

Psychology 129: Human Learning and Memory
University of California, Santa Cruz
Summer 2024

Lecture: June 24 – July 26, 2024

Times: Mondays and Wednesdays, 9:00 am - 12:30 pm
Location: J Bask Aud 101

Professor: Benjamin C. Storm, Ph.D.

Office Hours: Mondays, 1:00-2:00, and by appt.
In Person: SS2, Room 345
Zoom: <https://ucsc.zoom.us/j/96118734364?pwd=8Gv2vrV4MqrEpt3cvA71CIXIaoq8cV.1>
Email: storm@ucsc.edu

Teaching Assistant: Golnoosh Soroor

Office Hours: Thursdays, 11:00-12:00, and by appt.
In Person: SS2, Room 145
Zoom: <https://ucsc.zoom.us/j/3790592632?pwd=a05XSXNEOHRKUXJ4VDRnYmdYYjBMQT09>
Email: gsoroor@ucsc.edu

Teaching Assistant: Barry Yao

Office Hours: Thursdays, 1:00-2:00, and by appt.
In Person: SS2, Room 301
Zoom: <https://ucsc.zoom.us/j/7651468892?pwd=3jtZaMi1HnxIR85EHIsHOglwD3sbXp.1>
Email: zyao29@ucsc.edu

Course Information:

The course introduces core topics in the study of human learning and memory. We will use a lecture format, but I encourage active questioning and discussion. To do well in the course, you should attend every class and keep up with the assignments and readings.

The course is in person. To get the full course experience, you will need to attend lecture in person. That said, I understand that sometimes it will be impossible to attend lecture (e.g., if you are sick), so lectures will be captured and available online. Lecture capture records what the projector is displaying with the audio from the instructor's microphone.

The quizzes and exam will need to be completed on the dates specified in the syllabus. Please talk to the professor ASAP if you think you might have a time conflict that prevents you from participating fully in the course.

You do not need to purchase a textbook. Instead, we will use a combination of articles, chapters, and free online modules. All reading assignments will be available on canvas.

Please visit us!!! The professor and teaching assistants are happy to meet with you to answer any questions you might have about the course, learning and memory, or anything else. Feel free to drop in during our office hours or set up an appointment to meet at another time.

Examinations:

Quizzes (32 points): There will be four “take-home” quizzes, each consisting of 25 multiple-choice questions. Each quiz will be made available on canvas towards the end of lecture on the dates specified below and need to be completed within the next four days (submitted by Sunday at 11:59 pm). You are allowed to use all course materials while taking the quizzes, but you must take them alone and without help from others. You will be allowed two attempts to take each quiz, with only your highest score counting towards your final grade. There will be no time limit on a given attempt, but you will need to complete it before the deadline. Students who fail to complete a quiz will receive a zero.

Quiz 1: June 26, 11:15 am - June 30, 11:59 pm

Quiz 2: July 3, 11:15 am - July 7, 11:59 pm

Quiz 3: July 10, 11:15 am - July 14, 11:59 pm

Quiz 4: July 17, 11:15 am - July 21, 11:59 pm

Final Exam (32 points): The final exam will be cumulative and consist of 80 to 100 multiple-choice questions. It will be administered in person during lecture on Wednesday, July 24. Students are allowed to bring one 8x11 sheet of paper, front and back. You can write/type anything you'd like on both sides of the paper, as long as it is your own writing/typing. Make-up exams will be given only when absolutely necessary and will need to be completed in person. No early exams will be possible. If you know you will miss the final exam, or if you do miss the final exam, email Professor Storm as soon as possible to let him know. Be sure to bring a green scantron (#882-E), two sharpened pencils, and a well-functioning eraser.

Final Exam: July 24, 9:00 am - 12:00 pm

Assignments:

The following assignments will be due on Canvas before 11:59 pm on the dates specified below. 10% will be deducted for each day an assignment is late, up to a maximum of 50%. No credit will be possible for assignments over 5 days late.

July 2 (Critical Reflection)

July 9 (Annotated Bibliography)

July 16 (Topic Paper)

July 21 (Video/Art/Media Assignment)

Critical Reflection (4 points). The paper should be 2 pages (double spaced, 12 point, times new roman font, no title page). It will be due by July 2 at 11:59 pm. When writing a critical reflection, the goal is to identify, question, and assess our assumptions. For this assignment, I would like you to write a brief essay reflecting upon your own study habits and what you have assumed, rightly or wrongly, are the most effective ways of studying.

A sample of the types of questions you might address: Going into the class, what did you believe were the most effective ways of studying? What did you believe were the least effective ways of studying? Why did you think this? Where and from whom did you learn how to study effectively? How do you know what you learned is correct? Have you learned anything so far in this class that led you to re-think your assumptions? Why or why not? Are you skeptical of anything that you learned in this class? Explain. End the paper by discussing what you learned in the process of engaging in this reflection, and how it might impact how you study in the future.

Annotated Bibliography (6 points). For this assignment you will write a paragraph summarizing a topic related to memory that you would like to explore in more detail and then prepare an annotated bibliography related to that topic. It will be due by July 9 at 11:59 pm, and ideally it will prepare you to write your Topic Paper (described below).

- 1) Summary Paragraph. The goal is simply to give us a general sense of the topic you plan to explore for your Topic Paper, which will help us judge whether the articles listed in your annotated bibliography are appropriate for giving you the background that you need to write your Topic Paper.
- 2) Annotated Bibliography. For this portion of the assignment, you will need to find 10 articles related to your topic of interest (they must be either peer-reviewed journal articles or research-oriented edited book chapters; please do not include references to textbooks, lecture slides, or unpublished online material). Remember that not all the articles need to be directly related to your specific topic. You can also include papers that provide the foundation necessary to place your topic into context. At least half of the articles should be empirical. When constructing your bibliography, be sure to provide the following information for each article that you include:
 - a. APA Style reference
 - b. A 2 to 3 sentence summary of the article. The summary should be written in your own words. Do not copy and paste from the article.
 - c. A 2 to 3 sentence explanation of why the article is relevant or important or interesting.

For Example:

Ditta, A. S., & Storm, B. C. (2016). Thinking about the future can cause forgetting of the past. *Quarterly Journal of Experimental Psychology*, *69*, 339-350.

Summary: Four experiments investigated the consequences of episodic future thinking. The researchers found that imagining the future caused participants to become less likely to recall related episodic descriptions (either that they had studied as part of the experiment, or that they had generated themselves from autobiographical memory).

Comments: This study is important because it follows up on previous work that failed to show the same sort of effect. It will be useful for discussing when and why thinking about the future causes people to forget about the past.

Topic Paper (20 points): The paper should be 5 pages (double spaced, 12 point, times new roman font, no title page). It will be due by July 16 at 11:59 pm. Your task is to choose a specific topic related to memory and to write a targeted literature review on that topic using the organization provided below. You are welcome to choose a topic that was covered in class or one that was not, but either way, it should focus on a specific question or idea relevant to the study of memory. You are expected to go beyond what was discussed in lecture by reviewing empirical articles that were not discussed in class. You will not get full credit for simply summarizing what was already discussed in lecture or the course readings. The paper should be written in APA-style and refer to peer-reviewed empirical journal articles (please do not rely solely on references to textbooks, lecture slides, or unpublished online material).

- 1) Introduce the topic and describe some of the basic findings/theories. What is your topic and why should we care about it? Give the reader some general context and then narrow things down to your specific focus. The paper should focus on a particular idea, finding, question, or issue. You might focus on a specific hypothesis, for example, or a specific implication or application of an area of work related to learning and memory.
- 2) Review several empirical journal articles related to your topic. What did the studies do? What did they find? Be sure to provide enough methodological detail to allow the results of the studies to be interpreted. Discuss strengths and weaknesses of the studies. Would you interpret the findings differently? Why?
- 3) Synthesize the results and discuss potential theoretical and or real-world implications, either for you or for society at large. Connect the research to what has been discussed in class and with your own passions and interests. You may also describe possible directions for future research or even propose a new study.
- 4) APA style reference page (not included in page count)

Video/Art/Media Assignment (6 points): Construct your own learning experience by creating a short video, game, poem, art piece, etc., highlighting a concept covered in the class. Just about anything that is creative and that produces something new and interesting will do. Ideally it will bring to life a concept, phenomenon, experiment, or other relevant point related to human memory. The goal is to effectively teach, demonstrate, or give emphasis to the concept in a memorable way. Be creative and have fun with it. Up to four students can collaborate on a single project; be sure to specify the names of all students who worked on the project to ensure they receive credit. Please submit the project in digital form by July 21 at 11:59 pm. If it can't be submitted in digital form, then you are welcome to bring the project to lecture on July 22. By default, projects may be shared with the class. If you would like us to not share your project with the class, simply let us know.

As an alternative, students may write a two-page paper on how memory is represented in a movie, show, novel, video game, or any other form of art or entertainment. What did it get right? What did it get wrong? How might it be useful for highlighting the nature of

memory to students in Psych 129? Be sure to connect your discussion to the ideas and concepts discussed in class and in the readings. You are encouraged to be creative in selecting the target for this assignment and in writing the paper. The connection to memory can be obvious or it can be subtle.

Grading Scale:

98-100% = A+ 88-89.9% = B+ 78-79.9% = C+ 62-67.9% = D
 92-97.9% = A 82-87.9% = B 70-77.9% = C 60-61.9% = D-
 90-91.9% = A- 80-81.9% = B- 68-69.9% = D+ 0-59.9% = F

Week	Dates	Topics	Readings
1	June 24	Introduction to the Class and Human Memory	Baddeley (2015); McDermott & Roediger (NOBA); Putnam et al (2016)
	June 26	Basic Processes in Remembering and Forgetting; Quiz 1	Rajaram & Barber (2008); Schacter (1999)
2	July 1	Learning and Memory	Agarwal & Roediger (2018); Pan & Bjork (2024); Storm & Soares (2024)
	July 3	Amnesia and Episodic Memory; Quiz 2	Dudukovic & Kuhl (NOBA); Squire (2009); Schacter et al. (2007)
3	July 8	Autobiographical Memory; Collective Memory	Conway & Loveday (2015); Hirst & Merck (2024)
	July 10	Constructive Processes in Memory; Quiz 3	Laney & Loftus (NOBA); Newman & Lindsay (2009)
4	July 15	Implicit Memory; Suppression	Anderson & Levy (2009); Marsh & Yang (2018); Wegner (2003)
	July 17	Creative Cognition; Sleep and Dreams; Quiz 4	Storm et al. (2020); Schechtman et al. (2024)
5	July 22	To Be Announced	Fawcett & Hulbert (2020); Gutchess & Rajaram (2023)
	July 24	Final Exam	

Important Summer Session 2024 Deadlines:

Session 1:

Add: Thursday, June 27

Drop: Monday, July 1

Request "W" Grade: Sunday, July 14

Change Grade Option: Sunday, July 21

For all dates and deadlines: <https://summer.ucsc.edu/studentlife/index.html>

For questions about dropping, requesting a W grade for a course, or withdrawing from the summer quarter, email summer@ucsc.edu.

Accessibility

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please affiliate with the DRC. I encourage all students to benefit from learning more about DRC services to contact DRC by phone at 831-459-2089 or by email at drc@ucsc.edu. For students already affiliated, make sure that you have requested Academic Access Letters, where you intend to use accommodations. You can also request to meet privately with me during my office hours or by appointment, as soon as possible. I would like us to discuss how we can implement your accommodations in this course to ensure your access and full engagement in this course.

Academic Integrity

All members of the UCSC community benefit from an environment of trust, honesty, fairness, respect, and responsibility. You are expected to present your own work and acknowledge the work of others in order to preserve the integrity of scholarship.

Academic integrity includes:

- Following exam rules and using only permitted materials during an exam
- Keeping what you know about an exam to yourself
- Incorporating proper citation of all sources of information
- Submitting your own original work

Academic misconduct includes, but is not limited to, the following:

- Accessing exam materials without permission, or disclosing exam content during or after you have taken an exam
- Copying/purchasing any material from another student, or from another source, that is submitted for grading as your own
- Plagiarism, including use of Internet material without proper citation
- Using cell phones or other electronics to obtain outside information during an exam without explicit permission from the instructor
- Submitting your own work in one class that was completed for another class (self-plagiarism) without prior permission from the instructor.

Violations of the Academic Integrity policy can result in dismissal from the university and a permanent notation on a student's transcript. For the full policy and disciplinary procedures on academic dishonesty, refer to the Academic Misconduct page at the Division of Undergraduate Education. Note that AI chatbots like Bard and ChatGPT will use text from sources without citation. If you include such text as your own writing, it will be considered plagiarism.

Psychology Department Undergraduate Advising

Declared Cognitive Science and Psychology majors are added to the psychugrads@ucsc.edu alias and will receive emails from Psychology Advising (psyadv@ucsc.edu). You should read these emails carefully, as they contain important information about enrollment, undergraduate opportunities, and other topics. If you are a declared Cognitive Science or Psychology major and have NOT received emails by the second week of the quarter, please email psyadv@ucsc.edu. In addition, you can find answers to common questions, an enrollment help page, and information on advising availability at <https://psychology.ucsc.edu/undergraduate/advising/index.html>. We also post many announcements from other campus departments and organizations on our Facebook page: <https://www.facebook.com/UCSCPpsychologyDepartment>.

Distribution of Course Materials (Lecture Notes, Slides, Videos, Quizzes, etc.)

The materials in this course are the intellectual property of their creators. As a student, you have access to many of the materials in the course for the purpose of learning, engaging with your peers, completing assignments, etc. You have a moral and legal obligation to respect the rights of others by only using course materials for purposes associated with the course. For instance, you are not permitted to share, upload, stream, sell, republish, share the login information for, or otherwise disseminate any of the course materials, such as: video and audio files, assignment prompts, slides, notes, syllabus, simulations, datasets, discussion threads. Conversely, any materials created solely by you (e.g., your videos, essays, images, audio files, annotations, notes) are your intellectual property and you may use them as you wish.

Title IX / Care Advisory

The Title IX Office is committed to fostering a campus climate in which members of our community are protected from all forms of sex discrimination, including sexual harassment, sexual violence, and gender-based harassment and discrimination. Title IX is a neutral office committed to safety, fairness, trauma-informed practices, and due process.

Title IX prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. If you have experienced sexual harassment or sexual violence, you can receive confidential support and advocacy at the Campus Advocacy Resources & Education (CARE) Office by calling 831-502-2273. In addition, Counseling & Psychological Services (CAPS) can provide confidential, counseling support, 831-459-2628. You can also report gender discrimination directly to the University's Title IX Office, 831-459-2462. Reports to law enforcement can be made to UCPD, 831-459-2231 ext. 1. For emergencies call 911.

Principles of Community

The University of California, Santa Cruz expressly prohibits students from engaging in conduct constituting unlawful discrimination, harassment, or bias. I am committed to providing an atmosphere for learning that respects diversity and supports inclusivity. We need to work together to build this community of learning.

I ask all members of this class to be open to and interested in the views of others, consider the possibility that your views may change over the course of the term, be aware that this course asks you to reconsider some "common sense" notions you may hold, honor the unique life experiences of your colleagues, appreciate the opportunity that we have to learn from each other, listen to each other's opinions and communicate in a respectful manner, keep confidential discussions that the community has of a personal (or professional) nature, and ground your comments in the texts we are studying.

Basic Needs, Counseling, and Psychological Services

Counseling and Psychological Services. Many students at UCSC face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation.

<https://caps.ucsc.edu/>

Slug Support Program. College can be a challenging time for students and during times of stress it is not always easy to find the help you need. Slug Support can give help with everything from basic needs (housing, food, or financial insecurity) to getting the technology you need during remote instruction.

To get started with SLUG Support, please contact the Dean of Students Office at 831-459-4446 or you may send us an email at deanofstudents@ucsc.edu.

Research Participation (Extra Credit Opportunity)

The Psychology Department provides an opportunity for students in this course to gain extra credit by participating in psychology research projects (surveys or experiments) for up to **two hours**, or by completing up to two alternative assignments (see below).

Follow these easy steps to sign-up for research projects:

- 1) Go to the Sona website at <https://ucsc.sona-systems.com>
- 2) If you are enrolled in the class at the start of the quarter, then an account should already be created for you. To log in for the first time, click “Forgot Password?” to retrieve the pre-set password. For those who added the class late, or for some reason the system won’t let you log in, you may need to click “Request Account.” Only request a new account if the “Forgot Password” link isn’t working.
- 3) **Always enter your UCSC email address.** You will receive your password via email.
- 4) Log in and follow the instructions to complete the Prescreening Questionnaire. Your responses on this questionnaire will determine your eligibility for different studies.

IMPORTANT: You can earn research credits points by either participating in studies (in-lab experiments or online surveys) or writing papers (the alternative assignment). Studies are posted throughout the quarter. Plan ahead and complete them as soon as possible. Check online often for new studies. If you know you cannot make it, and if the time until the study is more than 24 hours, you can cancel on Sona. If you fail to show up for a study, or fail to cancel in time, you will be marked as having an “unexcused no-show.” If you accumulate three unexcused no-shows, you will be prevented from signing up for more experiments. All participation must be completed by Friday of the last week of instruction.

What if you can’t find studies? Although some studies may be available right at the start of the quarter, there may not be enough for everyone. Please be patient, researchers will post new studies throughout the quarter. There is usually a big spike in hours during the last couple weeks. If you are concerned about the availability of hours, please don’t email your instructors or TAs, instead email the pool administrator so that they can try to address the issue directly (ucscresearchpool@gmail.com). This is also the best email to use if other issues arise during the quarter. If you participated in a study but didn’t receive credit after two days, please start by emailing the researchers directly. If the researchers don’t respond, then send an email to the pool administrator. Rest assured, however, that all pending timeslots will be given credit at the end of the quarter before a report is sent to your professor.

Alternative assignment: If you prefer to not participate in research projects (or if you are under the age of 18) you may substitute up to **two papers**, each critically evaluating a psychology research article. If you are doing the alternative written assignments, they must be submitted via canvas by the last day of instruction. If you have any questions or concerns please contact the research pool administrator at ucscresearchpool@gmail.com. Please note that plagiarized papers will result in a No Pass.

Each paper should be 1-2 pages (double spaced, 12-point, times new roman) and critically evaluate a psychology research article (addressing the questions shown below). You will need to find articles published in 2023 or 2024 in one of the following journals: (a) *Psychological Science*; (b) *Memory*; (c) *Memory and Cognition*.

- 1) What were the basic questions or hypotheses under investigation?
- 2) How did the researchers test their hypotheses?
- 3) What did the researchers find and how were these findings interpreted?
- 4) Are you convinced? Why or why not? Explain.