LEARNING AND MEMORY (PSY 433/533)
University of Oregon
Spring 2018
TR 10:00-11:20am ♦ Straub 245 ♦ 4 credits ♦ CRN: 35084, 35095
http://canvas.uoregon.edu

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Required Reading
♦ Gluck, M.A., Mercardo, E., & Myers, C. E. (2016). *Learning and Memory: From Brain to Behavior*. (3rd Ed). New York, NY: Worth Publishers. (Available at the Duckstore, the publisher's website, and on reserve at Knight Library). https://store.macmillanlearning.com/us/search/?text=gluck
♦ All other required readings are available as PDF files on Canvas

Course Overview
This course will cover a range of research topics related to learning and memory. You will develop a clear understanding about different memory systems, the factors that promote successful remembering and those that contribute to forgetting, how distinct brain regions contribute to memory, and how memories are influenced by factors such as emotion and aging. You will also learn about various methodological approaches that are used in memory research: from behavioral methods to neuroimaging to studies of neuropsychological patients. In addition to learning about theoretical topics and principles, you will also develop an understanding and appreciation for how memory operates in the 'real world.'

Learning Outcomes
By the end of this course you should be able to:
♦ Identify and describe major theories, research findings, and methodological approaches in learning and memory;
♦ Critically examine and synthesize research on learning and memory, communicating your ideas clearly and effectively;
♦ Apply knowledge about how learning and memory work to your own life.

Student Workload
When you complete this course, you will earn 4 credits toward your degree. Four credits are the equivalent of 120 hours of work across the term, or 12 hours per week for 10 weeks. You will spend 3 hours in class each week. The other 9 hours will be spent completing reading assignments, posting on the discussion forum, studying for quizzes and exams, and working on your paper assignment.

Course Requirements

Reading Assignments
Reading assignments will consist of chapters from the textbook and in some cases, review articles or chapters from other sources. You should complete the assigned readings ***before*** coming to class. Completing the reading assignment before class will make it much easier for you to follow and stay engaged in our class sessions, ultimately improving your memory for the material.

Discussion Questions
To facilitate class discussion, you will be required to post on the Canvas discussion forum five times this term (see Course Schedule). Your post can be a query, puzzle, or issue about the assigned reading that you would like to have discussed in class, or it can be a response to one of your classmate's posts. **Discussion questions/responses must be submitted on the Canvas discussion forum by 8am on the day of the class session.** Your diligence and thoughtfulness in meeting this requirement will count for 5% of your grade in this course. There are no make-ups for missed discussion posts.

In-Class Activities
In order to promote and enhance your understanding of class material, I will frequently incorporate demonstrations and activities into our class sessions. Activities may include completing learning exercises alone or in groups, writing thought pieces or reactions to specific questions, and collecting and examining class data. Seven of these activities will require written responses that will be collected and scored (see Course Schedule). Your two lowest scoring in-class activity assignments will be dropped, with the remaining five counting toward 5% of your grade. ***Class activities cannot be made up;*** if you miss an in-class activity, that will count as one of the two scores that will be dropped.

Quizzes
Short quizzes will be given at the beginning of most Tuesday class sessions (see Course Schedule). Quizzes will consist of five multiple-choice questions that pertain to recently presented course material and the assigned readings. Questions will sometimes be drawn from readings that have been assigned but have not yet been discussed in class (even those due the day of the quiz); however, these questions will be of a more general nature and should be easily answered if you have read the material. Of the seven quizzes, the two with the lowest scores will be dropped, with the average score of the remaining five yielding 10% of your final grade. ***No make-up quizzes will be offered***; if you miss a quiz, that grade will be one of the two that will be dropped.

Exams
There will be two midterms and a final exam, each composed of multiple-choice and short-answer questions. Exam questions will be based on material presented in class and material from the reading assignments, and will require you to go beyond memorization to apply, analyze, and synthesize information. The final exam will be cumulative but will emphasize course material covered since the second midterm exam. ***Make-up exams are not permitted except in documented emergency situations.***

Critique Paper (Undergraduate students enrolled in PSY 433 ONLY)
The objective of the critique paper is for you to think critically and independently about learning and memory research and to communicate your ideas effectively. You will carefully choose and read one set of two pre-selected empirical articles (available on Canvas). Each set of articles focuses on a current debate in the field of learning and memory, presenting evidence on opposing sides of the debate. Your assignment is to introduce the debate, briefly summarize the two articles, compare, contrast, and critique the methods and conclusions of each article, and propose a thoughtful follow-up study that could help shed additional light on the debate. Papers should be 7-9 double-spaced pages. Additional information about this assignment will be provided in a

separate handout. **Your critique paper is due on Canvas on Thursday, May 31st.** Late papers will be penalized one letter grade per day late.

Research Proposal Paper (Graduate students enrolled in PSY 533 ONLY)
The research proposal will allow you to explore a research topic related to learning and memory in depth and propose a novel experiment to address an unanswered question. The proposal should include a literature review (going beyond the readings discussed in class), experimental design, predicted results, and a discussion of the study's implications. Research proposals should be approximately 10-12 pages (double-spaced) in APA format and include at least 10 references. More details will be provided in a separate handout.

Grading
Final grades in this course will be determined by the following:
   ♦   Discussion Questions: 5%
   ♦   In-Class Activities: 5% (best 5 of 7)
   ♦   Quizzes: 10% (best 5 of 7)
   ♦   Paper: 20%
   ♦   Exams: 60% (20% each)

Grades will be distributed as follows:

		B+	87-89%	C+	77-79%	D+	67-69%
A	93-100%	B	83-86%	C	73-76%	D	60-66%
A-	90-92%	B-	80-82%	C-	70-72%	F	0-59%

I reserve the right to adjust grades *up* (i.e., to curve); grades will never be adjusted downward. Whether grades are rounded up (e.g., whether an 89.5% counts as 90%) will depend on the distribution of scores. If you want to guarantee a score in the A range, you should plan to achieve a score of 90.00% or higher! Please see the psychology department guidelines for a description of the type of achievement that each grade signifies:
http://psychology.uoregon.edu/courses/department-grading-standards/

CLASSROOM ETIQUETTE

As a courtesy to your instructor and to your fellow classmates, please arrive on time for class and stay for the duration of the class period. Getting up in the middle of class is very disruptive. Please turn off phones and any electronic devices that might be distracting to others at the beginning of class. Be attentive (i.e., no texting, watching videos, web-surfing, etc.). It is the policy of the University of Oregon to support and value diversity, and I expect you to treat your fellow students and your instructor with respect.

SPECIAL ACCOMMODATIONS

Accessible Education Center (AEC)
If you have a documented disability and anticipate needing accommodations in this course, please notify me as soon as possible. Also, please request that a counselor at the Accessible Education Center (uoaec@uoregon.edu, 541-346-1155) send a letter verifying the type of accommodation that is appropriate. For a list of resources provided by the Accessible Education Center, please see http://aec.uoregon.edu.

Students for Whom English is a Second Language
 If you are a non-native English speaker and think you may have trouble in this course due to language difficulties, please see me as soon as possible to make any necessary special arrangements.

ACADEMIC INTEGRITY

We take academic integrity seriously. **All work submitted in this course must be your own.** Cheating includes providing or accepting information on an exam or assignment, or allowing someone else to copy your work. In addition, lying to try to get points (e.g., lying about having turned in an assignment on time) is considered academic dishonesty and will be treated as cheating. Plagiarism means copying someone's written work without proper citation (this includes your classmate's work, scholarly articles, Wikipedia, or other websites).

All instances of cheating and plagiarism will have serious consequences. You will receive a zero on the assignment and be reported to UO's student conduct coordinator. If the offense is serious, you will receive an F in the course.

Simply put: Don't cheat and don't plagiarize. You will be mad at me, and (hopefully) disappointed in yourself. It's not worth it. If you have any questions about what constitutes academic dishonesty, please ask me.

For more information about academic misconduct, see the University Student Conduct Code at http://dos.uoregon.edu/conduct. Additional information about plagiarism is available at http://researchguides.uoregon.edu/citing-plagiarism.

TITLE IX

I am a student-directed employee. For information about my reporting obligations as an employee, please see titleix-uoregon.edu. Students experiencing any form of prohibited discrimination or harassment, including sex or gender based violence, may seek information on http://safe.uoregon.edu, https://respect.uoregon.edu, https://titleix.uoregon.edu, or https://aaeo.uoregon.edu, or contact the non-confidential Title IX office (541-346-8136), AAEO office (541-346-3123) or Dean of Students offices (541-346-3216), or call the 24-7 hotline 541-346-SAFE for help.
I am a mandatory reporter of child abuse. Please find more information at https://hr.uoregon.edu/policies-leaves/general-information/mandatory-reporting-child-abuse-and-neglect/presidents-message

UO DREAMERS

I support all students regardless of immigration status or country of origin. As a Dreamer Ally, I support Dreamer students and seek to promote their sense of their sense of belonging and safety as they pursue their higher education goals. For more information and resources, please visit the UO Dreamers page (https://blogs.uoregon.edu/dreamers/) and the Immigration FAQs page (https://international.uoregon.edu/immigration_faq). I commit to not sharing your status with anyone if you reveal it to me, but also remind you that **when interacting with faculty, staff, and offices around campus, you are never required to reveal your immigration status.**

Course Schedule
The course schedule may change, but quiz/exam dates will not change unless absolutely necessary.

Week	Date	Topic	Reading	Assignments
1	T 4/3	Introduction to Memory	Syllabus	
	R 4/5	Experimental Methods	Ch. 1 & 2	
2	T 4/10	Non-associative Learning	Ch. 3	**Quiz 1**
	R 4/12	Associative Learning *In-Class Activity 1*	Ch. 4 & 5	**Discussion Q1**
3	T 4/17	Working Memory & Cognitive Control	Ch. 9	**Quiz 2**
	R 4/19	Working Memory & Cognitive Control *In-Class Activity 2*		
4	T 4/24	**Midterm I**		***Midterm I***
	R 4/26	Guest Lecture	TBA	
5	T 5/1	Episodic Memory: Encoding I	Ch. 7	**Quiz 3**
	R 5/3	Episodic Memory: Encoding II *In-Class Activity 3*	Squire (2009)	**Discussion Q2**
6	T 5/8	Episodic Memory: Retrieval	Rugg & Yonelinas (2003)	**Quiz 4**
	R 5/10	Forgetting *In-Class Activity 3*	Levy et al. (2010)	**Discussion Q3**
7	T 5/15	False Memories	Schacter (1999)	**Quiz 5**
	R 5/17	**Midterm II**		***Midterm II***
8	T 5/22	Semantic Memory	Yee et al. (2013)	**Discussion Q4**
	R 5/24	Skill Learning *In-Class Activity 5*	Ch. 8	
9	T 5/29	Emotion & Memory	Ch. 10	**Quiz 6**
	R 5/31	Social Learning *In-Class Activity 6*	Ch. 11	**Critique paper due**
10	T 6/5	Development & Aging	Ch. 12	**Quiz 7**
	R 6/7	Super Memory *In-Class Activity 7*	Luria (1968) Parker et al. (2006)	**Discussion Q5**
11	T 6/12 @8am	**Final exam**		***Final exam***

Reading List

All of the following readings are posted on Canvas. Please see Course Schedule for reading assignments.

Levy, B. J., Kuhl, B. A., & Wagner, A. D. (2010). The functional neuroimaging of forgetting. In S. Della Sala (Ed.), *Forgetting*, pp. 135-163. Hove and New York: Psychology Press.

Luria, A. R. (1968). Excerpt (pp. 7-38) from *The mind of a mnemonist: A little book about a vast memory*. New York: Basic Books.

Parker, E. S. Cahill, L., & McGaugh, J. L. (2006). A case of unusual autobiographical remembering. *Neurocase, 12*, 35-49.

Rugg, M. D., & Yonelinas, A. P. (2003). Human recognition memory: A cognitive neuroscience perspective. *TRENDS in Cognitive Sciences, 7*, 313-319.

Schacter, D. L. (1999). The seven sins of memory: Insights from psychology and cognitive neuroscience. *American Psychologist, 54*, 182-203.

Squire, L. R. (2009). The legacy of patient H.M. for neuroscience. *Neuron, 61*, 6-9.

Yee, E., Chrysikou, E. G., Thompson-Schill, S. L. (in press). The cognitive neuroscience of semantic memory. In K. Ochsner and S. Kosslyn (Eds.), *The Oxford Handbook of Cognitive Neuroscience*, pp. 353-374, Oxford: Oxford University Press.