# PSY 330: Foundations of Behavioral Neuroscience Course Syllabus: Fall Semester, 2021 3 Credit Sec 02, 2310 Au Sable Hall, Tuesday/Thursday 2:00pm-3:45pm Sec 04, Online Asynchronous Sec 06, 2310 Au Sable Hall, Tuesday/Thursday 1:00pm-2:15pm

Instructor: Dr. Kraig ShattuckTelephone: 616-331-8520Office: 2109 Au Sable HallE-mail: shattukr@gvsu.eduOffice Hours: In office: Tuesday/Thursday 3:45-4:45; Online: By appointment

## **Course Description:**

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

Prerequisites: PSY 101 - Introductory Psychology.

## Learning Objectives:

- 1. Identify the structure and function of the major parts of the nervous system.
- 2. Describe the process of action potentials
- 3. Describe the process of neurotransmission
- 4. Discuss basic research in behavioral neuroscience
- 5. Relate biological processes to everyday behavior

**Required Text:** Carlson, N. R., & Birkett, M. A. (2020). Foundations of Behavioral Neuroscience, eBook. Pearson Higher Ed.

Print ISBN: 9780134639796, 0134639790, eText ISBN: 9780134641362, 0134641361

# **Health and Wellness:**

I take care of someone who is immunocompromised and is high-risk. Please help me keep this person safe from not only COVID, but any contagious illness.

Please wear an appropriate mask, correctly, at all times during class.

Due to this, there will be no eating or drinking allowed in class.

If you do not feel well, or have been potentially exposed, please do not come to class! We can make alternate arrangements without penalty (all material can be made up online).

# Blackboard:

The syllabus, announcements, outside readings, assignments, and grades will be posted on Blackboard. If additional materials are placed elsewhere, e.g., electronic library reserves, links will be provided. I will attempt to make the lecture and other materials available prior to each class, although I cannot guarantee this.

## **Communication:**

- All communication should be done through email. My email is shattukr@gvsu.edu. I check
  my email at least twice a day so if I have not emailed within 24 hours, feel free to email
  again.
- I will communicate all class announcements, including cancellation of class, via Blackboard email. All institutional correspondence must be using your school email address in order to avoid your emails being flagged by the spam filter. Checking your email daily is expected as this is how I will communicate any course changes, including class cancellations.
- Assignment feedback will be given within 48 hours and exam feedback within 1 week.
- I will send an announcement with this syllabus prior to the first day of class. If it is the first day of class and you haven't received this email yet, it is your responsibility to figure out why and make sure that you receive future emailed announcements. It is strongly suggested that you keep a record or file of all emails sent by the instructor because you are responsible for all information sent in such emails.

# **Requirements of Students:**

**Exams**: There will be four exams. Make-up exams will need to be arranged prior to the scheduled exam time (If you cannot take the exam at the scheduled exam time contact me ahead of time). Exams will be graded on a curve. The exam will be available in-class and online, the day of the exam. If you take the exam in-class, you will need to bring a Scantron answer sheet and pencils to each exam; they are available at campus bookstores. If you take the exam online, you will need to have a webcam and use Respondus Lockdown Browser. Instructions on how to use Respondus will be provided.

**Discussion Board:** There will be eight discussion board assignments, relating to topics covered in the class. There will be a required discussion on a specified topic, for which you must make a discussion post and reply to a classmate's discussion post. You will not be able to see posts that other students make until after you have made your post. Your discussion post is due by 11:59pm Sunday that week and the reply to a classmate is due by 11:59pm Tuesday. Discussion posts should be 2-3 paragraphs (minimum of 4 sentences each) with at least one resource to support your post. APA formatting is required for all assignments in this class. The reply post needs to be a full paragraph (minimum of 4 sentences) and contribute to the discussion. Sentences that only say things such as "Good job on your post" "I agree with you," or contain several lines of quotes from their post will not be counted. You can say that you agree, or quote something that they said, but then you need to include 4 more sentences saying why. The exceptions to this are the Introduction Discussion, which is due Thursday (9/2) at 11:59PM and no reply is required, and no reply is also required for discussion 6 (McGurk Effect).

**Reflection Essay:** At the end of the semester, a 2-3 page reflection paper will be completed, reflecting on what you have learned. More information will be available later.

Grading:	Points
Exams (4 @ 100 pts ea.):	400
Discussion Board (8 @ 30 pts ea.)	240
Reflection Essay	60

Total

700

**Grading Scale:** A: 100.0-93.0; A-: 92.9-90.0; B+: 89.9-87.0; B: 86.9-83.0; B-: 82.9-80.0; C+: 79.9-77.0; C: 76.9-73.0; C-: 72.9-70.0; D+: 69.9-67.0; D: 66.9-63.0; D-: 62.9-60.0; F: Below 60.

#### **Attendance and Participation:**

Attendance at lectures (or watching prerecorded lectures) is required since not all material covered during lectures is in your text.

# This course is subject to the policies listed at <a href="http://www.gvsu.edu/coursepolicies">http://www.gvsu.edu/coursepolicies</a>

## Accommodations for Disabled Students:

If a student has a disability or believes that s/he may have a disability (including a physical, mental, or emotional disability) that may require an accommodation, students should contact Disability Support Resources (DSR), at their office (215 CON), by calling 616-331-2490, or email to <u>dsrgvsu@gvsu.edu</u>. I will meet all accommodations as dictated by DSR.

## Academic Integrity Policy

TLDR: You don't need to cheat to pass this class so don't cheat!

Any student suspected or found cheating--including plagiarism, and copying assignments from others, will receive an F in this course and be referred to the Dean of Students for possible further judiciary action. This includes falsifying data, copying work from sources without giving citation credit, and major ethical violations.

*Cheating* is defined as using unauthorized materials or receiving unauthorized assistance during an examination or other academic exercise. Some examples of cheating include: copying the work of another student during an examination or other academic exercise (including computer programming), or permitting another student to copy one's work; taking an examination for another student or allowing another student to take one's examination; possessing unauthorized notes, study sheets, examinations, or other materials during an examination or other academic exercise; collaborating with another student during an academic exercise without the instructor's consent; and/or falsifying examination results.

*Plagiarism* involves intentionally or unintentionally presenting another person's expressions –ideas, opinions, illustrations, data, style–as one's own expression. Examples of plagiarism include: failing to use quotation marks when directly quoting from a source; failing to document distinctive ideas from a source; fabricating or inventing sources; and copying information from computer-based sources, e.g.., the Internet.

Unauthorized possession or disposition of academic materials may include: purchasing or selling examinations, papers, reports or other academic work; taking another student's academic work without permission; possessing examinations, papers, reports, or other assignments not released by an instructor; and/or submitting the same paper for multiple classes without advance instructor authorization and approval.

*Undermining* the educational process occurs whenever one attempts to prevent another's learning or subverts the recognized means by which learning occurs. Some examples include: a student

signing in or indicating a student is in attendance when they are not or asking another individual to sign in or impersonate the student in any way.

# **Preparing for Exams:**

1. Act as if you must prepare a lecture on each topic, explain the material to others, and answer any questions they may have.

2. Do not rely on "cramming". Preparing for an exam involves studying course material during the weeks before the exam on a continuous basis.

3. Study the materials (e.g., textbook chapters) corresponding to topics that are to be covered during the upcoming class session *before* coming to class. Doing so will make note-taking much easier.

4. Studying is more than just reading. Studying involves processing information at a deep level; it involves both understanding and memorization. The difficult part about deep processing is that it is time consuming; it requires you to stop reading and think for a while, before reading any more material.

5. Take notes from chapters as you read *and think* about the material. As part of this, (a) stop after each paragraph or section and test yourself by seeing if you can state or summarize the key information and (b) write key terms, their definitions, and their meaning/significance/importance on a separate sheet of paper or flash cards, memorize the definitions, and understand their meaning. This will slow down the pace of your reading; but, it can also increase your comprehension and your ability to remember the material.

6. Attend class sessions and take good notes. *Taking good notes does not mean writing down every word that is presented.* If you spend too much time writing, you will spend too little time listening and understanding.

7. Review your notes, fill in any missing information, and clarify any ambiguous information as soon as possible after class.

8. Study in a distraction-free (or at least distraction-reduced) environment. Most importantly, do not multi-task while studying.

9. Get good sleep. Studies show that getting 8 hours of restful sleep a night increases memory for materials learned throughout the previous day.

Wee	k Date Cl	napte	er Topic(s)	Discussion
1	Tue, 8/31		Syllabus and Intro	1: Introduction
	Th, 9/2	1	Origins of Behavioral Neuroscience	
2	Tue, 9/7	2	Structure and Functions of Cells of the	2: Neurotransmitters
			Nervous System	
	Th, 9/9		Structure and Functions of Cells of the	
			Nervous System Cont.	
3	Tue <i>,</i> 9/14	3	Structure of the Nervous System	
	Th, 9/16		Structure of the Nervous System Cont.	
4	Tue <i>,</i> 9/21	4	Psychopharmacology	
	Th, 9/23		Exam 1	
5	Tue <i>,</i> 9/28	6	Vision	3: Visual Perception
	Th, 9/30		Vision Cont.	
6	Tue, 10/5	7	Audition, the Body Senses, and the Chemical	4: McGurk Effect
			Senses	
	Th, 10/7		Audition, the Body Senses, and the Chemical	
			Senses Cont.	
7	Tue, 10/12	9	Sleep and Biological Rhythms	
	Th, 10/14		Exam 2	
8	Tue, 10/19		Evolutionary Psychology	
	Th, 10/21		Evolutionary Psychology Cont.	
9	Tue, 10/26	10	Sexual and Reproductive Behaviors	
	Th, 10/28		Sexual and Reproductive Behaviors Cont.	
10	Tue, 11/2		VOTE: No Class	5: Aggression
	Th, 11/4	11	Emotion	
11	Tue, 11/9		Emotion Cont.	6: Memory
	Th, 11/11	13	Learning and Memory	
12	Tue, 11/16		Learning and Memory Cont.	
	Th, 11/18		Exam 3	
13	Tue, 11/23		Thanksgiving Break: No Class	
	Th, 11/25		Thanksgiving Break: No Class	
14	Tue, 11/30	15	Neurological Disorders	7: Neurocognitive Disorders
	Th <i>,</i> 12/2	16	Schizophrenia, Affective Disorders, and	
			anxiety disorders	
15	Tue, 12/7	17	Neurodevelopmental Disorders, Stress,	8: Developmental
			Posttraumatic Stress Disorder, and Substance	Neurocognitive Disorders
			Abuse Disorders	
	Th, 12/9		Other Disorders Cont.	
16			Exam 4	

**Class Schedule** 

Note: This syllabus is subject to change at the discretion of the instructor. Changes will be announced in class and/or posted on Blackboard; you are responsible for staying informed about changes or announcements.