

PSYCH 300: COGNITIVE PSYCHOLOGY

 The Science of How We Think 

Spring 2026 | Tue/Thur 1:00pm - 2:30pm

INSTRUCTOR

Dr. Tanushree Agrawal

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OFFICE HOURS: Held in Ikeda 402, by appointment using the following link: xxx

COURSE DESCRIPTION

Have you ever wondered why some things are difficult to remember and why other memories feel effortless to retrieve? Or how you manage to pay attention to a conversation in a crowded room but can be easily distracted in a quiet study space? Or how some kinds of problems are easy to solve just by working at them while others seem impossible until the solution comes to you in a flash of insight? These are the kinds of questions that cognitive psychology can address!

Cognitive psychology is the “scientific study of knowledge” or, the study of mental processes and how those processes affect behavior. It touches on all the mental processes related to the acquisition, retention, and use of knowledge, including attention, perception, memory, language, problem-solving, and decision making. Given that mental processes are not directly observable, cognitive psychology is based on scientific studies in which participants’ observable behavior is used to *infer* the structures and limitations of these processes.

In general, this course is designed to help you learn: (1) how to turn big, imprecise questions about the human mind into concrete, empirical questions, and (2) how to find and evaluate evidence to answer these questions. By the end of this course, you’ll be able to answer crucial questions about the human mind: How do our perceptual systems process information? What limits our ability to see and remember the world? When does human memory and reasoning work well – and what can make things go wrong? How can we optimize our own learning?

COURSE OBJECTIVES

Over the course of this quarter, you will:

- Learn about the major areas of and key theories in cognitive psychology
- Understand the methods and scientific basis for our knowledge of cognitive psychology
- Engage in discussion about how cognitive psychology is related to your everyday lives

Accomplishing these goals is both your responsibility and mine. I am committed to providing thoughtful lectures, videos, experiments and exams, being available to answer your questions, and making the course as worthwhile to you as possible. On your end, I ask that you commit yourself to deeply engaging with the course material, and with the assignments outlined in this syllabus.

COURSE MATERIALS

BRIGHTSPACE WEBSITE: Brightspace will be the primary hub for all activities, submissions, and communication in this course.

TEXTBOOKS: Pilegard, C. (Ed.). (2024). *Cognitive Foundations*, 2nd Edition. Published with bookdown. Available freely online at: <https://pilegard.github.io/cogfoundations/>

Reisberg, D. (2018). *Cognition: Exploring the Science of the Mind*, 8th edition. W.W. Norton publishing. Available for reference at the Ikeda library.

Note that you will not be tested on things that appear in the Reisberg textbook as long as they do not appear in any other class materials.

LABS: You will need to purchase ZAPS Labs (Note: you only need to buy “Stand-alone access to ZAPS 3.0 Interactive Labs”). I will send out the exact details and download link on Brightspace.

ASSIGNMENTS

LABS (BEST 6 OF 7 LABS, EACH WORTH 2%)

The best way to learn about cognition is to get a sense of what the experiments we talk about in class are really like. Thus, you are required to complete several online experiments throughout the course, each lasting approx 10-20 minutes. These labs will only be graded for completion, and not on how well you do on them. As long as you complete them on time, you will receive full credit.

LATE POLICY: Eligible for ½ **credit** as long as it is completed by the last day of class.

WEEKLY QUIZZES (BEST 8 OF 9 QUIZZES, EACH WORTH 2%)

After each big topic, there will be one low-stakes, open-book online quiz. Quizzes will all consist of 20 multiple-choice questions, to be completed on Brightspace outside of class. They will be available from Friday morning (8 am) until Sunday night (11:59 pm), but once you begin the quiz you will only have 1 hour to complete it.

LATE POLICY: The point of these is to give you systematic and regular practice with the material. As such, there are **no late quiz submissions** allowed.

EXAMS (50%, 2 EXAMS WORTH 25% EACH)

There will be two closed-book exams (non-cumulative) that will cover all content from this class.

LATE POLICY: There will be **no late exams allowed**. If you miss an exam, you CANNOT make it up, except under special circumstances (e.g., you have a doctor's note for a serious ailment).

FINAL PRESENTATION: AI MEETS MIND (2% TOPIC & REFS, 13% TALK)

In this class, you and a partner will deliver a 10 minute presentation on a topic at the intersection of AI and cognition, analyzing how AI models draw from cognitive theories or how cognitive science can benefit from developments in AI. In the talk, you MUST (1) explain key cognitive science concepts related to your topic (2) identify the relevant AI technologies or frameworks. (3) analyze how these fields inform, challenge, or support each other. Final presentations will be graded based on presentation skills (this component will be an individual grade per person), as well as on the depth of your team's research, the structure of your talk, and the quality of the slides.

This is meant to be a fun learning experience, so pick a topic that really interests you! It can be a deeper dive into something we discussed in class or it can be something entirely new. Either way, your presentation should go above and beyond what we already learn during the lectures. Example topics will be provided regularly during the course.

TOPIC SUBMISSIONS (2%): Presentation topics and names of three relevant academic articles (you can change these or add more in your final presentation) will be due first.

FINAL PRESENTATIONS (13%): Presentations will take place on the last day of class.

LATE POLICY: **No credit for late work**, *so don't procrastinate!*

GRADE BREAKDOWN

Labs:	12% (best 6 out of 7 labs, each worth 2%, graded for completion)
Weekly quizzes:	18% (best 8 out of 9 open-book quizzes, each worth 2%)
Reading checks:	5%
Exam:	50% (2 exams, 25% each)
Final Presentation:	15% (2% for topic and references, 13% for final presentation)

Final letter grades in the course will be assigned according to the following percentage scale

A+	97.00+	B+	87.00-89.99	C+	77.00-79.99	D	60.00-69.99
A	93.00-96.99	B	83.00-86.99	C	73.00-76.99	F	0.00-59.99
A-	90.00-92.99	B-	80.00-82.99	C-	70.00-72.99		

Grades will be rounded to the nearest hundredth of a point and the stated letter grade cutoffs will be applied without exception. There is no plan to "curve" grades in this course.

COURSE SCHEDULE

Date	Day	Agenda	Important Deadlines
Feb 3	Tue	Introduction	
Feb 5	Thur	Visual Perception	Quiz 1: 8am Fri Feb 6 to 11:59pm Sun Feb 8
Feb 10	Tue	Visual Perception	Lab 1: by 11:59pm Tue Feb 10
Feb 12	Thur	Attention	Quiz 2: 8am Fri Feb 13 to 11:59pm Sun Feb 15
Feb 17	Tue	Attention	Lab 2: by 11:59pm Tue Feb 17
Feb 19	Thur	Memory	Quiz 3: 8am Fri Feb 20 to 11:59pm Sun Feb 22
Feb 24	Tue	Memory	Lab 3: by 11:59pm Tue Feb 24
Feb 26	Thur	Memory	Quiz 4: 8am Fri Feb 27 to 11:59pm Sun Feb 29
Mar 3	Tue	Memory	Lab 4: by 11:59pm Tue Mar 3
Mar 5	Thur	Memory	Quiz 5: 8am Fri Mar 6 to 11:59pm Sun Mar 8
Mar 10	Tue	EXAM REVIEW	
Mar 12	Thur	EXAM #1	
Mar 17	Tue	☀️ NO CLASS: Happy Spring Break! ☀️	
Mar 19	Thur		
Mar 24	Tue	Knowledge	
Mar 26	Thur	Knowledge	Quiz 6: 8am Fri Mar 27 to 11:59pm Sun Mar 29
Mar 31	Tue	Knowledge	Lab 5: by 11:59pm Tue Mar 31
Apr 2	Thur	Language	Quiz 7: 8am Fri Apr 3 to 11:59pm Sun Apr 5
Apr 7	Tue	Language	Lab 6: by 11:59pm Tue Apr 7
Apr 9	Thur	Decision-Making	Quiz 8: 8am Fri Apr 10 to 11:59pm Sun Apr 12
Apr 14	Tue	Problem-Solving	Lab 7: by 11:59pm Tue Apr 14
Apr 16	Thur	Creativity	Topics & Refs: by 11:59pm Sun Apr 19
Apr 21	Tue	Creativity	Quiz 9: 8am Fri Sep 12 to 11:59pm Sun Sep 14
Apr 23	Thur	EXAM REVIEW	
Apr 28	Tue	EXAM #2	
Apr 30	Thur	PRESENTATION FEEDBACK SESSION	
May 5	Tue	PRESENTATION FEEDBACK SESSION	
May 7	Thur	FINAL PRESENTATIONS	

COURSE POLICIES

CLASS ETIQUETTE

ATTENDANCE: Please arrive on time for class. Late arrivals and early departures are disruptive, especially in the intimate class settings at Soka. Although attendance is not mandatory, I strongly recommend that you attend class regularly and come to each session fully prepared (i.e., having read/watched/listened to all of the assigned materials). If you aren't there, you'll miss material not covered in your text or found on the lecture slides. If you are there but aren't prepared, you won't be able to effectively engage in different activities and discussions. Not only does this make class boring for you – it can cost you points (e.g., Quizzes)!

If you do need to miss class for any reason, you are responsible for all material covered and for any course schedule changes made in your absence. Note that remote access to class (i.e., Zoom) will NOT be provided under any circumstances. Please refer to this syllabus, Brightspace, and your classmates regarding the content you missed before contacting me

IN-CLASS BEHAVIOR: Every student in this classroom, regardless of personal history or identity, is a valued member of this group. Your experiences are valuable and important, and you should feel free to share them as they become relevant to our class. Please be courteous and respectful to others in class. I believe that a climate of mutual respect allows us to ask difficult questions and to participate in honest discussions about difficult issues, even in the context of strong disagreement. Creating this kind of open, honest, and respectful climate is our mutual responsibility.

ELECTRONIC DEVICES: Cell phones, beepers, and “quiet conversations” are distracting and noticeable throughout the classroom. Students must turn off cellular phones during class. Research has consistently shown that taking notes by hand is more conducive to the learning process than using an electronic device (Mueller & Oppenheimer, 2014). As such, I strongly encourage you to take handwritten notes. That being said, you are permitted to use either a laptop or tablet (not a cell phone) for note-taking purposes in this class. If you choose to do so, you will be asked to sit toward the back of the classroom to limit inadvertently distracting others.

CONTACTING ME: The most efficient way to contact me is by email. Please do not assume your email has been received unless/until you receive a response. You can expect a response within 24-48 hours during the workweek; however, there is no guarantee of a response over weekends and holidays. Your email should include:

- A meaningful subject line with the course number (e.g., PSYCH100 Review Help)
- A formal greeting (e.g., Dear/Hello Dr. Agrawal)
- A concise description of the question/issue using standard spelling and grammar
- A formal closing with your name (e.g., Sincerely, XX)

EXCUSED ABSENCES

If you have a scheduling conflict or an emergency arises that affects your ability to complete any of the graded components of the course, please contact me as soon as possible to make alternative arrangements. You must provide documentation for a university-approved reason, such as hospitalization, family emergency, etc. Note that you must notify me AND obtain my permission to miss the exam PRIOR to its occurrence; otherwise, you will receive a zero for that exam grade.

If you are not sure whether your reason for missing class counts as an approved reason, please ask me! I am often willing to excuse absences when you communicate with me in a timely manner.

ACADEMIC INTEGRITY

All students are expected to adhere to standards of academic integrity. Cheating of any kind on any assignment will not be tolerated. It is disrespectful to your peers, the university, and to me. If you are unsure what might constitute a violation of academic integrity, consult me and/or the Soka website on academic honesty: <https://catalog.soka.edu/academic-honesty>. Any evidence of academic misconduct will be reported to the Office of the Dean of Students. Consequences for academic misconduct may include a failing grade in the course and official action (e.g., academic probation or suspension) by the University.

My advice to you is to always err on the side of caution. If you have questions about whether something is okay or might constitute academic dishonesty, just ask! I am happy to provide clarification and would much rather have a pleasant conversation with you before you submit an assignment than discuss concerns about academic integrity after you turn it in

UNIQUE CIRCUMSTANCES REQUIRING SPECIAL ACCOMODATIONS

Can you not see or hear very well? Is English your second or third language? Do you have to miss class because of work, childcare, or parole appointments? Is money tight, and you can't afford books right now? Can you concentrate better if you stand or walk around in class? If, at any point in the block/semester, a disability or personal circumstances affects your learning in this course, please contact me. I am committed to helping you succeed in this class as this course is intended for all students, including those with mental or physical disabilities, illness, injuries, impairments, or any other condition that tends to affect one's equal access to education negatively. If at any point in the term, you find yourself not able to fully access the space, content, and experience of this course, you are welcome (but not required) to contact me. For services and resources on physical, mental and social well-being, contact our on-campus counselor or the Student Health Center. If you have a documented condition (physical or psychological) and experience educational barriers due to your condition, I encourage you to contact Disability Services as soon as possible to explore what accommodations may allow you to access your education fully. None of these resources will disclose your specific condition to your instructors without your permission.

RESOURCES FOR YOU

WRITING ASSISTANCE

If you find yourself struggling with some aspect of the writing process or even just wanting a little extra feedback on your work, I highly encourage you to check out the Soka University Writing Center (<https://www.soka.edu/writing-center>).

TIME MANAGEMENT

For some helpful tips and tricks related to improving time management skills and creating good study habits, check out <https://www.soka.edu/writing-center/time-management> and <https://sites.rhodes.edu/time-management-tools/apps-managing-time-study>. There's even a link to some handy apps!

COUNSELING SERVICES

If you wish to speak to a counselor about any psychological and/or emotional distress that you are experiencing, you can get in touch with the Soka University Counseling Services (<https://www.soka.edu/student-life/living-sua/counseling-services>). April Nelson Afoa is Soka's primary counselor on campus. Students can request an appointment by contacting the counselor directly at Counseling@soka.edu or by calling (949) 480-4192.

NATIONAL HOTLINES

- National Domestic Violence Hotline: 1-800-799-7233
- National Eating Disorders Association Information and Referral Helpline: 1-800-931-2237
- National Sexual Assault Hotline: 1-800-656-4673
- National Suicide Hotline: 1-800-273-8255
- Substance Abuse and Mental Health Services Administration Treatment Referral Helpline: 1-877-726-4727