

PSY 433/533 Learning and Memory

CRN: 37005 (PSY 433, 4 credits); CRN: 37006 (PSY 533, 4 credits)

MW 4:00-5:20 in 245 Straub



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Course Description

It has often been quoted that “the purpose of psychology is to give us a completely different idea of the things we know best.” This quote is of particular relevance to this course in that while we already may have an idea about what learning and memory is, when we attempt to define these processes we come to find that they span a great many more definitions and abilities than we might first expect. For instance, a sea slug reacts less and less to a light touch on its gill – is this learning and memory? A person looks up a phone number and recites the number over and over while walking towards the phone – is this learning and memory? A patient with amnesia still retains the knowledge of how to ride a bike – is this learning and memory? A dog salivates to the sound of a can opener – is this learning and memory? In addition to reviewing the many abilities that are based on the processes of learning and memory, we will also review the cognitive, behavioral, biological, and practical aspects as to *how* we learn and remember. The consilience of these systems and how they are involved in different aspects of learning and memory, such as classical and operant conditioning, observational and associative learning, and the encoding, storage, and retrieval of information, will be the main emphasis of the course.

“The whole usefulness of education consists only in the memory of it”

– Hugh of St. Victor, 12th Century

Course Pre-Requisite

Successful completion of WR 121 and 122 or 123 and Psychology 303 (Research Methods) are pre-requisites for this course. Proficiency in research methods is particularly important as many of the concepts related to learning and memory that we will review in the course are based on findings from experimental research.

Textbook

Required Books (1):

Gluck, M. A., Mercado, E., & Myers, C. E. *Learning and Memory* 2nd Ed. New York: Worth Publishers.

Blackboard

Blackboard will be used in this course as an online resource for the syllabus, powerpoint lecture slides, assignments, study guides, additional/supplemental readings, and weblinks. It is recommended that you frequently check Blackboard in order to stay up to date on the course materials that are posted from week to week. Please note that while you may have access to the lecture slides ahead of time, attending class will be crucial to doing well in the course. The blackboard site for this course can be found at: <http://blackboard.uoregon.edu>.

Course Format

The material in this course will be presented through a combination of assigned reading from the text and additional handouts, class lectures, in-class discussion, and demonstrations. Lecture material and readings will have some overlap, but will not be replications of each other; some lecture material will not be covered in the readings and vice versa. You are expected to do the assigned reading *before* the class period in which it is due.

Course Learning Objectives, Activities, and Assessment

Learning Objectives	Activities	Assessment
1) To differentiate among theoretical approaches for understanding human learning, memory, and behavior.	Lectures, readings, group discussions.	Objective exams, short answer essays, quizzes.
2) To demonstrate an understanding of the psychology of learning and memory as a scientific and applied discipline.	Lectures, readings, group discussions, in-class demonstrations.	Objective exams, short answer essays, quizzes.
3) To gain a sound understanding of the behavioral, cognitive, and biological systems that influence human and animal learning.	Lectures, readings, group discussions, in-class demonstrations and videos.	Objective exams, short answer essays, quizzes.
4) To employ skeptical inquiry, critical thinking, and scientific analysis to the study of learning and memory.	Class and group discussions, quizzes, videos.	Short answer essays, thought pieces
5) To critically examine the learning and memory processes in ourselves and understand how they may be improved.	Class discussions, thought pieces	Thought pieces.

Course Points and Grading

Quizzes: 30 points
 Thought Pieces: 20 points
 Midterm Exam 1: 75 points
 Midterm Exam 2: 75 points
 Final Exam: 100 points
 Term Paper: 50 points

Total Points: 350

Final course grades will be assigned based on your total percentage points in the course (i.e., your final point total/300), based on the table below. All written work in this class (thought pieces and short answer exam questions) will be graded based on accurate demonstration of knowledge, critical thinking skills, and cohesiveness of writing. Note that extra credit is not offered in the course.

GRADE	PERCENTAGE		GRADE	PERCENTAGE
A+	99-100%		C	72-77.9%
A	92-98.9%		C-	70-71.9%
A-	90-91.9%		D+	68-69.9%
B+	88-89.9%		D	62-67.9%
B	82-87.9%		D-	60-61.9%
B-	80-81.9%		F	59.9% and Below
C+	78-79.9%			

Coursework

Quizzes (30 points): There will be 6 quizzes throughout the term. Each quiz is worth 6 points and will consist of 3 multiple-choice questions that will be based on the readings and lecture material for that week. Note that if you are absent, quizzes cannot be made up. However, I do drop one of the quizzes so that only 5 quizzes count toward your final grade. Therefore, if you miss a quiz, it will be the quiz that is dropped.

Thought Pieces (20 points): Five times throughout the term (see course calendar for specific dates), you will be asked to write an in-class reaction to a particular question posed during class. You will be given 5 to 10 minutes to write out your response and no preparation is required. Each thought piece will be worth 5 points. Thought pieces cannot be made up. However, I do drop one of the thought pieces so that only 4 count toward your final grade. Therefore, if you miss a thought piece, that will be the one that is dropped.

Exams (250 points): There will be three exams throughout the term: two midterm exams and a final exam (see Course Calendar for specific dates). Each exam will cover the textbook chapters listed in the course calendar in addition to the lecture material we covered in class. The exams will consist of multiple-choice, fill-in-the-blank, and short answer questions. The midterm exams are worth 75 points each and the final exam will be worth 100 points. The final exam will be comprehensive, but with emphasis on the material covered since the previous midterm. Study guides will be handed out prior to the exam date.

Learning and Memory Paper (50 points): The purpose of this paper is to examine a learning and memory-related issue in your own life. This can include any type of performance in your life (e.g., academic, occupational, personal, athletic, etc.) for which learning and memory plays a role in. In this

paper, you will first describe your learning/memory processes and strategies for accomplishing that task/topic. You will then search for three articles on the topic, which should be peer-reviewed articles from academic journals. Then, *based on the articles found*, you should critique your learning and memory processes/strategies by identifying the factors that positively and/or negatively contribute to your own learning/memory performance. The paper should be 4-6 pages (double-spaced, 1 inch margins, 12 point font) written in APA format. However, you are not required to have separate sections for the introduction, methods, results, etc. (i.e., it is acceptable to have the text as one flowing document, not broken into sections). Further guidelines for this paper will be provided in class.

PSY 533 (Graduate Credit): In addition to the course work above, students taking the course for graduate credit will also be required to prepare and deliver a 5-10 minute class presentation on a topic within Learning and Memory, or on a psychological phenomenon that fits within the topics of discussion in the course. For optimal success, students should do more than just relate the information in a conceptual way; successful presentations should also include a demonstration, video, data, or interactive class activity. The presentation will be worth 20 points that will count toward your final grade (i.e., for graduate students, total course points are therefore based on 370 total points possible), and will be graded on the following three criteria as assessed by the instructor: 1) the presentation's effectiveness, 2) the creativity of the presentation; and 3) the amount of work that was required in creating the presentation. Once the presentation is prepared, please contact the instructor regarding scheduling a time in class to deliver the presentation.

Course Expectations

Academic Honesty: Group discussion outside of class is encouraged. However, all work submitted in this course must be your own and produced exclusively for this course. Copying or paraphrasing information from any source, print or electronic, without citation, is plagiarism. The use of sources must therefore be properly acknowledged and documented. The consequences of academic dishonesty will be taken seriously and will entail a mandatory report to the Office of Student Conduct. If you are in doubt regarding any aspect of these issues, please come and speak with me.

Academic Responsibility: This class will be guided by University Policies that entails a standard of responsibility, honesty, and integrity for the instructor, your classmates, and the work that you do. This course has also been designed to comply with the psychology department's guidelines for teaching and learning. Please review these guidelines at <http://psychweb.uoregon.edu/guidelines/index.htm>

Due Dates and Late policies: Due dates for the term paper are contained in the course outline. A term paper turned in after its deadline will be marked down 10% for each day late, and will not be accepted after 5:00pm on Friday of finals week.

Student Accommodations

Accessible Education Center: If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with me. Also, please request that the Counselor for Students with Disabilities, Molly Sirois, send me a letter verifying your disability. The phone number for the AEC is 346-1155 and the email address is disabsrv@uoregon.edu.

Students for Whom English is Not Their Native Language: Foreign language dictionaries are permitted during exams. Exams will be designed to complete within an hour and twenty minute period; therefore, it is unlikely that you will need additional time. However, if you find that you do need additional time to complete the exam, please make arrangements with me ahead of time.

Academic Learning Services: If you have difficulty with the course materials at any time, you are encouraged to contact the instructor for assistance. In addition, the resources of the Academic Learning Services (<http://als.uoregon.edu/services/services.html>) can be invaluable to students that require assistance in, for example, perfecting good study habits or honing their writing skills.

Course Calendar

Week	Date	Lecture Topic	Chapter Readings	Exams/Quizzes/Thought Pieces
1	Mon., 3/30	Course Overview; The Psychology of Learning and Memory	Chapter 1	Quiz 1 Thought Piece 1
	Wed., 4/1	Neuroscience of Learning and Memory	Chapter 2	
2	Mon., 4/6	Non-Associative and Spatial Learning	Chapter 6	Quiz 2
	Wed., 4/8	Non-Associative and Spatial Learning	Chapter 6	Thought Piece 2
3	Mon., 4/13	Classical Conditioning	Chapter 7	Quiz 3
	Wed., 4/15	Instrumental Conditioning; Review Session	Chapter 8	
4	Mon., 4/20	Midterm Exam 1 (Chapters 1, 2, 6, 7, & 8)		Exam 1
	Wed., 4/22	Skill Memory	Chapter 4	
5	Mon., 4/27	Working Memory and Executive Control	Chapter 5	Thought Piece 3
	Wed., 4/29	Working Memory and Executive Control	Chapter 5	
6	Mon., 5/4	Episodic and Semantic Memory	Chapter 3	Quiz 4
	Wed., 5/6	Episodic and Semantic Memory	Chapter 3	Thought Piece 4
7	Mon., 5/11	Episodic and Semantic Memory; Review Session	Chapter 3	Quiz 5
	Wed., 5/13	Midterm Exam 2 (Chapters 3, 4, & 5)		Exam 2
8	Mon., 5/18	Emotional Learning and Memory	Chapter 10	
	Wed., 5/20	Observational Learning	Chapter 11	
9	Mon., 5/25	Holiday: NO CLASS		
	Wed., 5/27	Learning and Memory across the Lifespan	Chapter 12	Thought Piece 5 Term Paper Due
10	Mon., 6/1	Language Learning	Chapter 13	Quiz 6
	Wed., 6/3	Review Session		
Finals Week	Thurs., 6/11 At 2:45pm	Final Exam (Chapters 10, 11, 12, 13, & Comprehensive)		Final Exam