PSY 330 COURSE INFO

Class Meeting Times: 10am – 11:15am Tuesday / Thursday **Location**: ASH-1310

Final Exam: Thursday December 15, 10am – 11:50am

(May also have the option to take the test on Tuesday 12/13/22, location and time TBD)

Instructor: Dr. Elizabeth Flandreau (she/her)

Please sign up for an appointment to go over content Q&A, personal questions such as grades

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!

- Please **do** email me if:
 - o your question is urgent and hasn't been answered on the discussion board
 - o you need a 1:1 outside my availability per calendly,
 - you have a private matter that can't wait for a 1:1 meeting.
- I want to support all my students but I am not great at email and *very much* appreciate your help so I can keep my inbox from becoming a bottomless <u>pit of despair</u>:
 - Please ask questions in class, using discussion boards, and 1:1 meetings.
 - When <u>emailing</u>, please remind me who you are, who I am, and what I teach \bigcirc (aka please include your name, what course you're in, where relevant what group you're in, and be specific about your question / request / agenda).
 - I typically respond to emails within one business day; if I haven't responded within three days, **re-send** the original email with a quick "hey not sure if you saw this yet."

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 of cognition, memory, motivation, emotion, attention, and sensory processes. *In other words:* the biological underpinnings of psychology.

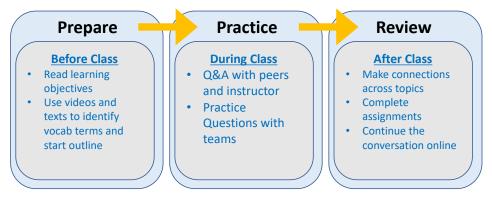
Content-Specific Learning Objectives: My goal is for each student to learn the structures and functions of neurons and neural systems, as well as skills, strategies, and ways of thinking about neuroscience.

- 1. <u>Identify the structure and function of the major parts of the nervous system</u> at a cellular and systems (functional neuroanatomy) level
- 2. Describe the process of action potentials
- 3. Describe the process of neurotransmission
- 4. <u>Identify the behavioral function of major brain chemical systems</u>; predict the effect of damage to these cells, pathways, or structures.
- 5. Describe the general principles of psychopharmacology; predict the effect of specific drugs on synaptic transmission and degenerative disorders.
- 6. <u>Discuss basic research in behavioral neuroscience</u>; critique scientific claims, identify limitations to current knowledge, integrate information from varying sources into a cohesive whole
- 7. <u>Relate biological processes to everyday behavior</u> including sensory systems and learning and memory.

Skill-Specific Learning Objectives: In addition to content, you will gain / improve employable skills.

- 1. <u>Time management</u>: Like most STEM courses, this one is relatively content-heavy. It will be important to organize your study time for efficiency.
- 2. <u>Reading for Content</u>: Learning to engage in meaningful, directed reading is a great skill for ANY career.
- **3.** Communication: Each individual is expected to communicate verbally in class and through written communication in online discussion boards and essay exams.
- 4. Critical Thinking: In this course you will be asked to look for patterns in the material, identify similarities and differences across topics, and link together diverse pieces of information into a cohesive scaffold.

Typical Weekly Routine: Students should arrive to class *familiar* with the material so that we can work towards fully understanding the content in class.



Required Resources

- 1. Prerequisite: PSY 101
- 2. Time: In addition to in-class time, please anticipate devoting \sim 6-9 hours per week outside of class.
- 3. Open Access Textbooks^{1, 2, 3}: Specific reading assignments will be posted to blackboard in the weekly folders as will any additional reading from other sources.
- 4. <u>Technology Requirements</u>
 - <u>MS Office</u>
 - <u>Zoom</u>
 - <u>Panopto</u>

¹Recommended but not required: Carlson Physiology of Behavior 12th edition Textbook ISBN:0134080912

² Please use course materials to complete course work. If you identify another resource that you find helpful, please verify its validity (for example by sharing it with the instructor.)

³ I am migrating away from expensive textbooks to 100% open access resources. Some materials still describe content from the Carlson textbook even though all topics are covered in the open access (aka free) resources.

UNIVERSITY & COURSE POLICIES

This course is subject to the GVSU policies listed at http://www.gvsu.edu/coursepolicies/

Expectations of Inclusion: The purpose of this course is to learn neuroscience. Please treat your classmates and instructors with respect in person, and online. Please review GVSU's policy on <u>Anti-Racism</u> and <u>Title IX</u>. If you have any concerns, please contact me or the GVSU division of inclusion and equity (<u>616)</u> 331-3296).

Expectations of Integrity: 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. GVSU Academic Misconduct Portal Please note that posting *or* accessing course content (e.g. questions / answers) on "study websites" violates integrity expectations for this course. Not meeting the expectations of integrity may lead to earning a "0" on an assignment, exam, or the course. Instructors are required to report incidents of academic integrity violations to the university.

How to meet the integrity standards for GVSU

- Make sure you know which resources you're allowed to use
 - Resources you can (and should!) use for weekly quizzes and assignments: Your teammates (weekly meetings and discussion boards), Your classmates (online discussion boards), Your textbooks (with proper in-text citations), Your instructor (class sessions, office hours, discussion board)
 - Resources you can (and should!) use for the exams: Your brain! Possibly your own personal notes⁴ written by you (see "own voice standard" for additional instructions).
- *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

• If you're not sure, ask! We share the same goal of student success. Let me know how I can help you.

⁴ In class exams may allow either a note-card or one-page "cheat sheet." Specifics vary by class section depending on student and instructor preferences.

Flandreau Own Voice Standard: This class requires integrating content across topics and demonstrating knowledge through application. You will be asked to "predict" an outcome or "explain" a process. Correct responses require using vocabulary flexibly and with meaning. To this end, *everything* you submit must be in your <u>own voice</u>. The "own voice" standard is a higher bar than simply 'did not plagiarize'; <u>direct quotations and paraphrasing are incompatible with this standard</u>. We will practice own voice writing in class and student will have an opportunity for a replacement assignment for a first own-voice violation. Additional submissions that do not meet this standard cannot be considered for credit.

How to meet the "Own Voice" Standard:

- 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.
- Avoid looking at notes while you craft your answers. Being able to speak from memory is a great way to demonstrate to yourself that you've mastered the content and are using your own voice.
- Read your answers aloud. Does it sound like something you would say? Do you understand every word you've written? If not, you likely haven't mastered the content and don't meet the standard.
- Google your answers: Does something come up that looks similar to what you (or a teammate) have written? If so, you likely haven't answered the question correctly and not met the standard.

• Ask Questions: Are you unsure what a question is asking? Unclear about how to approach the topic? Is the topic perplexing to you? Use the discussion board. Is the discussion board not helping? Make an office hours appointment with Flandreau!

Attendance & Contribution are expected and rewarded.

- <u>Please attend:</u> Class meetings are designed so that your learning is <u>an active process</u> to increase knowledge retention. We will often cover topics in class that are not on BB. Out of respect for your education, your peers, and instructor please arrive on time, and prepared to contribute and participate. *If you have a barrier that requires regularly arriving late, leaving early, or missing class, please let me know so we can work something out.*
- <u>Experience (and data) tell me that attending class is important for success</u>. You do not need to inform me of absences. Please get notes from a peer, and ensure that you are updated on any announcements or decisions made during class. If you are on a team, please inform your teammates if you are unable to attend.

Due Dates, Missed Tests, & Late Assignment Policy

Each assessment is a stepping-stone in building knowledge, skills, and abilities for this course. <u>Deadlines are essential to staying on track</u> so that each topic can build on the previous one and support the next topic.

- Please compare the course schedule to your schedule, identify any conflicts (e.g. if you have a sportsball event on the day of an exam). Set up an office hour meeting to make alternative arrangements.
- If you are unexpectedly unavailable the day of an exam, set up an office hour meeting to make alternative arrangements. Make up exams may be a different format (e.g. in person Q&A with instructor).
- Online assignments are due at 11:59pm on Fridays but have a <u>48hr grace period and will be</u> considered for full credit if submitted by 11:59pm Sundays.
- If have concern about meeting a deadline, <u>please submit assignments early</u>. Sometimes assignments can still be submitted after the grace period and I recommend doing all assignments to better understand course content, however, <u>assignments submitted after the grace period are not guaranteed feedback or a grade</u>.

HOW AM I GRADED?

How you personally are graded depends on which pathway you choose:

- 1. Option #1: Collaborative Pathway. Reasons why you might want to choose this option:
 - I (Flandreau) HIGHLY recommend the collaborative pathway because there's strong evidence supporting improved learning outcomes. If you plan a career in a neuroscience-related field (or taking PSY 435), this is the BEST way to develop a deep understanding of course content.
 - You expect to attend the vast majority of class sessions arriving on time and staying for the duration
 - You prefer to work with the same people all semester on in-class activities, want a built-in support system / study group for the semester with people you can count on.
 - You want your effort to count toward your grade and / or do not want tests to be weighted as heavily in the final grade

- 2. Option #2: Independent Pathway. Reasons why you might want to choose this option:
 - You have a schedule that makes it difficult to attend class or meet with a team due to lack of flexibility or changing routine each week.
 - You don't want to be graded on your effort and are okay with tests accounting for a larger portion of the total grade.

_	Collaborat	ive Pathway	Independent Pathway		
Assessment	Points (Each)	Points (Total)	Points (Each)	Points (Total)	
"Are you ready" Quiz	10	10	10	10	
Own Voice Practice Quiz	15	15	15	15	
Mini Quizzes Top 15 (collab) or 10 (ind) count toward grade; these are either at the start of class or the end of class; some are individual, some are with groups)	5	75	5	50	
Reflection Surveys (n = 5; graded based on completion)	5	25	5	25	
Review assignments ($n = 2$) (currently 3 on the schedule; complete as a team for collab pathway)	25	50	50	100	
Contribution to Team (determined by self, peer, and instructor evaluation)	15	30			
Team Contract	5	5	N/A	N/A	
On-time completion of team assignment survey	5	5			
On-time completion of team evaluation surveys	5 10				
Midterm Tests (n = 2)	75	150	75	150	
Summative (cumulative) Final Exam		75		100	
Total		450		450	

Grading Scale

Please take a moment to consider what each grade means

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А	Your work is exceptional. You thoughtfully and creatively demonstrate deep understanding of the key concepts and ideas, surpassing course expectations. You relate your learning to prior knowledge, explicitly recognized implications of these ideas/concepts and their application. Your work generates little critique and exceeds <u>ALL</u> criteria for assignments and the course.
A- / B+	Your work is very well done. You utilize feedback and demonstrate you are developing and deepening your understanding of key concepts. Your work generates few questions/critiques and meets all and exceeds <u>most</u> (A-) or some (B+) criteria for assignments and the course.
В	Your work meets all criteria for the assignments and course. There is evidence of a deepening understanding and an effort and commitment to thinking critically about the ideas, concepts, and topics as they might be applied in practice.
B-	Your work meets all criteria for the assessment and/or the course. You include nearly all necessary pieces/parts and adequately address each aspect of the expectations that have been conveyed to you. Your work demonstrates mastery in nearly all targeted areas of competency.
с	Your work includes evidence that feedback on prior assessments and experiences (i.e. discussions, tasks, etc.) in class have been thoughtfully applied. Some criteria are only partially addressed or has pieces missing, but your work is acceptable.

Description of Graded Items

- 1. <u>Are you ready quiz</u>: Basically a syllabus quiz. It's boring. It's important. Class doesn't really function if we don't all know the policies and expectations $\langle \underline{(\mathcal{Y})}_{/} \rangle$
- 2. <u>Own Voice & Citation Quiz</u>: A low-stakes way to practice the own-voice method and make sure we're on the same page leading up to larger assignments.
- 3. <u>Mini Quizzes (MQ)</u>: ensure that students PREPARE for class and arrive ready to PRACTICE. Low stakes, instant feedback. Hits the lowest two stages of <u>Bloom's Taxonomy</u> (Remember & Understand)
- 4. <u>Reflection Surveys</u>: An evidence-based strategy for students to think intentionally about their approach to the course and the best way for me to keep track of how things are going from your perspective.
- <u>Review Assignments</u>: An important stepping stone toward the exams. Submit one per team for collaborative pathway. Stages 1-4 of Bloom's Taxonomy (Remember, Understand, Apply & Analyze).
- 6. <u>Exams</u>: Questions designed for the top 4 levels of Bloom's (Apply, Analyze, Evaluate, & Create). All tests are cumulative because the material builds on itself.

Grade Cut Offs: A (93%), A- (90%), B+ (87%), B (83%), B- (80%), C+ (77%), C (73%), C- (70%), D+ (67%), D (60%). Your peers are your support system, not your competition. Grades are not curved or rounded.

RESOURCES

Flandreau: I strive to maximize inclusivity and opportunities for each student to reach their highest potential. My goal is for each student to masters all learning objectives for the semester. I've curated

resources and designed assessments to guide everyone toward that goal. **One of the most important resources for this course is me!!** In addition to watching my online lecture videos, participating in classes, responding to feedback, etc., please also visit me in office hours. These 1:1 meetings can be used to ask questions about course content, grades, academic and career choices. <u>https://calendly.com/flandree/flandreau-office-hours</u>

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. <u>https://www.gvsu.edu/library/km/</u>

Official Accommodations: Please work with DSR (<u>https://www.gvsu.edu/dsr/</u>) and communicate with me (preferably during the first week of the semester) to make sure your needs are met in this course. If you have a DSR form, please upload to the designated location on BB.

Health, Safety, & Academic Success

We all have different learning preferences and deal with different personal situations, some related to the COVID-19 pandemic and social injustice. Many of us are dealing with childcare, eldercare, or other requirements. No one can reach their greatest academic potential if basic needs are not being met. Please visit the following sites for information on resources related to access to food, housing, internet and software and mental health. <u>https://www.gysu.edu/clasadvising/student-support-services-228.htm</u>

If there are aspects of this course that prevent you from learning or exclude you, please let me know ASAP so that we can work together.

SCHEDULE

Details are subject to change based on our needs as a community; pay close attention to announcements on BB. Unless the instructor emails otherwise, if classes are canceled at the university, any exam will take place at the next class meeting.

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			Module	TOPIC	In-Class	Due Online
WEEK 1	Monday	29-Aug				
	Tuesday	30-Aug	0	Intro		
	Wednesday	31-Aug				
	Thursday	1-Sep	0	Bio Basics		
	Friday	2-Sep				Optional EC Pre-Test; Are you ready quiz
WEEK 2	Monday	5-Sep		Labor day		
	Tuesday	6-Sep	1	Neuroanatomy	Mini-quiz (MQ) 1	
	Wednesday	7-Sep				
	Thursday	8-Sep	2	Vm, Driving Forces	MQ2	
	Friday	9-Sep				Reflection Survey 1; Team Assignment Survey (Collab Path)
WEEK 3	Monday	12-Sep				
	Tuesday	13-Sep	2	AP; Myelin	MQ3	
	Wednesday	14-Sep				
	Thursday	15-Sep	3	Synapse Structure, NT Release	MQ4	
	Friday	16-Sep				Own Voice & Citation Practice Quiz
WEEK 4	Monday	19-Sep				
	Tuesday	20-Sep	3	Postsynaptic Receptors	MQ5	
	Wednesday	21-Sep				
	Thursday	22-Sep	4	Circuits and Reflexes	MQ6	
	Friday	23-Sep				Team Contract (Collab Path); Review Assignment #1
WEEK 5	Monday	26-Sep				
	Tuesday	27-Sep	0-4	Review		
	Wednesday	28-Sep				
	Thursday	29-Sep	0-4	Test 1		
	Friday	30-Sep				

			Module	TOPIC	In-Class	Due Online
WEEK 6	Monday	3-Oct				
	Tuesday	4-Oct	5	Psychopharmacology	MQ7	
	Wednesday	5-Oct				
	Thursday	6-Oct	5	Neurotransmitters	MQ8	
	Friday	7-Oct				Reflection Survey 2
WEEK 7	Monday	10-Oct				
	Tuesday	11-Oct	6	Retina	MQ9	
	Wednesday	12-Oct				
	Thursday	13-Oct	6	Vision in brain	MQ10	
	Friday	14-Oct				
WEEK 8	Monday	17-Oct				
	Tuesday	18-Oct	7	Somatosensation	MQ11	
	Wednesday	19-Oct				
	Thursday	20-Oct	7	Pain	MQ12	
	Friday	21-Oct				Review Assignment 2
WEEK 9	Monday	24-Oct		Fall break		
	Tuesday	25-Oct		Fall break		
	Wednesday	26-Oct				
	Thursday	27-Oct		Topic TBD		
	Friday	28-Oct				Reflection Survey 3; Team Eval Survey #1 (Collab Path)
WEEK 10	Monday	31-Oct				
	Tuesday	1-Nov	0-7	Review 2		
	Wednesday	2-Nov				
	Thursday	3-Nov	0-7	Test 2		
	Friday	4-Nov				

			Module	TOPIC	In-Class	Due Online
WEEK 11	Monday	7-Nov				
	Tuesday	8-Nov	8	Learning, Memory	MQ13	
	Wednesday	9-Nov				
	Thursday	10-Nov	8	Amnesia	MQ14	
	Friday	11-Nov				Reflection Survey 4
WEEK 12	Monday	14-Nov				
	Tuesday	15-Nov	9	Genetics	MQ15	
	Wednesday	16-Nov				
	Thursday	17-Nov	9	PD	MQ16	
	Friday	18-Nov				
WEEK 13	Monday	21-Nov				
	Tuesday	22-Nov	9	HD		
	Wednesday	23-Nov				
	Thursday	24-Nov				
	Friday	25-Nov				
WEEK 14	Monday	28-Nov				
	Tuesday	29-Nov	10	Stigma		
	Wednesday	30-Nov				
	Thursday	1-Dec	10	Schizophrenia Symptoms and Neuroanatomy	MQ17	
	Friday	2-Dec				Review Assignment 3
WEEK 15	Monday	5-Dec				
	Tuesday	6-Dec	10	Schizophrenia Treatment	MQ18	
	Wednesday	7-Dec				
	Thursday	8-Dec	0-10	Catch up / Review		
	Friday	9-Dec				Survey 5; Team Eval Survey #2 (Collab Path); Optional EC Post Test