LEARNING & MEMORY (PSY 433/533)
Spring 2008 – SYLLABUS
University of Oregon

Instructor: **Dr. Jagdeep Kaur-Bala**   Classroom: **142 Straub**
238C Heustis Hall   Time: **8:30am–9:50am TR**
346-4903
jagdeep@uoregon.edu
Office Hours: 10:00am -11:00am Tuesday/Thursday
        (& by appointment)

Course website: http://blackboard.uoregon.edu This site will provide supplemental information for the course (course outline, grades, copies of overheads, etc.).

General Course Description: In this course, we will examine the processes underlying learning and memory. We will discuss the behaviors and brain substrates on acquisition, retention, forgetting and retrieval of information. Toward this end, we will include discussions of the methods used by scientists to examine learning and memory systems and clinical perspectives on the diagnosis and treatment of deficits.

Each of the non-lecture parts of the course (discussions, texts, papers, presentations, movies) are designed to reinforce ideas and augment concepts presented in lectures. Questions are encouraged in all parts of the course and students are welcome to stop by my office for questions and/or discussions during my office hours or additional appointments. Questions/clarifications via emails are also encouraged at all times. It is my hope that by the end of this course you will have a new appreciation for the relevance of learning and memory to our lives.

Required Text: *Learning and Memory, 1st Edition* by Mark A. Gluck, E. Mercardo and Catherine E. Myers. This is a comprehensive text for the course. Please notify me immediately if you have difficulty obtaining the text from the bookstore. A copy of the text is also on reserve at the Knight Library.

Course Format: The material in this course will be presented through a combination of assigned reading from the text, class lectures, in-class discussion, and demonstrations. Lecture material and readings will have 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. Reading the material before the corresponding lectures will help your performance in two ways. First, discussions of the material during lecture will be more fruitful if you have at least a general understanding of the material beforehand, helping you to ultimately comprehend and retain the material. Second, questions drawn from the assigned readings will be included on the regularly scheduled quizzes, *even if they have not yet been discussed in lecture (see below).*

GRADING POLICY
Final grades are based on consistent performance through the term. As such, the final grade will include the weighted scores for the quizzes, the term papers, study group discussion responses and the exams. Graduate students (Psy533 class) will also undertake an additional self-study assignment and prepare a presentation for class that will also be graded. In addition, some opportunities for extra-credit will also be available to all. **Letter grades will be determined as follows: A (90-105% of total possible points), B (80-89%), C (70-79%), D (60-69%), F (0-60%).** However, the instructor reserves the right to relax (but not stiffen) this criterion, depending on the actual distribution of grades.

• *Midterm Exams* – 20% of final grade each
• *Final Exam* – 30% of final grade
• *Quizzes* **–** Off the 6 quizzes (5 MCQs each), scores from the your highest-scoring 4 quizzes form 12% of final grade (10% for graduate students)
• *Term Papers* – 12% of final grade (10% for graduate students)
• *Class presentation* (graduate students only) – 6% of final grade
• *Study group discussion responses* - 6% of final grade (4% for graduate students)
• *Extra-credit (optional)* - up to 4 points added to final grade

TESTS
Quizzes: (12% or 10% for graduate students)
Short quizzes will be given in the first 10 minutes of class some days (see the course schedule). The quizzes are designed to serve as quick reviews of recently covered materials as well as help you keep up with the reading assignments. Quizzes will contain 5 multiple choice questions that pertain to the most recently presented lecture material. Questions will occasionally be drawn from readings that have been assigned but may not yet have been discussed in the lectures; however, these questions will be of a more general nature and should be easily answered. Of the 6 quizzes, the 2 with the lowest scores will be dropped, with the total score of the remaining four yielding 15% of the 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: (Midterms - 20% each; Final 30%)
Exams primarily test conceptual understanding. The exams will be part multiple choice, part fill-in-the-blank/match the information and part short answer/short essay. The exams are comprehensive and cover all materials covered, albeit with a focus on material covered since the previous exam. Please bring a number two pencil with you on exam days. ***No make-up exams will be given without a valid, excused absence*** *– if you know in advance that you cannot take all exams on the appointed dates (see the course outline), do not take this course!* If unforeseen circumstances during the term prevent you from taking an exam, notify the instructor immediately. Allowable excused absences are executive orders/ court orders, medical emergencies and athletic events such as away games for student athletes. All such occasions must be accompanied by official documentation. Make-up exams may be essay-type.

Term Papers (12% or 10% for graduate students): A prerequisite to gaining scientific knowledge of any sort is the ability to read and critically evaluate the primary scientific literature. The goal of this assignment is to help you develop these essential skills.

During the term you will be required to write **_two_** 3 – 5 page (double-spaced, 1 inch margins, 10-12 point font) papers that summarizes and evaluates empirical research reported in journal articles that address a topic relevant to learning and memory. I suggest that you use the textbook as a source for selecting a general topic, followed by library, PsychINFO, and Medline searches for the selection of the two articles (for online assistance in your search, see http://libweb.uoregon.edu/guides/psychology/). The referenced articles must be _empirical_ in nature, with data collected to investigate a specific question related to the topic of interest *(i.e., no review or summary articles).*

You will need to submit a paragraph on your topic and the full citation of the research article you have chosen for instructor approval. Topic paragraphs and final papers are due at the beginning of class on the day they are due.

Each paper should include:
1) An introduction to the general topic of your interest.
2) A summary of the article in your own words, including the question under investigation, the hypothesis being tested, the methods used, the findings, and the conclusions drawn by the authors. (*Include comments on the type of research – does the article describe an experiment or descriptive/ correlational research? If this article describes an experiment, what is the independent variable? What is the dependent variable? If the article describes correlational research, which variables were determined to be correlated?*)
3) A discussion of the merits and deficits of the articles, including suggested ways that the deficits could have been avoided. *For example, questions such as these should be addressed: Is the question an interesting one, and is it framed properly? Is the hypothesis valid and defensible? Are the methods appropriate to address the question? Are the findings clear and interpreted appropriately? Are the authors' conclusions warranted, given the findings?*
4) Based on what you have learnt in class, discuss how the findings relate to human learning and memory systems (and the brain structure/function related those behaviors).
5) Give an overall assessment of the significance and quality of the contribution of the articles to the field of human learning and memory.
6) Xeroxed copies of the article.

Finally, *plagiarism will not be tolerated, and will be dealt with according to official University policy (see section on Academic Honesty below).*

Important note: *ALWAYS keep a copy of your paper and reference articles either on disk, or a hard copy!*

Study group discussion responses: (6% or 4% for graduate students)
We will form 5-6 member study groups in order to have some contact time outside the class in which course work maybe discussed and small assignments completed as a group. The study groups will be expected to meet once a week and 4 discussion reports will be due during the term. For each report, I will give you specific things to get done and will be looking for those things for the evaluation or grading. All members of the group will receive the same grade for the assignment.

Sometimes, group members feel that not everyone in the group is working to their best and so it is not fair for everyone in the group to receive the same grade for an assignment. If such is the case for your group, you can choose (as a group) to award individual grades for the report. *If* the group decides that it is not fair that every person receives the same grade for a particular report, I will let the group decide on grades for each member. For example, if the group grade on a particular assignment is 85 and there are 5 members in the group, the group will have a total of 425 points (85 times 5) to spread among its members. The group can then negotiate with all members and spread out the total points to all members in any way the group sees fits, as long as all members agree to the point spread. ***The only requirement is that the group negotiates who gets what grade and that all members of the group give me a written agreement to the point spread. It will be the responsibility of the group to notify me of the point spread if they wish to use this alternative.***

Class Presentation: (6% - graduate students only)
You will be required to give a **15 minute**, in-class presentation on a topic in cognitive science that interests you most. This should be accompanied by a short essay on your topic, as well as copies of any supporting slides/overhead transparencies that accompany your talk. The topics for your presentation are due ***beginning of the second class of week 3 (April 16th).*** Accompanying write-up and copies of slides, overheads, etc. are **due on the day of your presentation.**

Of necessity, the class presentations will be spread out through the term; some presentation will have to take place earlier in the term than others. Dates of individual presentations will be decided by the instructor/TA. In addition, while assessing/grading the presentations, we will be sure to keep in mind the amount of time (into the term) each student got for preparation of this assignment.

What about extra credit?
You can earn **up to 4 points** in extra credit for **Class Participation**. These points will be **added to your final grade** at the end of the class. So, if you get an 80% with all of your work, and you earn 4 points of extra credit, your final score will be 84%.

Participation is based on *attendance* and *discussion*. Attendance will be taken during some class periods. All students who sign attendance during that class and ones with excused absences will be awarded EC points. In addition, the instructor will, at other times, award extra-credit for participation in class activities /

discussions. It is important that you come to class. Many of the exam questions come from lecture content that is not in the assigned readings. If you miss a class, please try to get a copy of the lecture notes from a classmate. Allowable excused absences are executive orders/ court orders, medical emergencies and athletic events such as away games for student athletes. All such occasions must be accompanied by documentation. [*4 points*].

In addition, you may earn extra-credit by preparing a 2-4 page report on a recent news item (i.e., one reported during the term) related to the topics discussed in the course. For optimal success in this type of report, you must do more than simply relate the information that was presented in the newspaper article or news program – this may involve a web search to find other data to accompany your report, a dig in the scientific literature to find relevant details and hard data, etc. These reports must also discuss the news article's relation to the information presented in the lecture and reading materials [*4 points*].

Due Dates: *All assignments (paper as well as blackboard submissions) are due by the start of lecture on the appropriate date* and can be turned in to me during class or during office hours *the day before it is due*. An assignment turned in after its deadline will be marked down 10% for each day late.

Students with Disabilities: If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with the instructor as soon as possible. Also, please request that the Counselor for Students with Disabilities (Hillary Gerdes, hgerdes@oregon.uoregon.edu, tel. 346-3211, TTY 346-1083) send a letter verifying your disability.

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 of language difficulties, please see the instructor as soon as possible to make special arrangements.

Academic Honesty: All work submitted in this course must be your own. You may be required to submit writing assignments to SafeAssign. SafeAssign is a software tool designed to help students avoid plagiarism and improper citation. The software encourages original writing and proper citation by cross-referencing submitted materials with an archived database of websites, essays, journal articles, and other published work. In some cases also submit your work to SafeAssign or some other plagiarism analysis and detection program. By enrolling in this course you grant the instructor permission to do so

Violations will be taken seriously and are noted on student disciplinary records. If you are in doubt regarding any aspect of these issues as they pertain to this course, please consult with the instructor before you complete any relevant requirements of the course.For the consequences of academic dishonesty, refer to the Schedule of Classes published quarterly. (For more information, see the UO web site regarding academic honesty at: http://darkwing.uoregon.edu/~conduct/).

Course Outline: This is only a working draft of the course outline; it will be revised as the term progresses. **Dates on which particular topics are to be presented in lecture are subject to change, as are reading assignment due dates; however, I will not change the dates of quizzes, exams or term paper deadlines unless absolutely necessary.** The official updated version of the outline will reside on the Blackboard web site. Updated print versions can also be obtained from the instructor during normal office hours.

Version Updated: 3/18/2008 11:52 AM

Date	Topic	Readings	Assignments/Due dates/Quizzes
1-Apr	Introduction: *Then and now*	Ch. 1	
3-Apr	Psychology of Learning & Memory: *Theories and Models*	Ch. 1	
8-Apr	Physiology of Learning & Memory: *Techniques and modulation*	Ch. 2	*SGR 1 due,* Paper-1 topic due
10-Apr	Episodic & Semantic Memory: *Remembering & forgetting Events & Facts*	Ch. 3	**Quiz 1**
15-Apr		Ch. 3	*Presentation topics due*
17-Apr	Skill Memory: *Learning by doing*	Ch. 4	**Quiz 2**
22-Apr	*Midterm Exam*		
24-Apr	Working Memory *Transient memories & attention*	Ch. 5	
29-Apr	Executive control and Performance: *Representations and Retrieval*		*SGR 2 due*
1-May	Non-associative learning: *Learning & discriminating repeated events*	Ch. 6	**Quiz 3**
6-May	Classical conditioning: *Predicting important events*	Ch. 7	Paper-1 due
8-May	Instrumental conditioning: *Remembering consequences*	Ch. 8	**Quiz 4,** Paper-2 topic due
13-May	Observational learning: *Monkey see monkey do*	Ch. 11	*SGR 3 due*
15-May	*Midterm Exam*		
20-May	Generalization and Discrimination: *Similarity of facts and figures*	Ch. 9	
22-May	*Psy533 Class Presentations* Emotional learning and Memory	Ch. 10	**Quiz 5**
27-May	Emotional learning and Memory: *Remember the good, forget the bad?*	Ch. 10	*SGR 4 due;*
29-May	Language learning: *Signs and sounds of 1st and 2nd language*	Ch. 13	
3-Jun	Across the Lifespan: *Developing and aging*	Ch. 12	**Quiz 6,** Paper-2 due
5-Jun	Learning and Memory in AI: *Where do we go from here?*		Extra credit report due *SGR 5 due*
13 - Jun	FINAL EXAM : FRIDAY, 8:00am – 10:00am		