

Psychology 433 / 533: Learning and Memory – Winter, 2005
Mondays and Wednesdays 12:00-1:20 pm.
Room 146 Straub

INSTRUCTOR

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TEXTBOOK: *Essentials of Human Memory*. Alan Baddeley. (1999): Psychology Press.
 In addition to the text, a *course reader* will be available at the UO bookstore.

GENERAL COURSE DESCRIPTION

My mission in this course is to allow you to build an appreciation for the central role that memory plays in every aspect of our lives. Simply put, you cannot brush your teeth, speak on the phone, hit the snooze button, play basketball, recognize your mom, or even have a sense of identity if it were not for the seamless, unobtrusive function of these elementary processes. Indeed, the function of memory is never so conspicuous and astonishing as when it fails us. Through such encounters with memory, we each develop opinions about ourselves as learners and rememberers--opinions that shape our feelings about what we can and cannot do, which, in turn, change the courses of our lives.

Because memory is such a basic and pervasive process, it has been a central theme of psychology since its inception as a science over 100 years ago. The goal of this course will be to survey the most influential theories and findings in this important and extensive area of research. Basic research and theory will be discussed as well as a variety of interesting special issues, like amnesia, eyewitness memory, and the unconscious influences of memory.

COURSE FORMAT.

The material for this course will be presented through assigned readings, class lectures, films, limited discussion, and in-class demonstrations. Lectures will be designed to supplement the text, not repeat it. As such, there will be material in lecture that is not covered in the book and material in the book not covered in lecture. You will be responsible for all the material presented in lectures, films, and in the text, unless otherwise noted. Therefore, I am more than willing to speak with you during office hours about difficult material from the text which I have not covered in lecture. You are expected to have done the assigned reading before class in order to get the most out of lectures. Usually, I will assume you have done the reading and we will start from there to examine certain topics in more depth. It has been my experience that students who

have done the readings before class understand and retain the material much better than those students who do not do the reading until after the class (if ever!).

QUIZZES

There will be a total of 4 quizzes. Two will occur before the midterm (one on week 2, one on week 4) and two will occur after the midterm (one on week 7 and one on week 9), on randomly selected days. Quizzes will be administered at the beginning of class. The purpose of these quizzes is to encourage both regular class attendance and timely reading of the assigned material. Each quiz will have three multiple choice questions designed so as to be *straightforward* if you have read the assigned reading up through that class. Of these 3 questions on each quiz, you will only need to answer 2. Of these 4 quizzes, two will be required and two will be extra credit, allowing you the chance to make up for poor performance on previous quizzes (Quiz 1 is required, 2, extra credit, 3 required, 4 extra credit). Questions will be drawn from material covered in the book. Your total score on all the quizzes will be added to your midterm, final exam and paper scores to determine your final grade, as described below. Extra credit from extra credit quizzes will be added onto your score after the final curve for the course has been computed.

EXAMS

There will be one midterm exam and one final exam. The midterm and final will be part multiple choice and part short answer. The final exam will cover material from the first and the second parts of the course. Make-up exams for midterms will be given *during* the final examination. Make-ups will be composed of multiple choice questions from the first portion of the course, designed to be more difficult than questions on the original examination. Thus, makeup examinations are discouraged, but are possible if absolutely necessary. Students wishing to take a make-up examination must get approval from the instructor. No makeups for the final examination will be given.

Inevitably, some students schedule early flights, arrange weddings, etc. and then wish to take the final exam early. Such arrangements are not possible: *the final exam cannot be taken earlier than the time listed in the university's final exam schedule.*

GRADING

Grading will be based on the summed points from the exams, papers and quizzes. The total number of points possible is 50 (midterm) + 80 (final) + 2 x 10 (per quiz) = 20 (quiz points) + 50 (project) = 200. Thus, the midterm is worth 25% of your grade, the final 40%, the project paper, 25% and the quizzes, 10%. Based on these total scores, a curve will be constructed. After the curve has been constructed, any extra credit points earned during the quarter will be added to each person's score, and a letter grade assigned. The proportion of As, Bs, Cs, Ds, and Fs that will be assigned is not predetermined (although university guidelines will generally be observed), and is flexible, depending on the overall level of performance in the class (that is, if everybody does very well, more higher grades will be awarded).

Course Outline

Date	Lecture Topic	Reading Assignment	Week #
<u>Introduction and Overview</u>			
Jan 3	Introduction	Ch. 1 (1-20)	1

Jan 5	Overview of the Memory System	Ch. 1 (pp. 1-20)	1
<u>Temporary Forms of Memory</u>			
Jan 10	Sensory and Short-term Memory 2	Ch. 2 (pp. 21-44)	
Jan 12	Working Memory: Basic Cognitive and Neuropsychological Research (Quiz)	Ch. 3 (pp. 45-70)	2
Jan 17	Martin Luther King National Holiday.	No class/reading	3
Jan 19	Working Memory: Imaging and Individual Differences Reading #1		3
<u>Encoding Into and Retrieval From Long-Term Memory</u>			
Jan 24	Variables Influencing Long-term Retention, I	Ch. 4	4
Jan 26	Variables Influencing Long-Term Retention, II	Ch. 4	4
Jan 31	Skilled Memory (Quiz)	Ch. 5 Readings 2 and 3	5
Feb 2	Retrieval Processes	Chapter 9 (169-181) Chapter 9 (186-198)	5
Feb 7	Midterm Examination	No assigned reading	6
Feb 9	Discussion of Class Project		6
<u>Forgetting</u>			
Feb 14	Forgetting 1: Cue Change and the Phenomena of Context, State, and Mood Dependent Memory (Quiz)	Ch. 6 Ch. 9 (pp. 182-185)	7
Feb 16	Forgetting Mechanisms 2: Interference and Inhibition	Reading 4	7
Feb 21	Inaccurate Memories: Memory Illusions and errors	Reading 5	8
<u>Special Issues in Memory</u>			
Feb 23	Repression I (Quiz)	Ch. 7 Readings 6, 7, 8	8
Feb 28	Repression II	Ch. 7 Readings 9,10	9
Mar 2	Organic Amnesia	Ch. 11 Readings 14 & 15	9
Mar 7	Memory Development	Ch. 12 Reading 11	10

Mar 9

Memory and Aging

Ch. 13

10

Readings 12 and 13

Paper due

Friday, March 18, (10:15am)

Final Exam

**Final Project: Memory outside the classroom:
Everyday memory failures--their costs and causes.**

Our memory systems frequently fail us. Sometimes memory failures are inconsequential, and go unnoticed. Other times, memory failures may impose serious costs on us. These costs may take the form of financial losses, academic setbacks, social discomfort, or lost opportunities. The purposes of this assignment are to (a) tune you into the memory lapses that you experience daily; (b) emphasize the costs associated with those lapses, and identify them specifically with your memory; (c) get you to relate the concepts and theories presented in this class to your life, and (d) get you to think about how such ideas might be applied to improving your lives. The end product of this project will be a 6-8 page paper in which you report the results of tasks (c) and (d) below.

(a) *Tuning into your memory failures.* In this assignment, you will keep a "forgetting journal" for a period of five days. Each day, you will record in this journal the incidences of forgetting that you experienced during the day. Forgetting can come in a great many forms. For instance, forgetting where you parked, the name of an acquaintance, a word for a particular thought, the location in which you put your keys, to brush your teeth, your friend's birthday or an appointment, are all common sources of forgetting. Also, sometimes we "misremember" things in ways that lead us to commit errors of commission (doing the wrong thing) instead of errors of omission (doing nothing). ANYTHING that you think is a case of forgetting can be included, even if it may seem "minor," and even if the forgetting was only temporary.

(b) *Understanding the costs of memory failures.* For each entry in your forgetting journal, you should note a variety of pieces of information. For instance: the date, time and location of the incident; a general description of the content of what was forgotten; speculation about what caused the incident of forgetting; and a description of the cost of the memory failure. The description of the cost should be as specific as possible. For instance, if you forgot to put money in a parking meter, the cost is (a) the amount of the ticket; (b) an estimate of the time it took/will take to mail in the ticket; (c) aggravation; (d) any additional costs (e.g., you had to run out of a meeting to check the meter). Other types of costs include (a) social costs (e.g., embarrassment, arguments, hard feelings); (b) practical costs (e.g., you didn't get in a class because you didn't register on time; you lost a job); (c) emotional costs (e.g., you were upset for N minutes); (d) time costs (e.g., time spent making up for the failure). *A form for recording this information will be provided to you after the midterm.*

(c) *Understanding the causes of memory failures.* Based on this "forgetting journal," you will provide one or more explanations about why you think the failures might occur. Your explanation for the failures in that category should be based on

principles derived from the text and classroom instruction. In addition, for the particular type of forgetting that you choose to focus on (you will have a choice, which will be discussed after the midterm), you will be assigned one or two journal papers to read to assist you in your thinking about the issues.

(d) Using your Experiences to Generate Further Questions for Research. Your second thinking task will be to use your own personal experience to generate questions that would be interesting to investigate for further research. Once you have read the background articles on the type of forgetting that you have chosen to analyze, and once you have spent time documenting your own forgetting, you will have a clearer idea of the gaps that exist in the literature. You may wish that the articles that you read said something more about an aspect of your experience that they failed to address. In the last part of the assignment, you will discuss these new ideas, and suggest ways in which the issues you are interested in might be addressed empirically.

Course Packet References
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Psychology 433/533
Learning and Memory
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