San José State University Psychology Department 43449, Psyc 135, Cognition, Sec 04, FALL 2025

Instructor: Steven Macramalla

Office Location: DMH 354 / ZOOM

Telephone: 831-234-8451

Email: <u>steven.macramalla@</u>sjsu.edu

Office Hours: TR 12:00PM-1:00PM

Class Days/Time: TR 10:30AM - 11:45AM

Classroom: Engineering Building 232

Prerequisites: Psych 001

WELCOME TO COGNITIVE PSYCHOLOGY IN-PERSON

with "ZOOM SUPPORT"



CANVAS Lecture Slides
Announcements
Assignment Submissions
Exams



ZOOM

Permission From Me To Attend
One Or All Lectures Online.
And You Must Have A Valid Reason.

SJSU Code of Conduct Applies – Be
Professional
NO Hate Speech!

Course Name, Number, S

Course Description

We are examining how the brain processes information and generates the illusion of your reality. This class will reinforce basic scientific concepts as we delve into new territory of vision, language, memory, attention and other domains of cognitive psychology.

Course Goals and Student Learning Objectives

The objective is to distinguish fundamental principles of cognitive function in vision, attention, memory and language.

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

Navigate and discriminate the scientific literature in cognitive psychology in areas relevant to their concerns.

Required Texts/Readings

Juola, & Koshino Cognitive Psychology

V.S. Ramachandran *Phantoms in the Brain*

Readings:

James Gleick, The Information

Matthew Cobb, Why Your Brain is Not a Computer

Unknown Readings on Attention
Pashler Doing Two Things at Once
Lee What Whorf Really Said

Boroditsky The Role of the Body and Mind in Abstract

Thought

Boroditsky & Lieberman Does Language Shape Your Thoughts

IN-PERSON+ You Are Expected To Attend Class In-Person

This is an in-person class with supplementary asynchronous resources: you are expected to attend class unless prohibited by circumstances (family, work

etc.) during this pandemic, in which case, the class is designed so you can complete the requirements on your own time.

Please understand, it's a safety net. To get the most out of the class, you want to attend lecture and discussions.

Classroom Protocol

Students are expected to display professionalism and respect for others: Arrive on time. Participate in class. Engage in civil dialogue. Pay attention to the lecture. Do not cheat.

QUIZZES

Time-pressured Multiple-Choice approx. 50 Questions. Tests will be "online in-class." You will come to the regular class time, and take the test on your laptop.

Requests for exam date

changes will be considered for extenuating circumstances with a doctor's note,

if you have more than two exams on the same day, you are a parent or have suffered unforeseen hardships due to the pandemic.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's <u>Catalog Policies</u> 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 <u>Late Drop Policy</u> 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 <u>Advising Hub</u> at http://www.sjsu.edu/advising/.

Assignments and Grading Policy

GRADING

Exams	40%
Test Yourself Study Guide	10%
Science Daily	15%
Group Project	30%
Milestones	5%
Total	100%

DO NOT trust the final total you see on Canvas.

Calculate your current grade yourself.

Use this formula:

(AVG Tests x .4) + (TestYourself x .1) + (AVG Science Daily x .15) + (AVG Milestones x .05) + (Paper x .30)

Course Grading Scale (% of Total Points):

A +	96-100%	В	+ 86-89%	C+ 76-79%		D+ 66-69%	F<60%
Α	93-95%	В	83-85%	C 73-75%	D	63-65%	
A-	90-92%	B-	80-82%	C- 70-72%	[D- 60-62%	

SCIENCE DAILIES

SCIENCE DAILY REACTION PAPERS

OBJECTIVE: This exercise will teach students to initiate self-directed literature searches related to cognitive psychology, identify critical elements of research design (theory, hypotheses, independent and dependent variables) and mercilessly drill proper APA formatting.

10 pts Each

Each *first class of a new chapter* you will come prepared with an article from Science Daily based on a search for a key term from the chapter we are covering in class. These Science Daily assignments will be used for in-class discussion.

FOR EACH SCIENCE DAILY ASSIGNMENT:

- Copy and Paste the ENTIRE SCIENCE DAILY ARTICLE you chose.
- Copy and Paste the ABSTRACT FROM THE ORIGINAL RESEARCH ARTICLE
- Provide:
 - Citation of the original study in APA format -- the citation includes the Author names, Title, Journal, Volume, Issue, pages.

Template:

Author Surname, F. M. (Publication Year). Article title: Subtitle. *Journal Title, Volume*(issue), page range. URL or DOI

Example:

Collins, R. (2004). Rituals of solidarity and security in the wake of terrorist attack. *Sociological Theory*, 22(1), 53–87. https://doi.org/10.1111/j.1467-9558.2004.00204.x

- Then read the ORIGINAL RESEARCH ARTICLE and write a sentence for each:
 - o theory,
 - hypothesis,
 - o independent and dependent variables,
 - o with a little summary of the conclusion. Do NOT summarize the statistics (Results), just tell me what the researchers found and ...
 - o ... why you thought it was cool.

HOW TO

Pick Your Science Daily Article

- Go to Science Daily.com
- Be sure to be in the section for Psychology
- Pick a news article you find interesting.

Find the Original Research Article

- At the bottom of the Science Daily article will be a reference to the ORIGINAL RESEARCH ARTICLE.
- Use the DOI or use the citation in **Psych Info or Google Scholar**,
 - PsycInfo: Go to the King Library → Databases → Psychology
 →PsychInfo → do a search and find the original article. If they do not have it, choose a different article.

Submit on Canvas and bring a paper copy OR a digital version to class for discussions. Keep an electronic version for your record.

- CANVAS: Upload the document in PDF or word document (do not cut and paste into the box). File name format must be as follows:
 - SDLectureNumber_LECTURETOPIC e.g., SD6_ MEMORY

You will be uploading them roughly other every class.

HOW I GRADE SCIENCE DAILIES

Hybrid PASS / NO PASS

- Full Credit complete (Science Daily article, Abstract from original study, citation from study, and the Theory, Hypotheses, IV, DV, What's Cool) and the citation is for the original study and in APA format.
- o -2 points citation not for original study
- o -2 points citation not in correct APA format
- o -5 missing experiment elements (theory, hypotheses, etc)
- o -5 missing Science Daily article
- o -2 missing abstract
- o -2 unrelated topic

Paper There is a 6-page paper, not including title page and references, 1500 minimum word-count, in APA format (do NOT include an abstract). The paper will summarize at least TWO ORIGINAL PEER-REVIEWED ARTICLES on sensation and perception. Points will be deducted from late papers (see syllabus for DUE date).

University Policies

Academic integrity

Students should know that the University's <u>Academic Integrity Policy</u> is available at http://sa.sjsu.edu/judicial_affairs/faculty_and_staff/academic_integrity/index.html. Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's 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. The <u>Student Conduct and Ethical</u> <u>Development website</u> is available at http://www.sa.sjsu.edu/judicial_affairs/index.html.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 requires approval of instructors.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make 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 the <u>Disability Resource Center</u> (DRC) at http://www.drc.sjsu.edu/ to establish a record of their disability.

Learning Assistance Resource Center (Optional)

The Learning Assistance Resource Center (LARC) is located in Room 600 in the Student Services Center. It is designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. The center provides support services, such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. The LARC website is located at http://www.sjsu.edu/larc/.

SJSU Writing Center

The SJSU Writing Center is located in Room 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. Our writing specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. The Writing Center website is located at http://www.sjsu.edu/writingcenter/about/staff/.

Peer Mentor Center

The Peer Mentor Center is located on the 1st floor of Clark Hall in the Academic Success Center. The Peer Mentor Center is staffed with Peer Mentors who excel in helping students manage university life, tackling problems that range from academic challenges to interpersonal struggles. On the road to graduation, Peer Mentors are navigators, offering "roadside assistance" to peers who feel a bit lost or simply need help mapping out the locations of campus resources. Peer Mentor services are free and available on a drop –in basis, no reservation required. The Peer Mentor Center website is located at http://www.sjsu.edu/muse/peermentor/

43449, Psyc 135, Cognition, Sec 04, FALL 2025

The schedule is subject to change. Notification will be by email and class announcement.

Week	Date	Topics, Readings, Assignments, Deadlines
1	Aug 21	Welcome & Logistics
2	Aug 26 – 28	Intro History & Schools of Thought Biological, Computational, & Behavioral Research Juola & Koshino Ch. 1 Textbook Test Yourself Ch. 1 Gleik <i>The Information</i> Cobb <i>Why Your Brain is Not a Computer</i>
3	Sept 2 – 4	Neurons, Auto-Associators Frontal, Temporal, Motor, Parietal Cortices, Amygdala & Hippocampus, Bio Measurements Juola & Koshino Ch. 2 pg. 24-31, 34-38, 42-57 Textbook Test Yourself Ch. 2 Rama Chap 1 & 2
4	Sept 9 – 11	Neurons, Auto-Associators Frontal, Temporal, Motor, Parietal Cortices, Amygdala & Hippocampus, Bio Measurements Juola & Koshino Ch. 2 pg. 24-31, 34-38, 42-57 Textbook Test Yourself Ch. 2 Rama Chap 1 & 2
		Visual Physiology of the Eye, Parvo & Magno Cellular, LGN, Hemispheric Differences, What Where/How Lateral Inhibition & Opponent Processes & Color Juola & Koshino Ch.2, pg 32-33, 39-41, Ch. 3 Rama Chap 3 MILESTONE 1
5	Sept 16 – 18	Visual Physiology of the Eye, Parvo & Magno Cellular, LGN, Hemispheric Differences, What Where/How

Week	Date	Topics, Readings, Assignments, Deadlines
		Lateral Inhibition & Opponent Processes & Color Juola & Koshino Ch.2, pg 32-33, 39-41, Ch. 3 Rama Chap 3
		Receptive Fields, Depth Perception Juola & Koshino Ch.3 Rama Chap 4
6	Sept 23 – 25	Receptive Fields, Depth Perception Object Recognition Hubel & Wiesel Feature Detectors, Spatial Frequency Detectors, Figure Ground, Gestalt Prinicples, Affordances Juola & Koshino Ch.3 Rama Chap 4
7	Sept 30 – Oct 2	Object Recognition Template & Feature Theories, Face Perception, Change Blindness Juola & Koshino Ch.3 Textbook Test Yourself Ch. 3
		TEST 1 Intro, Neuro & Vision
8	Oct 7 - 9	Project Workshop
		Attention: Posner Cueing, Serial & Parallel Searches, Illusory Conjunctions & Feature Integration Theory, Attention, Juola & Koshino Ch. 5 Early & Late Selection, Emotions & Attention
		Readings on Attention MILESTONE 2
9	Oct 14 – 16	Brain & Attention, PRP & RSVP Juola & Koshino Ch. 5 Textbook Test Yourself Ch. 5 Rama Chap 6, 7 Juola & Koshino Ch. 5 Early & Late Selection, Emotions & Attention
		Textbook Test Yourself Ch. 5 Readings on Attention

Week	Date	Topics, Readings, Assignments, Deadlines
10	Oct 21 – 23	Memory: Encoding, Storing, Retrieving Short-Term Memory, Serial Position Curve Juola & Koshino Ch. 6 Textbook Test Yourself Ch. 6
11	Oct 28 – 30	Working Memory & Mneumonics Long-Term Memory & False Memories & Flashbulb Memories Juola & Koshino Ch. 7 – 8 Textbook Test Yourself Ch. 7 & 8 Language Taxanomy & Bottom-Up & Top-Down Processes
12	Nov 4 – 6	TEST 2 Attention & Memory
		Project Workshop
13	Nov 11 – 13	Language Acquisition Juola & Koshino Ch. 9 Textbook Test Yourself Ch. 9 Rama Chap. 8 PAPER DUE
14	Nov 18 – 20	Deep Structure of Language Juola & Koshino Ch. 10 Rama Ch. 9-10 Boroditsky The Role of Mind and Body in Abstract Thought Boroditsky and Libermann Does Language Shape Our Thoughts Yee What Whorf Really Said
15	Nov 25 – 27	THANKSGIVING – NO CLASSES
	Dec 2 – 4	Imagery Juola & Koshino Ch. 4 Rama Chap 11 -12
Final Exam		FINAL EXAM THU, DECEMBER 11 Language and Mental Imagery