

LEARNING & MEMORY

PSYC 311— Fall 2024 — 3 credit hours

Class times:

- **Lectures:**
 - Monday & Wednesday 3-4:15pm in Founder's Hall 0116
 - **Final Exam:**
 - Wed December 13th 2-3:40pm
 - **Office hours:** get help, and/or chat!
 - Tuesdays 1-3pm in Alumni Hall 0130
(if you can't make that day/time, just email me and we can schedule)
 - **Last day to drop (100% refund):** Aug 30th **Last day to withdraw (W grade):** Oct 25th
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Your instructor:

- **Dr. Jason Finley**
 - email: jafinle@siue.edu
 - phone/text: 949-433-4216
 - office: 0130 Alumni Hall
 - office hours: Tuesdays 1-3pm in Alumni Hall 0130

Required course text:

Gluck, M. A., Mercado, E., & Myers, C. E. (2020). *Learning and memory: From brain to behavior* (4th ed.). Worth Publishers.

Tech we will be using:

- **Blackboard:** <https://bb.siue.edu>
 - PowerPoints, quizzes, and links to online experiments will be here.
 - PowerPoints will be posted as soon as they are complete and available.
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My Teaching Philosophy

My goal is to spark a sense of wonder in students, and to equip them with the skills to think better and become better people.

How to communicate with me?

I will do my best to respond to emails within 24 hours on weekdays. We also have a Q&A discussion board on Blackboard. Please address me as Dr. Finley or Professor Finley or Prof. Finley.

Course Catalog Description: Survey in topics related to conditioning, memory, and their integration. Students are recommended to have taken PSYC 208, PSYC 220 and PSYC 221.

Prerequisite(s): PSYC111 or equivalent (intro psych).

This class involves two independent but interrelated topics. The first is *learning*, which we can think of changes in behavior as a result of interactions with the world. The second is *memory*, which we can think of as the encoding and retrieval of information. Learning was traditionally taught from a behaviorist perspective, one which considers the construct of “memory” to be largely irrelevant. Memory was traditionally taught from a cognitive perspective, one which tries to go beyond simple associations to understand behavior. But since the turn of the millennium, these two fields have come back together due to advances in neuropsychological and computational (computer) modeling of cognition. This class will cover learning and memory from an integrative perspective, involving both behaviorist and cognitivist, animal and human models, behavioral and neuropsychological methods.

Course Objectives

After completing this course, you should have a better understanding of...

- The historical context of the field of learning and memory
- The neuroscience behind learning and memory
- The different types of memory and how they impact behavior
- Classical and Instrumental, and Operant conditioning (i.e., learning)
- Applications of learning research to applied psychology

Classroom Etiquette/Logistics:

- **Take notes.** Whether it’s lecture or reading the book, you’ll want to be taking notes. On paper or on computer? Both have their advantages; use whatever works best for you.
- Please be mentally present. I will strive to not be boring.
- Please do your part to *minimize distraction*. Silence your cell phone, no texting. Computers are for note-taking and other course-related activities, *not* for TikTok, YouTube, Instagram, Facebook, etc. Divided attention is no joke, guys.
- **Put your phone away and keep it away.**
DON’T MESS AROUND ON YOUR PHONE DURING CLASS.
I can totally see you doing it and will call you out.
- No antimatter in class; trust me on this.
- **Ask questions!** Seriously! Speak up whenever you have questions, don’t understand something, have answers, have ideas, etc. Asking questions is a sign of WISDOM, and it’s also a great way to learn.

- You may make recordings of class, but note that instructional material created by the professor is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International license (CC BY-NC-SA 4.0). Meaning that you can share and adapt the material as long as you give credit and it is for non-commercial purposes. Content created by third parties (e.g., movies, textbooks) is covered by its own copyright licenses.

Accommodations

- If you have accommodations through ACCESS, please talk to me so I can work with you.

HOW TO LEARN AND DO WELL IN COLLEGE:

Lessons from Cognitive Psychology

- Create a study group that meets before each exam to review class material. Talk through things together, explain things to each other, make connections between concepts.
- If you have three hours total to study, three 1 hour sessions spaced apart are much more effective than one three hour session the night before the exam.
- Learning requires adequate sleep. So get some sleep.
Also, stay hydrated (i.e., drink water).
- Taking notes in your own words** is a far more effective learning tool than either writing down exactly what I say or simply reviewing the text or lecture notes. Simply reviewing PowerPoint slides may be the worst strategy you could use, especially if you were not in class that day. Also, if you take notes on paper, the process of physically organizing your notes will influence your mental organization as well. Taking notes on computer can be fine too, and has the added benefit of searchable text.
- QUIZ YOURSELF.** The **retrieval practice effect** (aka the testing effect) shows us that every time you retrieve something from memory, you strengthen that memory. Wanna hear some really ineffective study strategies? Re-reading your notes, looking over the powerpoints, re-reading the book and highlighting/underlining. Those things might make you *feel* like you understand and remember stuff, but that doesn't mean you actually do! Instead, try things like this:
 - After class, think back over the topics you learned. Flip to a blank page in your notes and jot down the main topics from memory. Make an outline. Maybe try explaining to someone else what you learned that day.
 - When reading the book, read a few pages, then pause to mentally review what you learned. Jot things down on a blank page without looking back at the text yet. See? You're quizzing yourself!
 - Make and use flashcards (on paper or online using websites like quizlet.com). But don't cheat! Look at one side of the card (e.g., a key term) and actually retrieve the meaning and say it out loud before flipping over the card to see the answer. If you just flip without retrieving first, and you're like "yeah I knew that!" you're not doing yourself any favors.

- d. Use any practice exam/quiz questions if available. Don't look at the answers until after you've tried to retrieve from your memory.
 - e. Use any review questions in the textbook chapters.
 - f. Try writing your own multiple choice questions about key topics
 - g. Think of it this way: let's say an upcoming test would require you to throw a basketball into the hoop from a certain distance. What do you think would be the most effective way to prepare for that test: (a) reading about basketball over and over again, (b) watching videos of other people throwing basketballs, or (c) actually practicing throwing the basketball yourself? Obviously, c. It's the same with academic tests. Your task on the test will be to remember things and apply the concepts you've learned; so that's what you should actually practice!
6. *You are not the multi-tasker you think you are!* You can only do one task at a time that requires controlled attention. Switching between tasks has cognitive costs. If you're using a computer to take notes, and you also have other programs like messages going, your attention is divided and your comprehension will suffer. If you're studying and there is noise or other stuff going on, your attention is divided and your comprehension will suffer. Study in a quiet environment with no distractions.
 7. Relate concepts to your personal experience when applicable.
 8. Don't wait until you are struggling to come to me for help! **Thinking you understand** and **actual understanding** is not the same thing. Successful people seek out feedback about their knowledge rather than rely on subjective internal evaluations of learning.
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Evaluation: Your grade in this course will be based on:

	Points
Exams Midterm (chapters 1-6): 12 Final (chapters 7-12): 12	24
Quizzes 11 worth 3 each	33
Assignments 11 worth 3 each	33
Online Experiments 3 worth 3 each	9
Syllabus quiz	1
Total:	100

There are 100 points possible in this course.

Final letter grades will be based strictly on the following scale:

89.50	≤	A	≤	100
79.50	≤	B	<	89.50
69.50	≤	C	<	79.50
59.50	≤	D	<	69.50
0	≤	F	<	59.50

Final scores will be rounded to two digits. For example, a final score of 89.495 would be rounded up to 89.50, and a final score of 89.494 would be rounded down to 89.49.

Exams:

The midterm will cover the first half of the course, and the final will cover the second half. Both exams will be conducted in person, barring the unforeseen. They will most likely be a mix of multiple choice and short answer. If you miss an exam, you'll get a zero. If you get sick or have some disaster or whatever, you have to communicate to me about it AS SOON AS POSSIBLE, BEFORE the exam. Makeup exams may be given at my discretion, and may be different (and more difficult) than the regular exam.

Quizzes:

Each chapter will have a quiz. On Blackboard. Due dates listed in the schedule at the end of this syllabus. They will be 12 multiple choice questions based on a *pool* of questions (i.e., you get a random set of questions out of a large pool of possible questions), multiple attempts will be allowed, and your highest score will be the one that counts for your grade. You can turn

in one quiz up to 2 weeks late with no penalty. Additional quizzes completed late will earn half credit if completed within 2 weeks of the due date, with the caveat that no late work will be accepted after the final exam.

Assignments:

These will involve some reading, writing, and even watching an actual movie! Assignments completed late will earn half credit if completed within 2 weeks of the due date, with the caveat that no late work will be accepted after the final exam.

Online Experiments:

These will give you some firsthand experience participating in tasks like those in the research you will be learning about! On Blackboard I'll post a link to each experiment, and then you'll answer some questions about your experience. Experiments completed late will earn half credit if completed within 2 weeks of the due date, with the caveat that no late work will be accepted after the final exam.

Syllabus Quiz:

This is exactly what it sounds like, dude.

Extra Credit???

I reserve the right to *potentially* offer extra credit opportunities. Any such opportunities would be equally available to all students, so don't ask me for special extra credit just for you.

Course Policies and University Policies

Academic integrity/plagiarism

The expectations and academic standards outlined in the [Student Academic Code \(3C2\)](#) apply to all courses, field experiences and educational experiences at the University, regardless of modality or location.

Plagiarism is the use of another person's words or ideas without crediting that person. Plagiarism and cheating will not be tolerated and may lead to failure on an assignment, in the class, or dismissal from the University, per the [SIUE academic dishonesty policy](#). Students are responsible for complying with University policies about academic honesty as stated in the [University's Student Academic Conduct Code](#).

- We will cover how to properly read and cite sources in class. You are responsible for understanding what plagiarism is; if you have any questions at all, you should discuss them with the professor or your TA BEFORE you turn in a plagiarized paper. A lack of knowledge of appropriate citation and referencing format will not excuse you from point deductions from written assignments or disciplinary action in the case of plagiarism.

Unless expressly allowed by the instructor, the use of artificial intelligence (AI) tools and applications (including ChatGPT, DALL-E, and others) to produce content for course assignments and assessments is a violation of SIUE's academic policy and is prohibited.

We have ways of detecting plagiarism and use of AI, so don't do it!

Psychology Department writing policy

As a student in this course, you will be expected to display university-level writing, which includes completing course assignments that meet the following basic writing criteria.

Specifically, all written assignments completed for this course should include:

- clear transitions from sentence to sentence and idea to idea (i.e., paper is organized/flows well);
- verb tense consistency;
- clear and unambiguous sentences and ideas;
- writing that is free of typos, spelling errors, and major grammatical errors;
- properly formatted citations and references (if relevant).

This is by no means an exhaustive list of basic writing skills, but will give you an idea of what we are looking for in our papers. If you feel you need help with your writing, you are encouraged to seek assistance from the [writing center](#) on campus or utilize one of the many [online resources](#) they have identified to help students. If your graded written assignments fail to meet the basic writing requirements listed above (and any others found to be appropriate by your instructor), the instructor will stop the grading process and return the paper to you with the grade of 0. You will have 48 hours to return the assignment in an acceptable form; if it still fails to meet the basic writing criteria, the grade of 0 will remain.

Regular and Substantive Interaction

Regular and substantive interaction (RSI) is required as part of new U.S. Department of Education regulations for distance (online) education and it supports student learning in all learning environments (online, face-to-face, hybrid, hyflex, etc.). SIUE faculty participate in RSI by initiating frequent and timely opportunities to engage with students. Because there are several ways to implement RSI, such as facilitating online discussions, scheduling a Zoom conference with a student, or holding regularly scheduled review sessions before tests, RSI may look different in every class. To learn more about RSI, use the Online Tips links for Faculty and Students in your Blackboard course websites or visit the [Faculty Resources for Regular and Substantive Interaction webpage](#).

Diversity and Inclusion

SIUE is committed to respecting everyone's dignity at all times. In order to learn, exchange ideas, and support one another, our virtual and physical classrooms must be places where students and teachers feel safe and supported. Systems of oppression permeate our institutions and our classrooms. All students and faculty have the responsibility to co-create a classroom that affirms inclusion, equity, and social justice, where racism, sexism, classism, ableism, heterosexism, xenophobia, and other social pathologies are not tolerated. Violations of this policy will be enforced in line with the SIUE Student Conduct Code.

The Hub <https://www.siu.edu/csdi> is an excellent resource for students for support and community. Any person who believes they have experienced or witnessed discrimination or harassment can contact Ms. Jamie Ball, Director in the Office of Equal Opportunity, Access and Title IX Coordination at (618) 650-2333 or jball@siue.edu. There is also an online form for reporting bias incidents at https://cm.maxient.com/reportingform.php?SIUEdwardsville&layout_id=10.

Pregnancy and Newly Parenting Policy

This policy and procedure are established to ensure the protection and equal treatment of pregnant students, students with pregnancy-related medical conditions including as a result of the termination of pregnancy, and students who become new parents including parents adopting or fostering to adopt for the first 12 weeks a child is in the home, in accordance with Federal and State guidelines and regulations. "New Parents" refers to a parent who has recently welcomed a newborn or adopted a child or is fostering to adopt a child and needs support to mitigate the disruption in academic progress within the first 12 weeks of parenting or a parent that needs support due to medical necessity attributed to pregnancy or delivery of a child; care of newborn; or lactation within the first year of child's life or legal adoption/fostering. Visit [Policies & Procedures - Student Rights and Conduct - Newly Parenting Policy - 3C15](#) to view the full policy and learn how to request accommodations through the Office of Equal Opportunity, Access, and Title IX Coordination (EOA).

Technology Privacy Information

We will be using Blackboard in this course. View the [Anthology Blackboard Privacy Statement](#) to review how your data is being used and stored.

Additional Support

Services for Students Needing Accommodations

It is the policy and practice of Southern Illinois University Edwardsville to create inclusive learning environments. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or to accurate assessment of achievement—such as time-limited exams, inaccessible web content or the use of non-captioned videos—please contact Accessible Campus Community and Equitable Student Support (ACCESS) as soon as possible. In order to properly determine reasonable accommodations, students must register with ACCESS either online at siue.edu/access or in person in the Student Success Center, Room 1203. You can also reach the office by emailing us at myaccess@siue.edu or by calling [618-650-3726](tel:618-650-3726).

If you feel you would need additional help in the event of an emergency situation, please notify your instructor to be shown the evacuation route and discuss specific needs for assistance.

Academic and Other Student Services

As an enrolled SIUE student, you have a variety of support available to you, including:

- [Lovejoy Library Resources](#)
- [Academic Success Sessions](#)
- [Tutoring Resource Center](#)
- [The Writing Center](#)

- [Academic Advising](#)
- [Financial Aid](#)
- [Campus Events](#)
- [Counseling Services](#)

If you find that you need additional support, please reach out to me and let me know.

Cougar Care

Dealing with the fast-paced life of a college student can be challenging, and I always support a student's decisions to prioritize mental health. Students have access to counseling services on campus (Student Success Center, 0222). Make an appointment by visiting cougarcare.siu.edu or by calling [618-650-2842](tel:618-650-2842).

Student Success Coaches

[Student success coaches](#) work across campus to serve the SIUE student population with the tools and resources to adjust to and meet the demands of the college experience. Success coaches provide direct services such as time management support and referrals to campus resources. If you find yourself in need of academic or personal support, or in a situation that is preventing you from being successful in the classroom, please utilize [Starfish](#) to connect with a coach as soon as possible. The sooner you engage, the sooner you can access the information or tools you need that may help you get back on track.

Subject to change notice

All material, assignments, and deadlines are subject to change with prior notice. It is your responsibility to stay in touch with your instructor, review the course site regularly, or communicate with other students, to adjust as needed if assignments or due dates change.

Note: Quizzes and Assignments are due by 11:59pm on the Sunday at the end of each week. For example, the Metaphors assignment is due Sun Aug 25th.

Week	Date	Topic	Reading Chapter	Quiz Due Sunday by 11:59pm	Assignment Due Sunday by 11:59pm
1	Mon Aug 19	What is memory? Associations. Terminology: Learning vs Memory. Evolution.			Metaphors
	Wed Aug 21	Behaviorism to Cog Psych, Metaphors, Expanded Taxonomy, Views from Beyond Psych			
2	Mon Aug 26	Brains	2	Ch. 2 Quiz	Learning Styles, Syllabus Quiz
	Wed Aug 28	"	2		
3	Mon Sept 2	LABOR DAY: NO CLASS			
	Wed Sept 4	Habituation, Sensitization, and Familiarization (non-associative learning)	3		Ch. 3 Assignment
4	Mon Sept 9	"	3	Ch. 3 Quiz	Classical Conditioning Worksheet
	Wed Sept 11	Classical Conditioning	4		
5	Mon Sept 16	"	4	Ch. 4 Quiz	Operant Conditioning Worksheet
	Wed Sept 18	Operant Conditioning	5		
6	Mon Sept 23	"	5	Ch. 5 Quiz	Online Exp: Implicit Association Task
	Wed Sept 25	Addiction + Bonus Topic	5		
7	Mon Sept 30	Generalization, Discrimination Learning, and Concept Formation	6	Ch. 6 Quiz	Digital Preservation
	Wed Oct 2	Continued + Digital Preservation (External Memory)	6		
8	Mon Oct 7	Midterm Exam			
	Wed Oct 9	Memory: Episodic and Semantic	7		

Week	Date	Topic	Reading Chapter	Quiz Due Sunday by 11:59pm	Assignment Due Sunday by 11:59pm
9	Mon Oct 14	Memory: Episodic and Semantic	7		Online Exp: Self Reference
	Wed Oct 16	"	7		
10	Mon Oct 21	"	7	Ch. 7 Quiz	Clive Wearing
	Wed Oct 23	"	7		
11	Mon Oct 28	Involuntary Memory (+?)	8	Ch. 8 Quiz	Proust
	Wed Oct 30	Skills			
12	Mon Nov 4	Working Memory	9	Ch. 9 Quiz	Online Exp: Digit Span
	Wed Nov 6	"	9		
13	Mon Nov 11	Development	12	Ch. 12 Quiz	Alzheimer's
	Wed Nov 13	"	12		
14	Mon Nov 18	Emotion	10	Ch. 10 Quiz	Trauma & Memory
	Wed Nov 20	"	10		
	Mon Nov 25 - Fri Nov 29	Thanksgiving week off			
15	Mon Dec 2	Social	11	Ch. 11 Quiz	Memory Movie Assignment
	Wed Dec 4	"	11		
16	FINAL EXAM: Tues Dec 10, 2-3:40pm				