

San José State University Department of Psychology PSYC 30-01, Psychobiology (40250), Fall 2022

| Instructor: | Jill Citron, PhD |
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| Email: | jill.citron@sjsu.edu |
| Phone Number: | (408) 780-8838 – Messages Only |
| Office Hours: | Monday & Wednesday, $12:30 \text{ pm} - 1:20 \text{ pm}$, and by appointment. |
| Office Location: | DMH 352 & Zoom Room https://sjsu.zoom.us/j/96512319685 |
| Class Days/Time: | Monday & Wednesday, 1:00 pm – 2:45 pm |
| Classroom Location: | DMH 356 |
| Prerequisites: | Either: Bio 021 or Bio 065 You must <u>complete</u> the prerequisites classes before taking this course. |

CANVAS and MYSJSU Messaging

Copies of some course materials such as the syllabus, major assignment handouts, etc. may be found on Canvas. Messages to the class may be sent through Canvas or MYSJSU.

Course Description

Biological Psychology is a major subdivision of psychology, the systematic study of behavior and mental processes. Biopsychology tries to understand the biological basis for brain and behavior. This discipline involves examining many aspects of human functioning, through the mechanisms of evolution, genetic, neural and hormonal influences on normal and abnormal behavior. The goal of this class is to pursue a greater understanding of brain and behavior from the smallest unit of the human nervous system, brain structures and interconnections with the nervous, endocrine, and immune systems.

Communication with Instructor

Use email, office hours, or class time to ask questions. I respond to email M-F 9:00-5:00. Please allow 1-2 days for a response. When emailing, include a relevant title and our course number (30). If you have extensive questions about an assignment or class work, please come to office hours, or contact me to set up a Zoom appointment.

Course Goals and Learning Outcomes (CLO)

PSYC 30 Introduction to Psychobiology explores the biological basis of cognition and behavior. This course examines the structural and functional components of the nervous systems, from the cellular level to the system level, and will consider how information from the internal and external environment can direct and influence adaptive behavior.

<u>Course Learning Outcomes (CLOs)</u> Upon successful completion of this course, Psych 30 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 Hypothes.is* #1, *Annotated Bibliography* #,1 and Exam 1.

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 Exam2, Class Activity, and Hypothes.is assignments.*

CLO3 – *Students will be able to* –identify, describe, and communicate experimental approaches and associated empirical findings for various methodological approaches in biopsychology. *Assessment for this CLO will be conducted primarily in Exam 1 and 2, and Hypothesis assignments.*

CLO4 – *Students will be able to* – think critically and creatively about biopsychological approaches to address issues related to behavioral and mental health processes. *This CLO will be assessed in annotated bibliography and Final.*

CLO5 – *Students will be able to* – apply biopsychological principles to individual, interpersonal and group behavioral and mental health issues. *This will be assessed by case study participation*

Program Learning Outcomes (PLO)

Upon successful completion of the psychology major requirements...

PLO1 – Knowledge Base of Psychology – Students will be able to identify, describe, and communicate the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

PLO2 – 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.

PLO3 – Critical Thinking Skills in Psychology – 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.

PLO4 – Application of Psychology – Students will be able to apply psychological principles to individual, interpersonal, group, and societal issues.

PLO5 – Values in Psychology – Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.

Goals for this course fall into three categories. Learning outcomes for the first part of the course are a general understanding of the philosophical issues driving much of contemporary neuroscience research, an understanding of mechanisms during brain development, and students are expected to develop a firm hold on

biological foundational knowledge as it relates to the central nervous systems. The second category will provide students with a detailed understanding of the sensory systems. The final section of the course, students will gain an understanding of how neural systems contribute to various behaviors ranging from motivation to learning.

It is strongly recommended that students use the Chrome Web Browser when working in Canvas. Using Chrome will decrease the number of glitches and errors you experience, as Canvas was developed using the Chrome.

In addition, update your Canvas setting to receive messages from this course, as announcements are sent out on a regular basis.

Note: clearing your cache may help if you have trouble logging into the site.

Accessing Course Canvas site

To access the Canvas site go to http://www.sjsu.edu/at/ec/canvas/ and click on "Log in to Canvas"

Username = SJSU 9-digit ID

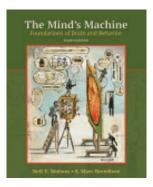
Password = your current SJSUOne password

For additional information or help with logging in:

Canvas Student Tutorial: http://www.sjsu.edu/at/ec/canvas/

Required Textbook

Watson, N.V and Breedlove, S.M. (2020). Minds Machine (4th edition). Oxford University Press.ISBN: 1605359734,9781605359731Biopsychology Newslink: https://biopsychology.com/news/index.php?book=MM



ISBN-13: 978-0197542811. ISBN-10: 0197542816. There are other ways of accessing the textbook, looseleaf, ebook, rental, etc. If you are having a difficult time finding an affordable option, access the 3rd edition We will be relying on the textbook to provide an overview of each topic (lots of reading), so I encourage you to choose the format that is best for you. I will be teaching from the 4th edition, so if you are using the 3rd edition, you will need to connect with class members for questions about page numbers. I will focus on chapter content.

Library Liaison

The SJSU library has a librarian who specializes in psychology (and other social sciences), and this librarian can serve as an extremely valuable resource for helping you to develop research ideas and locating appropriate research materials. The library also has an abundance of resources for doing psychology research: Christa Bailey, 408-808-2422, <u>christa.bailey@sjsu.edu</u>, http://libguides.sjsu.edu/psychology

Classroom Protocol

Students are expected to always maintain a level of professional and courteous behavior. You are required to put your cell phone and other distractions away before the beginning of class. I expect you to be respectful of your fellow classmates and to receive the same respect in return. This includes introducing distractions and unrelated comments during class. Students not abiding by these policies will be asked to leave the class.

*During the creation of this syllabus, we are required to wear approved face masks in class to prevent the spread of Covid-19 and its variants. We may not like it, but we need to do it anyway. Please wash your hands throughout the day and use hand sanitizer frequently. We are all in this together and need to look out for one another. Should policy change at the university level, we will discuss how best to institute the changes in our class.

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, <u>https://catalog.sjsu.edu/</u>, policy section. The Late Drop Policy is available at <u>https://www.sjsu.edu/aars/policies/latedrops/policy/</u>. Please be aware that there are changes due to COVID-19 SIP. Information about the latest changes and new is available at the Advising Hub at <u>https://www.sjsu.edu/advising/</u>

Attendance

Students are expected to attend all meetings for the courses in which they are enrolled as they are responsible for material discussed therein, and active participation is frequently essential to ensure maximum benefit to all class members.

According to University Policy F15-12, "Students are expected to attend all meetings for the courses in which they are enrolled as they are responsible for material discussed therein and active participation is frequently essential to ensure maximum benefit to all class members. In some cases, attendance is fundamental to course objectives; for example, students may be required to interact with others in the class. Attendance is the responsibility of the student. Participation may be used as a criterion for grading when the parameters and their evaluation are clearly defined in the course syllabus and the percentage of the overall grade is stated."

Assignments and Grading Policy

During this course, you will be required to participate in class and to complete various assignments, two Infographic exercises, three examinations (two tests and a final exam), Hypothes.is assignments, classroom activities, and presentation on hallmark research studies that changed the course of biopsychology. SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

Anticipate that your grades in Canvas will continue to change throughout the semester. Do not contact me at the end of the semester asking if I will round up your grade. I want all of my students to succeed and will always round grades up (not down) when it is possible.

Definition of a Credit Hour

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course. As an example, the expectation of work for a 3-credit course is 150 minutes of direct faculty instruction and six-hours of out-of-class student work each week. Please review the following sources and policies, as well:

• University Syllabus Policy S16-9 at http://www.sjsu.edu/senate/docs/S16-9.pdf PSYC 30-01, Psychobiology, Fall 2022 • Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/

Make-up Exams and Late Assignments

There will be <u>no</u> late make-up exams or late work accepted (except for a documented medical illness or prior approval). Please check your schedule to ensure that you have no conflicts with due dates. Again, no extensions for assignment will be given except in cases documented emergencies or serious illness.

Academic integrity

Academic integrity is essential to the mission of San Jose State University. As such, students are expected to produce their own work (except when collaboration is expressly permitted by the course instructor) without the use of any outside resources. Students are not permitted to use old tests, quizzes when preparing for exams, nor may they consult with students who have already taken the exam. When practiced, academic integrity ensures that all students are fairly graded. Violations to the Academic Integrity Policy undermine the educational process and will not be tolerated. It also demonstrates a lack of respect for oneself, fellow students, the course instructor, and can ruin the university's reputation and the value of the degrees it offers. The Student Conduct and Ethical Development is available at https://www.sjsu.edu/studentconduct/. We will be using Turn-It-In to ensure academic integrity of your writing.

GRADING INFORMATION AND MAJOR ASSIGNMENTS:

Your final grade will be based on the number of points that you earn during the semester. The following table provides a breakdown of the points that you can earn during the semester.

| Assignment | How Many? | Points Per Assignment | Total Points | ^{Approximate} % of Final Grade |
|----------------------|-----------|-----------------------|--------------|--|
| Exams | 3 | 40 | 120 | 44% |
| Hypothes.is | 2 | 15 | 30 | 10% |
| Class Activities | 3 | 10 | 30 | 10% |
| Infographic | 2 | 25 | 50 | 18% |
| Article Presentation | 1 | 40 | 40 | 16% |
| Name Coach | 1 | 5 | 5 | 2% |
| Total: | | | 275 | 100% |

| Grading Scale: | Percent | Grade |
|-----------------------|-------------|-------|
| <u> </u> | 100 - 94 | А |
| | 93-90 | A- |
| | 89 - 87 | B+ |
| | 86-84 | В |
| | 83-80 | В- |
| | 79 - 77 | C+ |
| | 76-74 | С |
| | 73-70 | C- |
| | 69-67 | D+ |
| | 66 - 64 | D |
| | 63 -60 | D- |
| | 59 or below | F |

University Policies: Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/.

Student Resources

Student Computer Resources -

Computer labs and other technological resources for students can be found in various places on campus:

- For information regarding the loan of laptops, tablets, and other computer materials; https://library.sjsu.edu/student-computing-services/student-computing-services
- For IT Support visit https://www.sjsu.edu/it/support/service-desk/index.php
- For a list of software available to all SJSU students visit <u>https://library.sjsu.edu/student-computing-</u>services/software-available

ACCESS Success Center

The Academic Counseling Center for Excellence in Social Sciences (ACCESS) Success Center "provides general education advising for undergraduate students majoring or intending to major in any of the departments in The College of Social Sciences." Visit their webpage for more information and to schedule an online appointment, <u>https://www.sjsu.edu/education/studentsuccesscenter/advising-and-tutoring.php</u>.

Accessible Education Center (AEC)

Ability Redefined - Please reach out to me as soon as possible in the beginning of the semester, for any support. "If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with AEC to establish a record of their disability. "<u>Academic Senate Policy</u> **F06-2 [pdf]**

SJSU Peer Connections

Peer Connections website "offers free mentoring, tutoring, and supplemental instruction services for students at SJSU. Peer Educators are students just like you; they understand the triumphs and challenges of being a student at San José State University." If you have questions about services, contact the Peer Connections at 408-924-2587 or email at peerconnections@sjsu.edu, or visit their webpage for more information, https://peerconnections.sjsu.edu/programs/tutoring/index.html

SJSU Writing Center– Check for different ways to access these services during the COVID-19 SIP. The SJSU Writing Center "offers a variety of resources to help students become better writers, and all of our services are free for SJSU students." If you have questions about services, call the Writing Center at 408.924.2308 or email us at <u>writingcenter@sjsu.edu</u>, or visit their webpage to make an online appointment <u>https://www.sjsu.edu/writingcenter/</u>

SJSU Counseling and Psychological Services (CAPS)

SJSU Counseling and Psychological Services invites "all students to come into Counseling and Psychological Services, located at the Student Wellness Center, room 300B, for any support. *If you have questions about services, contact CAPS at (408) 924-5910 or email at <u>counseling.services@sjsu.edu</u> or visit their webpage, https://www.sjsu.edu/counseling/*

Major Assignments

Below is a tentative list of important course events. Instructions for each assignment is available on Canvas.

Infographic #1 Submission Due: Monday, September 19th

Hypothes.is #1 Due: Monday, September 26th – Assignment on Canvas

<u>Test 1</u> Date: Monday, October 3rd Chapters: Chapters 1-3

Infographic #2 Submission Due: Monday, October 24th

<u>Hypothes.is #2</u> Due: Monday, October 31st – Assignment on Canvas

Test 2

Date: Wednesday, November 2nd Chapters: Chapters 5-7

Hallmark Studies Presentations

Date: Monday, November 28th, Wednesday, November 30th, and Monday December 5th

<u>Final Exam</u>

Date: Tuesday, 12/13, 12:15 pm – 2:30 pm

COURSE SCHEDULE Note: This schedule is subject to modification (with fair warning) as the instructor deems necessary.

| Week | Date | Topics | Reading | Assignment |
|-------|--------------------|--|--------------------------|--|
| 1 | M-8/22 | Course Introduction Review of Syllabus Course Requirements Study Skills Review of Covid-19 Safety Protocol | | Due: Set up Name Coach Get your textbook if you haven't already! |
| | W-8/24 | Structure and Function: Neuroanatomy and Research Methods | Chapter 1 | |
| 2 | M-8/29 W-8/31 | Structure and Function: Neuroanatomy and Research Methods | | |
| 3 | M-9/5 W-9/7 | Veteran's Day – No Class Neurophysiology: The Generation, Transmission, and Integration of Neural Signals | Chapter 2 | |
| 4 | M-9/12 W-9/14 | Neurophysiology: The Generation, Transmission, and Integration of Neural Signals | Chapter 2 | |
| 5 | M-9/19 W-9/21 | The Chemistry of Behavior: Neurotransmitters and Neuropharmacology | Chapter 3 | Infographic #1 Due |
| 6 | M-9/26 W-9/28 | The Chemistry of Behavior: Neurotransmitters and Neuropharmacology | Chapter 3 | Hypothes.is #1 Due |
| 7 | M-10/03 W-10/05 | Exam 1 No Class | | |
| 8 | M-10/10 W-10/12 | The Sensorimotor System | Chapter 5 | |
| 9 | M-10/17 W-10/19 | Hearing, Balance, Taste, and Smell | Chapter 6 | |
| 10 | M-10/24 W-10/26 | Vision: From Eye to Brain | Chapter 7 | Infographic #2 Due |
| 11 | M-10/31 W-11/2 | Zombie Science Exam 2 | | Hypothes.is #2 Due |
| 12 | M- 11/7 | Hormones and Sex | Chapter 8 | |
| | W- 11/9 | Homeostasis: Active Regulation of the Internal Environment | Chapter 9 | |
| 13 | M-11/14 | Biological Rhythms and Sleep | Chapter 10 | |
| | W-11/16 | Emotions, Aggression, and Stress | Chapter 11 | |
| 14 | M-11/21 | Psychopathology Memory and Learning | Chapter 12 Chapter 13 | |
| | W-11/23 | No Class- Thanksgiving | | |
| 15 | M- 11/28 | Hallmark Studies Presentations | | |
| 16 | W- 11/30 M-12/5 | Hallmark Studies Presentations Hallmark Studies Presentations | | Hypothes.is #3 Due |
| | | | | |
| Final | T 12/13 | Final Exam - 12:15 pm - 2:30 pm | | In Class |