

Cognition

PSYC 135

Fall 2026 · Section 01 · In Person · 3 Units · 19 August 2026 to 7 December 2026

Contact Information

Instructor	Eva Feredoes, Ph.D.
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Office	DMH 232
Office hours	Wednesdays 9:15 – 10:15 in person and by appointment (Zoom or in person)
Class days / time	Tuesday & Thursday, 10:30 – 11:45
Classroom	Dudley Moorehead 355
Prerequisite	PSYC 001

Course Description and Requisites

The activity of knowing: acquisition, organization and use of knowledge. Processes involved in that activity, including perception, memory, thinking and language.

Prerequisite: PSYC 001.

About this course

Working out how the mind does what it does is one of the harder problems anyone has taken on, mostly because you cannot watch it happen. This course covers where the field came from, the methods it invented to study something it cannot observe directly, what those methods have established about perception, attention, memory, language and decision making, and which arguments are still open.

This section places particular emphasis on the methods of cognitive neuroscience and on how to judge what a piece of evidence actually supports. No prior background in biology is assumed; the neuroscience material is taught from first principles.

Program Learning Outcomes

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.

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

Course Learning Outcomes

These are the consensus course learning outcomes agreed by the PSYC 135 teaching group and are common to all sections of this course.

CLO1: Demonstrate knowledge of the different components of and cognitive mechanisms underlying cognition, including perception, attention, memory, language, and decision making.

CLO2: Describe methodological approaches used in cognitive psychology, including research design, analysis, and findings.

CLO3: Critically evaluate evidence and theories in cognitive psychology.

CLO4: Apply principles of cognitive psychology to real-world issues.

CLO5: Recognize the value of intellectual curiosity, skepticism, and the relative nature of empirical evidence in cognitive psychology.

Each course learning outcome supports one or more of the Program Learning Outcomes listed above: CLO1 supports PLO1, CLO2 supports PLO2, CLO3 supports PLO3, CLO4 supports PLO4, and CLO5 supports PLO5.

Course Materials

Required textbook: Goldstein, E. B., Francis, G., & Neath, I. (2019). *Cognitive Psychology: Connecting Mind, Research, and Everyday Experience* (5th ed.). Cengage Learning. ISBN 978-1337408271.

The textbook is available at the Spartan Bookstore. A used copy of the 4th edition is an acceptable lower-cost alternative; chapter numbering differs slightly.

All other materials: lecture slides, readings for the three Frontier sessions, assignment briefs and announcements will be posted on Canvas at <http://sjsu.instructure.com>. You are responsible for checking Canvas regularly for announcements and updates. Frontier readings are freely available, and require no technical background.

See Module 0 on the course Canvas site for guidance on submitting work, classroom etiquette, contacting me, and the academic, financial and health support available to you at SJSU.

Course Requirements and Assignments

Component	Weight	CLOs assessed	Description
Weekly quizzes	15%	1, 2, 3	Twelve short multiple-choice quizzes on Canvas, ten questions each, with a 15-minute time limit. Each opens on Thursday after class and closes at 11:59 PM the following Sunday. Your lowest two scores are dropped.
Exams (three, in person)	45%	1, 2, 3, 4, 5	Exam 1 in Session 11, Exam 2 in Session 22, Exam 3 during the University final examination period. Each is worth 15%. Multiple choice plus short written answers, handwritten in the room.
Frontier Assignment: outline and sources	15%	2, 3, 5	Due Session 25 (12 November). A paragraph-level plan plus the sources you intend to use.
Frontier Assignment: final submission	25%	2, 3, 4, 5	Due Friday 4 December. Approximately 2,000 words. See description below.

Frontier Assignment

Three sessions in this course (Sessions 7, 20 and 29, marked Frontier in the schedule) revisit material you have already learned in order to examine a live debate in the field: the relationship between human cognition and artificial systems. These sessions introduce no new core content, but they are examinable and are assessed on the exam that follows them.

The assignment: Select a published claim about an artificial system's cognitive ability. Design the experiment that would properly test it. Specify your hypothesis, your independent and dependent variables, your controls, and, most importantly, what result would falsify the claim. Approximately 2,000 words in APA format.

The assignment is submitted in two stages. An outline with your sources is due in Session 25, and I will give you written feedback on it before you write the full version. Submitting the outline late, or not at all, will cost you more than it saves you.

You are not required to build or run anything. You are required to think like an experimentalist. This assignment addresses CLO2, CLO3, CLO4 and CLO5, and it is the culminating written work of the course.

Quizzes

There is a short multiple-choice quiz on Canvas most weeks, covering the reading and the lectures from that week. Each quiz has ten questions and a 15-minute time limit, which is roughly 90 seconds per question. Each opens on Thursday after class and closes at 11:59 PM the following Sunday. The one exception is Quiz 12, which stays open until Tuesday 8 December so that it does not compete with the Frontier Assignment deadline.

These are deliberately low stakes: they are worth 10% in total and your two lowest scores are dropped. Use them as a check on whether you have understood the week's material. Looking answers up defeats the purpose, and you will not have that option in the exam room.

Quizzes 8 and 12 fall immediately before Exam 2 and Exam 3. Retrieval practice of this kind reliably improves later retention (Roediger & Karpicke, 2006), so treat those two as part of your revision rather than as an interruption to it.

Quiz	Opens (Thu)	Closes (Sun)	Covers	Reading
1	27 Aug	30 Aug	Sessions 1–3	Ch. 1
2	3 Sep	6 Sep	Sessions 4–5	Ch. 2
3	10 Sep	13 Sep	Sessions 6–7, incl. Frontier A	Ch. 2, Canvas
4	17 Sep	20 Sep	Sessions 8–9	Ch. 3, 10
Exam 1 — in class, Thursday 24 September				
5	1 Oct	4 Oct	Sessions 12–13	Ch. 4
6	8 Oct	11 Oct	Sessions 14–15	Ch. 5
7	15 Oct	18 Oct	Sessions 16–17	Ch. 6–7
8	29 Oct	1 Nov	Sessions 18–20, incl. Frontier B	Ch. 7–8, Canvas
Exam 2 — in class, Tuesday 3 November				
9	5 Nov	8 Nov	Session 23	Ch. 9
10	12 Nov	15 Nov	Sessions 24–25	Ch. 11
11	19 Nov	22 Nov	Sessions 26–27	Ch. 12–13
12	3 Dec	8 Dec (Tue)	Sessions 28–29, incl. Frontier C	Ch. 13, Canvas

Quiz dates assume we keep to the schedule. If a catch-up session is used for catching up, I will announce any change to quiz coverage on Canvas.

Roediger, H. L., & Karpicke, J. D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention. *Psychological Science*, 17(3), 249–255.

Catch-up and review sessions

Two sessions in the schedule, before Exam 1 and before Exam 2, are held in reserve. If a topic has taken longer than planned, we use them to catch up. If we are on schedule, we use them to review for the exam. Either way you will not be penalized for the pace of the course.

Writing in this course

A substantial part of your grade is earned by writing: short answers on Exams 1 and 2, extended answers on Exam 3, and the Frontier Assignment. All examination writing is done by hand, in the room, without devices. This is deliberate as a key skill this course develops is your own reasoning about evidence, and the only way to assess this fairly is to have you do it unaided.

Attending class

There is no attendance grade, and you will not be marked present or absent. No part of your grade depends on being in the room. If you are unwell, please stay home and rest.

That said, attendance predicts college grades better than any other known predictor, including high school GPA and standardized test scores (Credé, Roch & Kieszczynska, 2010). Much of what happens in this room e.g., the demonstrations, the arguments, the discussed examples, do not fit well on slides. If you do have to miss a session, I can let you know what you need to catch up.

Credé, M., Roch, S. G., & Kieszczynska, U. M. (2010). Class attendance in college: A meta-analytic review. *Review of Educational Research*, 80(2), 272–295.

Grading Information

Final grades are based on 100 total points.

Grade	Percentage
A+	97.00 – 100%
A	93.00 – 96%
A–	90.00 – 92%
B+	87.00 – 89%
B	83.00 – 86%
B–	80.00 – 82%
C+	77.00 – 79%
C	73.00 – 76%
C–	70.00 – 72%
D+	67.00 – 69%
D	63.00 – 66%
D–	60.00 – 62%
F	59% and below

Grades posted in Canvas during the semester reflect only work returned to date and are not a projection of your final grade.

Classroom Protocols

This is an in-person course. We meet twice weekly for lectures, discussions and in-class activities. There is no hybrid or Zoom option.

We work together to foster an inclusive learning environment in which people with diverse backgrounds and perspectives are recognized, respected, and seen as a source of strength. I intend to present materials and activities that are respectful of diversity with regard to gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions on how I can make this course more equitable and inclusive are definitely encouraged and appreciated.

All students are expected to exhibit professionalism and respect for one another and for the instructor. This means arriving on time, coming prepared, participating in discussion, and giving your attention to lectures and demonstrations. If you arrive late or need to leave early, please sit near the door. Please silence phones during class.

You may record lectures only with my prior permission. Recordings are for your personal study only and may not be shared or posted online.

Cognitive psychology is a field with genuine unresolved disputes. You are encouraged to disagree with the textbook, with published researchers, and with me, provided you can say what evidence would change your mind.

Course Policies

6. Grades will not be changed except to correct a clerical error in calculation.
7. Requesting extensions. If something unexpected and outside your control happens, email me with as much notice as you can before the deadline. I take these requests seriously and will work with you to find a way forward. Contacting me does not guarantee approval, but not contacting me guarantees the alternative. This flexibility covers emergencies, not travel, work rosters or other foreseeable conflicts.
8. Late work. Assignments submitted without an approved extension lose 10% for each 24-hour period they are late.
9. Quizzes. Because the lowest two scores are dropped, missed quizzes are not reopened and no extensions are given. The two drops exist to cover illness, travel and technical problems.
10. Exam make-ups. No make-up exams are given unless an extension has been approved before the exam date.
11. Office hours. Please use them. Come to talk about the course, about research, about what you might do next, or about anything I can help with. The more I know about how you are finding this course, the better I can teach it.
12. Course materials. Slides, exam questions and assignment briefs posted on Canvas are for your own study. Please do not share or post them elsewhere, during the semester or after it.
13. Accommodations. If you need course adaptations or accommodations because of a disability, or special arrangements in case the building must be evacuated, speak to me as early as you can. Presidential Directive 97-03 requires students requesting accommodations to register with the Accessible Education Center. Approved extended-time accommodations apply to the Canvas quizzes as well as to exams.
14. Communication. Email is the best way to reach me and I will answer within two working days. If something is going wrong, tell me sooner rather than later!

Academic Integrity

Your own commitment to learning, as evidenced by your enrollment at San José State University, and the University's Academic Integrity Policy require you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Student Conduct and Ethical Development.

Plagiarism means presenting work you did not create, including published work, the work of other students, and material generated by artificial intelligence tools, as your own, without proper citation. All assignments in this course must be your own work, and any source you use must be cited. Written work may be submitted to originality-checking tools. Students may appeal any allegation to the Office of Student Conduct and Ethical Development.

Generative AI Policy

This course studies cognition, and part of it examines what artificial systems can and cannot do. It would be strange to pretend these tools do not exist, so the policy here is specific rather than prohibitive.

- You may use AI tools to search for sources, clarify a concept you did not follow in lecture, or check your own writing for clarity.
- You may not submit text generated by an AI tool as your own writing. Any AI-generated material that appears in your work must be verified, rewritten in your own words, and cited like any other source.
- **Where you have used an AI tool in any aspect of your work, include a brief note (at the end of the assignment saying which tool/s and for what purpose. If you are in doubt as to whether the tool you used is classified as AI, include it regardless. Use of an AI tool is not penalized but failing to disclose it is an academic integrity violation.**
- The brief note can be 25 to 100 words placed at the end of your text, before any reference list. The note does not count toward the word count.

As a practical warning, these systems produce fluent text that is frequently, but sometimes quite subtly, wrong and they can invent citations that do not exist. In a course where the whole point is learning to evaluate evidence, outsourcing your reasoning defeats the exercise, and the Frontier Assignment in particular is designed so that it cannot be completed well without your own thinking.

University Policies

Per University Policy S16-9, relevant university policy concerning all courses, including student responsibilities, academic integrity, accommodations, dropping and adding, and consent for recording of class, and available student services are listed on the University's Syllabus Information web page. Please visit that page to review these policies and resources.

University Policy S16-9: <https://www.sjsu.edu/senate/docs/S16-9.pdf>

Syllabus Information: <https://www.sjsu.edu/curriculum/courses/syllabus-info.php>

Accommodations

The Accessible Education Center (AEC) provides accommodations for students with disabilities and will contact me before the start of the semester if you are registered with them. If you need accommodations, or need special arrangements in case the building must be evacuated, please speak with me as early in the semester as possible.

Support and wellbeing

If you find yourself falling behind, or if events outside class are affecting your work, please reach out early to me, or to any of the following:

- SJSU Cares: support with food, housing and financial insecurity.
- Counseling and Psychological Services (CAPS): Student Wellness Center, room 300B.
- Peer Connections: free mentoring, tutoring and supplemental instruction.
- SJSU Writing Center, Clark Hall room 126: free writing support for all students.
- Psychology Advising: questions about your degree progress.

Course Schedule

The schedule is subject to change with fair notice, given by announcement in class and on Canvas. Readings should be completed before the session for which they are listed.

#	Date	Topic and activity	Reading
UNIT 1: FOUNDATIONS AND METHODS			
1	Thu 20 Aug	Welcome; What is cognition? Course mechanics, assessment, expectations. The problem of studying something you cannot observe directly.	–
2	Tue 25 Aug	Foundational perspectives: empiricism and rationalism, structuralism, functionalism, behaviorism, and the cognitive revolution. Marr's three levels of analysis.	Ch. 1
3	Thu 27 Aug	Doing cognitive science. Reaction time and accuracy as inference tools; dissociation logic; what an experiment can and cannot license. Quiz 1 opens.	Ch. 1
4	Tue 1 Sep	Neuroscience I: neurons to networks. Foundations for students without a biology background.	Ch. 2
5	Thu 3 Sep	Neuroscience II: what each method measures. EEG, fMRI and the BOLD signal, lesion studies. Quiz 2 opens.	Ch. 2
6	Tue 8 Sep	Neuroscience III: causal methods. TMS and focused ultrasound; correlation versus causation; the logic of single and double dissociation.	Ch. 2
7	Thu 10 Sep	FRONTIER A: Is the brain a computer? The history of the information-processing metaphor, and what evidence would show that a model does what a brain does. Quiz 3 opens.	Canvas
UNIT 2: PERCEPTION			
8	Tue 15 Sep	Perception I. Sensation versus perception; perception as inference; ambiguity and constancy.	Ch. 3
9	Thu 17 Sep	Perception II. Object recognition, the ventral stream, face perception, change blindness. Visual imagery: perception without a stimulus. Quiz 4 opens.	Ch. 3, 10
10	Tue 22 Sep	CATCH-UP AND REVIEW. Held in reserve for material that has run over. If we are on schedule, this is the Exam 1 review session.	–
11	Thu 24 Sep	EXAM 1 – in class. Covers Sessions 1–9.	–
UNIT 3: ATTENTION AND MEMORY			
12	Tue 29 Sep	Attention I. Selection; Posner cueing; the early versus late selection debate.	Ch. 4

#	Date	Topic and activity	Reading
13	Thu 1 Oct	Attention II. Feature integration theory; divided attention; inattentional blindness. Applied: human factors, driving, and alarm design. Quiz 5 opens.	Ch. 4
14	Tue 6 Oct	Short-term memory. Span, the serial position curve, decay versus interference.	Ch. 5
15	Thu 8 Oct	Working memory. Cognitive and neuroscience models; capacity; resisting distraction. Quiz 6 opens.	Ch. 5
16	Tue 13 Oct	Long-term memory: structure. Episodic, semantic and procedural memory. Double dissociation and modularity, HM and KF case studies.	Ch. 6
17	Thu 15 Oct	Encoding. Levels of processing; elaboration; the generation effect. Quiz 7 opens.	Ch. 6–7
18	Tue 20 Oct	Retrieval and consolidation. Cues and context; the testing effect; massed versus distributed practice, applied to how you study for this course.	Ch. 7
19	Thu 22 Oct	Everyday memory. Reconstruction; false memory; eyewitness testimony; flashbulb memories.	Ch. 8
20	Tue 27 Oct	FRONTIER B: Attention and memory in machines. Whether the borrowed vocabulary is valid. Frontier Assignment released.	Canvas
21	Thu 29 Oct	CATCH-UP AND REVIEW. Held in reserve. If we are on schedule, this is the Exam 2 review session. Quiz 8 opens.	–
22	Tue 3 Nov	EXAM 2 – in class. Covers Sessions 12–20.	–
UNIT 4: KNOWLEDGE, LANGUAGE AND THOUGHT			
23	Thu 5 Nov	Conceptual knowledge. Categories; the classical view; prototype and exemplar models; semantic networks and category-specific deficits. Quiz 9 opens.	Ch. 9
24	Tue 10 Nov	Language I. Comprehension, ambiguity resolution, and prediction in language processing.	Ch. 11
25	Thu 12 Nov	Language II. Linguistic relativity; what Whorf actually claimed; the evidence. Frontier Assignment outline and sources due. Quiz 10 opens.	Ch. 11
26	Tue 17 Nov	Problem solving, creativity and expertise. Insight; analogy; what distinguishes an expert. Applied: expertise and error in professional settings.	Ch. 12
27	Thu 19 Nov	Judgment I. Heuristics and biases: availability, representativeness, anchoring. Quiz 11 opens.	Ch. 13
28	Tue 24 Nov	Judgment II. Dual-process accounts; framing effects; reasoning and rationality.	Ch. 13
–	Thu 26 Nov	NO CLASS – Thanksgiving.	–
UNIT 5: SYNTHESIS			

#	Date	Topic and activity	Reading
29	Tue 1 Dec	FRONTIER C: Do language models think? Concepts, language and judgment revisited; prediction versus explanation as scientific goals.	Canvas
30	Thu 3 Dec	Synthesis, and Exam 3 review (covers Sessions 23–29). What the semester established and what remains open. Frontier Assignment due Friday 4 December. Quiz 12 opens.	–

Exam 3 (final examination): covers Sessions 23–29. Scheduled during the University final examination period, 9–11 and 14–15 December 2026. The examination is held at a time different from our normal class meeting and lasts 135 minutes. Confirm your slot on the University final examination schedule. Per University Policy S17-1, final examinations may not be given during regularly scheduled class periods or on Study/Conference Day.