

Neuroscience Section 02 PSYC 129

Spring 2023 3 Unit(s) 01/25/2023 to 05/15/2023 Modified 01/25/2023

Course Description and Requisites

Principles of brain organization and function underlying behavior. Topics include neuroanatomy and physiology of language, vision, sexual behavior, memory and abnormal behavior.

Prerequisite: Either PSYC 030 and 3 units of biology, or 9 units of biology.

Notes: Not acceptable as an elective in the Biology major.

Letter Graded

* Classroom Protocols

To succeed in this course, attendance is critical. You should come prepared for class discussions with a completion of course readings. Students are responsible for keeping current on changes that may occur on the tentative schedule of events in the syllabus. Students are expected to maintain a level of professional and courteous behavior at all times.

Cell phones and other electronic devices

You are to turn off cell phones and other electronic devices before the beginning of class.

Communication with instructor

Use email, office hours, or class time. I will respond to emails M-F 9:00 – 5:00. Please allow 1-2 business days for a response, and be certain to be specific about the topic. For example, the subject line should include the course (129) and brief topic (e.g., appointment). Please note, email is not a mechanism to get extensive help with course content or with papers. Please come to my office hours for these and other issues that require more discussion. Also note that lecture notes (or a lecture recap) will not be emailed to students. When a lecture is missed, it is your responsibility to get notes from a classmate.

Consent for Recording of Class and Public Sharing of Instructor Material

University Policy s12-7, http://www.sisu.edu/senate/docs/S12-7.pdf, requires students to obtain instructor's permission to record the course.

- "Common courtesy and professional behavior dictates that you notify someone when you are recording him/her. You must obtain the instructor's permission to make audio or video recordings in this class. This permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material."
- If you would like to record course lectures, please obtain permission from your instructor in writing (via email is ok) or orally and indicate whether you will record for the whole semester or on a class by class basis.
- "Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor-generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent".

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the <u>current academic calendar</u> web page located at http://www.sjsu.edu/academic_programs/calendars/academic_calendar/. The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the Advising Hub at http://www.sjsu.edu/advising/.

■ Program Information

Program learning outcomes (PLOs) are skills and knowledge that students will have achieved upon completion of the Psychology BA degree. Each course in our curriculum contributes to one or more of these PLOs. The PLOs for the Psychology BA degree are:

- 1. Knowledge Base of Psychology. Students will be able to demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- 2. Research Methods in Psychology. Students will be able to design, implement, and communicate basic research methods in psychology, including research design, data analysis, and interpretations.
- 3. Critical Thinking Skills. Students will be able to use critical and creative thinking, skeptical inquiry, and a scientific approach to address issues related to behavior and mental processes.
- 4. Applications of Psychology. Students will be able to apply psychological principles to individual, interpersonal, group, and societal issues. Values in Psychology. Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.

O Course Goals

Course Learning Outcomes (CLOs)

Upon successful completion of this course, Psych/Bio 129 students will be able to:

CLO1 – Students will be able to –identify, describe, and communicate the major concepts related to basic neuroanatomy, neurophysiology and psychopharmacology. Assessment for this will be in quiz 1, midterm I, and in parts of quiz 2 and midterm II.

CLO2 – Students will be able to –describe, and communicate the major transduction mechanisms, neuroanatomical pathways and theoretical perspectives associated with vision and nonvisual sensory systems, motivational systems and learning processes. Assessment for this CLO will be conducted in quizzes 2 and 3, and midterms I and II.

CLO3 – Students will be able to –identify, describe, and communicate experimental approaches and associated empirical findings for various methodological approaches in neuroscience. Assessment for this CLO will be conducted primarily in Midterm I, but also in quizzes 1 - 3, and midterms II and III.

CLO4 – Students will be able to – think critically and creatively about neuroscience approaches to address issues related to behavioral and mental health processes. This CLO will be assessed in essay-type questions on primarily on the final exam.

CLO5 – Students will be able to – apply neuroscience principles to individual, interpersonal and group behavioral and mental health issues. This will be assessed on the final exam.

Course Materials

Additional Reading and Resources: Handouts will be provided to supplement reading. Check the website or Canvas when directed to do so.

Writing Assistance: http://psychology.about.com/science/psychology/msub_writing.htm

Neuroscience: Exploring the Brain

Author: Bear, M. F., Connors, B. W., and Paradiso, M. A. (2016).

Publisher: Philadelphia, PA: Wolters Kluver

Edition: 4th ed.

E Course Requirements and Assignments

The requirements for this class include 3 quizzes, 4 examinations (3 midterms and a final exam), a paper topic (3%) and 1 research paper (12%). Each quiz is worth approximately 8% of your grade. The midterms and the paper each count 15% toward your final grade. The final exam will be worth a total of 15%.

Quiz format is objective (i.e., multiple choice, true/false, fill-in, identify, and match), and short answer. The objective portion will be provided on Canvas. Examination format is objective and essay. The final exam is scheduled for Thursday 5/18 @ 9:45 AM.

Literature review research papers will be due on the last week of instruction (5/12). They must be at least 5 pages of text (excluding summary, references and cover page) and must be typed (double spaced) and in APA format. This assignment is designed to provide you with an opportunity to explore a particular topic of interest and to demonstrate what you've learned about neuroscience. You may research a particular topic, theory, or author. These are merely intended as examples of what is possible, and all topics must be preapproved by the professor. The paper topic assignment (due 3/16) is a one-page (maximum) description of your literature review research paper. This is to be double spaced with at least one reference (APA format). More will be said about these assignments in class.

Grading Information

Assignment Quizzes (3)	Approximate percent 8% each	Points 25 each (75 total)
Midterms (3)	15% each	45 each (135 total)
Paper (1)	12%	35
Paper Topic	3%	10
Final Exam	15%	45
TOTAL	100%	300

Grading Scale (300 points)

Breakdown

		Grading Scale (S00 points)
Total Points	Percentage	Grade
269 – 300	90 – 100	A- to A+
239 – 268	80 – 89	B- to B+
209 – 238	70 – 79	C- to C+
180 – 208	60 – 69	D- to D+
179	less than 50	F

1 University Policies

Per <u>University Policy S16-9 (http://www.sjsu.edu/senate/docs/S16-9.pdf)</u>, relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on <u>Syllabus Information web page</u> (https://www.sjsu.edu/curriculum/courses/syllabus-info.php). (https://www.sjsu.edu/curriculum/courses/syllabus-info.php). (https://www.sjsu.edu/curriculum/courses/syllabus-info.php). Make sure to visit this page to review and be aware of these university policies and resources.