

San José State University

Department of Psychology

PSYC 155-03, Human Learning, Fall 2022

BASIC COURSE INFORMATION

| | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Instructor | Corey Fernandez, PhD |
| Office location | Dudley Moorhead Hall (DMH) 318 |
| Email | corey.fernandez@sjsu.edu |
| Office hours | <ul style="list-style-type: none">• Mon 11:00am-12:00pm• If you can't make my usual office hours, book a virtual appointment here• Zoom link for virtual meetings here |
| Class days/time | <ul style="list-style-type: none">• Mon/Weds, 9:00-10:15am• Dudley Moorhead Hall (DMH) 231 |
| Prerequisites | PSYC 1 |

ACKNOWLEDGING THE PANDEMIC

I would like to start by acknowledging that this pandemic has been and will continue to be challenging this fall, particularly with uncertainties regarding the new variants. I am sympathetic to your situation, and I pledge to work with you to understand the unique challenges you're facing, to connect you to relevant resources, and to find a path forward so that you can successfully engage with this course. I know it can be hard to speak up when you're struggling, but the sooner you reach out and let me know about any obstacles you're facing, the sooner I can help develop flexible solutions.

Additionally, I encourage you to read SJSU's [Health Advisories](#) site to keep up with the latest messages and policies regarding being present on campus. Importantly, masks must be worn at all times. You are welcome to lower your mask to briefly sip a drink, but I ask that you refrain from eating during class, given that this would involve significant time spent without your mask on.

COURSE DESCRIPTION

The goal of this course is to help you build an appreciation for the central role that learning and memory plays in our lives. None of us could have a conversation, ride a bike, sing lyrics to a song, recognize our family, or even have a sense of our own identity if it were not for the ability to learn and to remember the past. As you'll find, the function of memory is never as obvious and astonishing as when it fails us. In this course, we will survey the most influential theories and findings in this important and extensive area of research. Basic research and theory will be discussed, as well as a variety of fascinating topics including training pets,

amnesia, the relationship between sleep and memory, false memories, the accuracy of eye-witness memory, and Alzheimer's disease.

From the course catalog: "Memory, forgetting, concept formation, language learning, reinforcement and related topics. Traditional learning concepts, theories and findings with reference to contemporary classroom management, behavior modification and other applications."

COURSE FORMAT

We will be meeting in-person in Dudley Moorhead Hall (DMH) 231 during our scheduled class days/times.

The material in this course will be presented through a combination of class lectures, in-class demonstrations, partner/group activities, and assigned readings from the textbook and other sources. Lectures will complement the reading material and will include additional information not covered in the readings. As such, attending class is essential for optimal performance in the course. Keeping pace with the reading schedule and being proactive about seeking help are similarly important in achieving a successful outcome. Please ask questions when you don't understand information in lecture or in the readings – asking questions and offering ideas is welcomed and encouraged!

Technology requirements

To use Canvas, you will need access to the internet and either a computer or mobile device. If you do not have access to these resources, please reach out to me and I can point you to university resources. An excellent place to start is the [Technology page](#) on SJSU's Learn Anywhere website at: <https://www.sjsu.edu/learnanywhere/equipment/index.php>. It includes resources relating to low-cost or free Wi-Fi, as well as computer loans from the university.

CANVAS

Course materials such as the syllabus, assignments, announcements, grades, etc. can be found on the [Canvas learning management system](#) course website at <http://sjsu.instructure.com>. You are responsible for regularly checking Canvas to learn of any updates. It is important to ensure that you adjust your Canvas notification settings so that you receive all course announcements as soon as they are posted. For help with using Canvas see [Canvas Student Resources page](#) at: http://www.sjsu.edu/ecampus/teaching-tools/canvas/student_resources

OFFICE HOURS

Office hours give students the opportunity to ask in-depth questions and explore points of confusion or interest that can't be fully addressed in class. Office hours are a great opportunity to chat with your instructor about questions you might have that are related to class, study skills, your research or career interests, graduate school, or anything else that I may be able to help with. If you'd like to attend office hours, please see the relevant information on p1 of this syllabus.

COURSE LEARNING OUTCOMES (CLO)

Upon successful completion of this course, students will be able to:

- **Master course content**
 - CLO1: Demonstrate knowledge of major concepts of learning and memory
 - CLO2: Identify processes by which we encode, store, and retrieve information
 - CLO3: Explain research methodologies used in the study of learning and memory, primarily in humans, but also in other animals
- **Demonstrate critical and applied thinking**
 - CLO4: Compare and contrast major theories of learning and memory, and evaluate evidence for and against these theories
 - CLO5: Apply concepts in learning and memory to real-world problems and events
- **Communicate course concepts**
 - CLO6: Communicate how memory failures impact your own life and the factors that contribute to these failures

PROGRAM LEARNING OUTCOMES (PLO)

Upon successful completion of the psychology major requirements, students will be able to:

- **Knowledge Base of Psychology**
 - PLO1: Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- **Research Methods in Psychology**
 - PLO2: Design, implement, and communicate basic research methods in psychology, including research design, data analysis, and interpretations.
- **Critical Thinking Skills in Psychology**
 - PLO3: Use critical and creative thinking, skeptical inquiry, and a scientific approach to address issues related to behavior and mental processes.
- **Application of Psychology**
 - PLO4: Apply psychological principles to individual, interpersonal, group, and societal issues.
- **Values in Psychology**
 - PLO5: Value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.

REQUIRED TEXTS / READINGS

Textbook

Gluck, M. A., Mercado, E., & Myers, C. E. (2020). Learning and Memory: From Brain to Behavior (4th ed). NY: Worth Publishers.

Other readings

Additional readings will be provided as links or PDFs posted on Canvas.

COURSE REQUIREMENTS AND ASSIGNMENTS

Assignments in this class will be grouped into the following categories:

| Category | Points |
|-----------------------|----------------|
| Participation | 22 |
| Midterms | 40 |
| Forgetting project | 16 |
| Cumulative final exam | 22 |
| Total points | 100 pts |

Assignment categories

See the details below regarding each type of assignment, and please also see “Grading Information” and “Schedule.”

Participation

Your participation grade will include several low-stakes homework assignments, in-class activities, and quizzes. Please note that late homework assignments and quizzes will not be accepted unless you’ve requested an extension that has been approved by the instructor (see below). These assignments will address CLOs 1-5.

Midterms

Each of three midterms will contain multiple-choice and short answer questions that cover the assigned reading material and information presented in lecture. They will be time-limited (1hr 15 min), such that you still need to sufficiently study and prepare. If you have an extended time accommodation through AEC, I will adjust your time accordingly. Please note that no makeup midterms will be given unless you’ve requested an extension that has been approved by the instructor (see below). However, to allow flexibility, the lowest score of the three midterms will be dropped, such that the remaining two midterms will count 20 points each. Midterms will address CLOs 1-5.

Final exam

The cumulative final exam is required and cannot be dropped. The first portion of the exam will be similar to a midterm that covers the final unit of the course. The second portion will contain short answer questions that cover cumulative content. It will be time-limited (2hr 15 min), such that you still need to sufficiently study and prepare. If you have an extended time accommodation through AEC, I will adjust your time accordingly. Please note that no makeup exams will be given unless you’ve requested an extension that has been approved by the instructor (see below). The final exam will address CLOs 1-5.

Final project

For this project you will record and summarize your own memory failures over a period of several days. In addition to three small assignments in which you report on your forgetting, you will also write a paper describing two examples of your forgetting, their underlying causes, and solutions for each that address the underlying causes. The purposes of this project are to (a) make you aware of how common forgetting is, as well as its consequences; (b) allow you to discover the underlying causes of your forgetting as they relate to

course concepts, and (c) encourage you to find solutions to reducing your forgetting and improving your own life. This assignment and a grading rubric will be discussed in greater detail later in the semester. The final project will address CLOs 1, 2, 5, and 6.

Submitting assignments

All homework assignments and quizzes are due by the beginning of lecture (i.e., at 9am) on the specified due date unless explicitly mentioned otherwise. All assignments will be submitted via Canvas. It is your responsibility to ensure that submitted files are properly uploaded and complete by the due date. As such, blank/incomplete/corrupt files will not be accepted, similar to how a blank piece of paper would never be accepted in class. I suggest beginning the submission process at least 30 mins in advance of each deadline to ensure sufficient time to correctly upload your files and address any Canvas-related difficulties.

Late assignments

No late homework assignments, quizzes, midterms, etc. will be accepted unless a request for extension has been approved (see below). I will, however, accept late final papers with the following penalty: For each 24-hr period your final paper is late, your score will drop 10%. I.e., if you submit your paper one hour late (within the first 24-hr period), your grade will drop by 10%; if you submit it 25 hours late (within the second 24-hr period), it will drop by 20%, and so on.

Requesting extensions

No late assignments will be accepted unless a request for extension has been approved. If you encounter an unexpected emergency outside of your control (e.g., COVID infection, eviction from your home, daycare closure, etc.) and you would like to request extension on an assignment, please fill out [this Google Form](https://forms.gle/nfpuiaqi1rbBupJD7) at <https://forms.gle/nfpuiaqi1rbBupJD7> in **advance** of the assignment deadline. Although filling out this form is not a guarantee that your request will be approved, I take all requests seriously and will work with you to find appropriate resources and a path forward for completing your coursework.

Please note that my flexibility with respect to deadlines relates to situations beyond your control, and that this flexibility does not apply to vacation travel, conflicts with your work schedule, or other foreseeable circumstances that are within your control. I expect you to act ethically and honorably, and not to take advantage of this situation.

Expected effort

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Please review the following sources and policies, as well:

- [University Syllabus Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) at <http://www.sjsu.edu/senate/docs/S16-9.pdf>
- Office of Graduate and Undergraduate Programs' [Syllabus Information web page](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) at <https://www.sjsu.edu/curriculum/courses/syllabus-info.php>

GRADING INFORMATION

Grades will be based on participation (homework and quizzes; 22 pts), midterms (40 pts), a cumulative final exam (22 pts), and a final project (16 pts). Letter grades will be assigned according to the table on the following page:

| | | |
|--------------------------------|--------------------------|--------------------------------|
| A plus: 97 - 100 points | A: 93 - 96 points | A minus: 90 - 92 points |
| B plus: 87 - 89 points | B: 83 - 86 points | B minus: 80 - 82 points |
| C plus: 77 - 79 points | C: 73 - 76 points | C minus: 70 - 72 points |
| D plus: 67 - 69 points | D: 63 - 66 points | D minus: 60 - 62 points |
| F: < 60 points | | |

Extra credit

Several extra credit opportunities will be offered throughout the semester. Students can complete a maximum of two extra credit assignments, such that each assignment adds 1 pt to your overall grade at the end of the semester.

Attendance and grading

As per the [University Attendance and Participation Policy F15-12](http://www.sjsu.edu/senate/docs/F15-12.pdf) at <http://www.sjsu.edu/senate/docs/F15-12.pdf>, “Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.” Thus, although attendance will not be used in determining your grade, regularly participating in class activities is essential for success in the course.

Academic integrity

Cheating, plagiarism, or other forms of academic dishonesty that are intended to gain unfair academic advantage will not be tolerated. This includes obvious forms of academic dishonesty such as copying someone else’s homework assignment and cheating on quizzes/midterms/exams. It also applies plagiarizing published works or those of other students.

Additionally, academic dishonesty includes helping other students gain unfair academic advantage, such as posting or distributing quizzes/midterms/exams and answers to homework assignments. Any students who share such materials (e.g., via sites like Course Hero, Uloop, etc.) or who otherwise distribute such materials will be referred to the Student Conduct and Ethical Development office.

If evidence of academic misconduct is found, you will receive a zero on the assignment(s) in question, and I will file a report with the Office of Student Conduct & Ethical Development. See the [office’s website](#) for more information at <http://www.sjsu.edu/studentconduct/policies/>.

DIVERSITY, EQUITY, AND INCLUSION

I aim to provide an inclusive learning environment in which diverse backgrounds and perspectives are recognized, respected, and seen as a source of strength. It is my intent to present materials and activities that

are respectful of diversity with respect to gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions on how I can make this course more equitable and inclusive to all forms of diversity are encouraged and appreciated.

In accordance with SJSU policies, the Student Code of Conduct, and applicable state and federal laws, discrimination based on gender, gender identity, gender expression, race, nationality, ethnicity, religion, sexual orientation, or disability is prohibited in any form. All such policies and regulations apply to the online environment, just as in face-to-face instruction. I encourage students who have a disability or other condition necessitating accommodation to discuss your needs with me as soon as possible.

STUDENT RESOURCES

Now more than ever, I encourage you to take advantage of the following resources. You can find a more exhaustive list in my Online Resources doc on Canvas.

- The [SJSU Learn Anywhere](https://www.sjsu.edu/learnanywhere/) site (<https://www.sjsu.edu/learnanywhere/>) has a number of helpful resources for learning in an online environment, including help with Zoom and Canvas, finding free or affordable internet and computer resources, FAQs, workshops, and more.
 - The [Academic Counseling Center for Excellence in Social Sciences \(ACCESS\) Success Center](http://www.sjsu.edu/access/) (<http://www.sjsu.edu/access/>) provides general education advising for undergraduate students majoring or intending to major in any of the departments in The College of Social Sciences, including Psychology.
 - [SJSU Peer Connections](https://peerconnections.sjsu.edu/) (<https://peerconnections.sjsu.edu/>) 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 SJSU.
 - [The SJSU Writing Center](http://www.sjsu.edu/writingcenter/) (<http://www.sjsu.edu/writingcenter/>) offers a variety of resources to help students become better writers. All of their services are free for SJSU students.
 - [SJSU Counseling and Psychological Services](http://www.sjsu.edu/counseling/) (<http://www.sjsu.edu/counseling/>) invites all students to contact them for any support needed. To get connected, call (408) 924-5910 or email counseling.services@sjsu.edu.
 - [SJSU Cares](https://www.sjsu.edu/sjsucares/) (<https://www.sjsu.edu/sjsucares/>) provides resources and services for students facing a financial crisis, including trouble paying for food or housing, trouble paying bills (including medical), and housing and food insecurity.
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UNIVERSITY POLICIES

Per [University Policy S16-9](https://www.sjsu.edu/senate/docs/S16-9.pdf) (<https://www.sjsu.edu/senate/docs/S16-9.pdf>), 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 the [Syllabus Information web page](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) at: <https://www.sjsu.edu/curriculum/courses/syllabus-info.php>

[Please continue to the next page for the schedule]

PSYC 155-03, Human Learning, Fall 2022

COURSE SCHEDULE

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

| Date | Topic | Reading |
|---------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aug 22 | Welcome and intro | |
| Aug 24 | Experimental methods | <ul style="list-style-type: none"> • Skim Ch 1 and 2 |
| Aug 29 | Non-associative learning | <ul style="list-style-type: none"> • 3.1: Recognizing and responding to repetition • 3.2: An invertebrate model system |
| Aug 31 | Classical conditioning I | <ul style="list-style-type: none"> • 4.1: Basic concepts of classical conditioning |
| Sept 5 | <i>No class, labor day</i> | |
| Sept 7 | Classical conditioning II | <ul style="list-style-type: none"> • 4.1: All remaining sections |
| Sept 12 | Operant conditioning I | <ul style="list-style-type: none"> • 5.1: All but Reinforcement schedules, Choice Behavior |
| Sept 14 | Operant conditioning II | <ul style="list-style-type: none"> • 5.1: Reinforcement schedules, Choice Behavior |
| Sept 19 | Midterm #1 | |
| Sept 21 | Working memory & cognitive control I | <ul style="list-style-type: none"> • 9.1: Transient memories |
| Sept 26 | Working memory & cognitive control II | <ul style="list-style-type: none"> • 9.1: All remaining sections • 9.2: Frontal lobes and consequences of damage |
| Sept 28 | Episodic memory I | <ul style="list-style-type: none"> • 7.1: Features of episodic and semantic memories • 7.2: The medial temporal lobes and memory storage |
| Oct 3 | Episodic memory II | <ul style="list-style-type: none"> • 7.2: Long-term storage and retrieval • 7.3: All sections |
| Oct 5 | Semantic memory | <ul style="list-style-type: none"> • 6.1: Concept formation, category learning, prototypes |
| Oct 10 | Skill learning | <ul style="list-style-type: none"> • 8.1: All sections • 8.2: The basal ganglia and skill learning • 8.3: Parkinson's disease |
| Oct 12 | Midterm #2 | |
| Oct 17 | Encoding I | <ul style="list-style-type: none"> • 7.1: Encoding new memories |
| Oct 19 | Encoding II | |
| Oct 24 | Memory expertise I | <ul style="list-style-type: none"> • Ericsson PDF |
| Oct 26 | Memory expertise II | |
| Oct 31 | Retrieval success and failure I | <ul style="list-style-type: none"> • 7.1: Retrieving existing memories, When memory fails (Forgetting) |
| Nov 2 | Retrieval success and failure II | <ul style="list-style-type: none"> • Anderson PDF (191-205) |
| Nov 7 | Discussion: Tech and memory | <ul style="list-style-type: none"> • Sparrow or Mueller or Tamir PDF |

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|---------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nov 9 | Midterm #3 | |
| Nov 14 | False memory I | <ul style="list-style-type: none"> • Loftus PDF |
| Nov 16 | False memory II | <ul style="list-style-type: none"> • 7.1: When memory fails, Memory consolidation and reconsolidation |
| Nov 21 | Sleep and memory | <ul style="list-style-type: none"> • 7.1: The role of sleep, Learning while you sleep |
| Nov 23 | <i>No class, Thanksgiving Holiday</i> | |
| Nov 28 | Emotion and memory Paper due | <ul style="list-style-type: none"> • 10.1: All sections • 10.3: Phobias |
| Nov 30 | Memory in the courtroom | <ul style="list-style-type: none"> • Lacy PDF |
| Dec 5 | Aging and memory | <ul style="list-style-type: none"> • 12.1: Aging memory • 12.2: The brain from adulthood to old age • 12.3: Alzheimer's disease |
| Dec 7 (optional) | Review session | |
| Dec 13 | Final exam, 7:15-9:30am | |