / reading; memorize vocab; resolve areas of confusion		
Basal Ganglia & Motor Disorders	Weds	Learning objectives; lecture videos or reading	Collaborative Pathway: Meet with team to study	
	Thurs	Lecture videos / reading; memorize vocab; resolve areas of confusion		
Review	Friday	Review Weeks 1- 6 content	Collaborative Pathway: Team Assignment Survey	
			Reflection Survey 3 (All)	
			LIFT Survey (all; online anonymous)	
FINAL EXAM WEEK	Exam will become available at 12:00AM Monday and will close at 11:59pm Wednesday. There are no exceptions or extensions (for you to take the test or for me to submit grades to the University!)			

About the Instructor

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

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>

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 2, 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/16yhpycv5JeQW/bibliography/49569051/public/?sort=date&direction=ascending

Office Hours (aka 1:1 meeting with Flandreau) One office hours visit is required for the semester, either individually or with your collaborative team. Additional office hours are recommended and can also be individual or as a group for assistance with course content. I will be most useful in these meetings if students arrive with a specific agenda. 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. Any questions about grades should be addressed in an office hours meeting. Please complete this form to schedule a meeting.

UNIVERSITY & COURSE POLICIES

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

GVSU Expectations of Inclusion and Integrity

- 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. Instructors are required to report incidents of academic integrity violations. Most violations of academic integrity are not malicious but result from insufficient understanding of expectations. To meet integrity standards of GVSU, be sure that....
 - You know which resources you're allowed to use: Resources you can (and should!) use for assignments: Your teammates, classmates, instructor, and readings
 - You ALWAYS cite your sources: In-Text and end of text citations should be used when you've gained ideas, understanding, words, or definitions from a source

Own Voice Standard

- 1. This class requires integrating content across topics and demonstrating knowledge through application. *Everything* you submit must be in your <u>own voice</u>. Direct quotations and paraphrasing 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.
- 2. How to meet the "Own Voice" Standard:
 - a. 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.
 - b. 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 are using your own voice.
 - c. Read your answers aloud. Does it sound like something you would say? Do you understand every word you've written? If not, take a step back, revise, and ask questions.
 - d. Ask Questions: Are you unsure what a question is asking? Unclear about how to approach the topic? Use the discussion board. Is the discussion board not helping? Make an office hours appointment with Flandreau!

Missed Deadline Policy

Online 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. It's dangerously easy to fall behind in such a short term! If you're struggling to stay on top of content, please meet with me ASAP so we can come up with a strategy.

Resources for Students

- 1. Time: Spring / Summer Semester is only 6 weeks long but we still have 15-weeks worth of content! It will be difficult to succeed in this course with fewer than 10 hrs per week (as a bare minimum).
- 2. Technology: <u>Technology Requirements</u> and software through GVSU MS Office, Zoom, Panopto.
- **3.** Support: 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. I've curated resources and designed assessments that I believe will guide everyone toward that goal. One of the most important resources for this course is me!!
- **4.** 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/
- **5.** 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.
- **6.** Health, Safety, & Academic Success: 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.

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.

	ITEM	Percent of Total Grade	
CATEGORY		Collaborative Pathway	Independent Pathway
	Are you ready	5%	5%
Surveys (individual; graded	Meeting with Flandreau (1 per semester either individual or with your collaborative team)		
based on completion)	Reflection Survey 1		
	Reflection Survey 2		
	Reflection Survey 3		
Collab Only Surveys (Team	Team Assignment	5%	N/A
assignment and evaluation surveys individually; Team	Team Evaluation Survey		
contract together)	Team Contract		
	Homework 1 (Individual)	50%	60%
Homework (graded based on	Homework 2		
content; Collab path complete written homework 2-4 as a team)	Homework 3		
ŕ	Homework 4		
Contribution to Team	Based on self/peer/statistical data	10%	N/A
CUMULATIVE EXAM (Individual)	Part 1- up to two attempts; highest score retained; Part 2- own voice written answers	30%	35%
	TOTAL	100%	100%

THE COLLABORATIVE PATHWAY

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

Prepare: Start each module

1. Skim the learning objectives to get a sense of the topic

- 2. "Attend Lecture" this means watch the lecture videos posted to BB. Take notes as if these were F2F lectures. Identify vocab words and areas of confusion
- 3. Additional resources: use the reading, discussion board, and / or team to work to better understand the vocabulary and get answers to those areas of confusion

Practice: Meet with your team

- 1. Identify topics that still feel confusing or areas where you don't have enough information
- 2. Revisit course material (lecture videos, reading, discussion board, office hours, team) to fill in the gaps you've identified

Review: Complete each module

- 1. Work to memorize vocab terms and generate ~ 1 page "cheat sheet" for easy reference
- 2. Look for connections across modules and topics; create scaffolded notes to literally see these connections and cause / effect relationships.
- 3. Work collaboratively with your team to complete homework assignments.

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: Start each module

- 1. Skim the learning objectives to get a sense of the topic
- 2. "Attend Lecture" this means watch the lecture videos posted to BB. Take notes as if these were F2F lectures. Identify vocab words and areas of confusion
- 3. Additional resources: use the reading, discussion board, and / or team to work to better understand the vocabulary and get answers to those areas of confusion

Practice:

- 1. Answer "topic specific learning objectives" as if they are essay questions and flesh out outlines
- 2. Continue identifying areas of confusion and using additional resources (class meetings, discussion boards, and office hours!) to address questions

Review: Complete each module

- 1. Identify connections between the weekly module(s) and previous modules.
- 2. Once you feel comfortable with content, complete the homework assignment.

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 Survey (n = 3)**: every other week you'll answer a few questions about how the class is going for you- what is working well? In what areas are you struggling? These are particularly important in an asynchronous class where there are fewer opportunities to connect.
- 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.
- d. **Homework Process Statements:** collaborative teams will submit a process statement along with homework to provide transparency regarding contribution.

HOMEWORK

- Most homework assignments have two parts.
 - Part 1 is typically multiple choice and will have up to two attempts with the highest score retained. Bb will identify incorrect answers for part 1.
 - Part 2 is typically short or longer written answers, which must be in your own voice for a
 target audience of first year GVSU students, and must include relevant citations. I will
 provide feedback for the written answers briefly on each assignment and sometimes via
 an announcement to the whole class when relevant.
- The first homework assignment is individual because we won't have teams set up in time. The written portions of homework 2 4 must be completed with your team for those in the collaborative pathway. Teams have the option of completing the multiple choice portion together.
- There's an option to re-submit one written homework assignment for a replacement grade; deadline for re-do is Friday of week 6 at 11:59pm.

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 process statement for each assignment. The process statement will be written at the start of the semester and updated at the start of each week, and turned in with each homework assignment.
- Students will also receive a grade for their contribution to the team (based on self and peer evaluations)

EXAM

Exam questions will ask students to apply course content in new ways (think alien neurons and brains) and connect topics across multiple modules. **The exam is an individual assignment** regardless of pathway. Part 1 is automatically graded by Bb and can be done up to two times with the highest score retained. Part 2 is the written portion and requires *own voice / target audience* answers <u>with relevant citations</u>.