

### Course Objectives

The goals of this course are to provide the student with in depth knowledge in a variety of subject areas related to the psychological study of learning and memory functions in both human and non-human species. The initial portion of the course introduces the student to different models of associative learning, and explores the types of variables which influence classically conditioned and instrumentally conditioned behaviors. Theoretical models of these two conditioning paradigms are also discussed. The second portion of the course builds on earlier material and examines more complex forms of establishing behavioral control and change within the context of instrumental and operant conditioning techniques. The limitations of various learning theories in their ability to account for species typical behaviors are discussed, and the application of these theories to human behavior modification are considered. The last portion of the course focuses on memory processing, and language acquisition, comprehension and usage. Processing of information in memory is discussed with reference to three different conceptual approaches in both sub-human and human subjects. A cognitive approach is utilized to explore human language acquisition and usage.

### Course Requirements

Grading requirements differ for 433 and 533 students. Credit towards a final grade for 433 students is based on three non-cumulative multiple choice exams, 50 points per exam, 150 points total possible. Credit towards a final grade for 533 students is based on three non-cumulative multiple choice exams, 50 points per exam, 150 points total possible plus an 8-10 page archival/research/review term paper, valued at an additional maximum of 50 points; thus, for 533 students credit towards a final grade is based on a maximum total possible score of 200 points. 533 students must submit a 2-3 page synopsis of their term paper "proposal" no later than 7/28/82 in order to receive any credit for their term paper\*. 533 students are encouraged to contact the instructor prior to preparing the term paper proposal synopsis.

### Grading

Final letter grade is determined by a performance based curve. The highest cumulative score in the numbering distribution of final (sum of test 1 + 2 + 3) grades will be considered to be the "top" of the "A" range, then numerical intervals equal to one third of a ten point scale between "A", "B", "C", "D", "F" values is constructed to define numerical values for A+, A, A-, B+, B, etc., letter grades. For 533 students a different total numerical score will be used; this reflects the additional term paper course requirement. Statistical techniques will be used to determine if 433 and 533 students should receive final letter grades based on significantly different score distributions.

\*Term papers submitted by 533 students may not represent any portion of their master's or doctoral work. Topics related to such work may be considered, and require instructor approval.

Course: Psy 433/533 Learning and Memory  
 Instructor: John P. Vicedomini  
 Office: 218a Huestis  
 Hours: By appointment

Summer 1992

<u>No.</u>	<u>Date</u>	<u>Lecture Topics</u>	<u>Readings</u>
1.	6/22	Intro to course/historical antecedents	Chap 1
2.	6/23	Classical Conditioning: Phenomenology/Terminology	Chap 1-2
3.	6/24	Variables influencing acquisition/extinction	Chap 2
4.	6/25	Excitation/inhibition testing	Chap 3
5.	6/29	Discrimination/generalization, classical conditioning	Chap 3
6.	6/30	Theoretical issues, classical conditioning	Chap 4
7.	7/1	Instrumental conditioning: Phenomenology/Terminology	Chap 5
8.	7/2	Variables influencing acquisition/extinction	Chap 5
9.	7/6	Discrimination/Generalization, instrumental conditioning	Chap 6
10.	7/7	Theoretical issues, instrumental conditioning	Chap 6
11.	7/8	<b>*****TEST ONE; 10 LECTURES; CHAP 1-6*****</b>	
12.	7/9	Punishment/avoidance training: Phenomenology	Chap 7
13.	7/13	Punishment/avoidance training: Terminology	Chap 7
14.	7/14	Variables influencing responding: Acquisition	Chap 7-8
15.	7/15	Variables influencing responding: Extinction	Chap 8
16.	7/16	Discrimination & generalization phenomena	Chap 9-10
17.	7/20	Biological constraints on learning I	Reserve #1
18.	7/21	Biological constraints on learning II	Reserve #1
19.	7/22	Applications of learning theory I	Reserve #1
20.	7/23	Applications of learning theory II	Reserve #1
21.	7/27	<b>*****TEST TWO; 9 LECTURES; CHAP 7-10; RESERVE #1*****</b>	
22.	7/28	Memory: Information Processing Approach	Reserve #2
23.	7/29	Memory: Neurobiological Approach	Reserve #2
24.	7/30	Memory: Cognitive Approach I	Reserve #3
25.	8/3	Memory: Cognitive Approach II	Reserve #3
26.	8/4	Learning about language: Acquisition	Reserve #4
27.	8/5	Learning about language: Production	Reserve #4
28.	8/6	Learning about language: Production	Reserve #4
29.	8/10	Learning about language: Utilization	Reserve #4
30.	8/11	Neuropathology: Learning	Lecture only
31.	8/12	Neuropathology: Memory	Lecture only
32.	8/13	<b>*****TEST THREE; 10 LECTURES; CHAP 12-13; RESERVE #2-4*****</b>	

Required text: Learning and Memory (2nd Ed.) John F. Hall, Allyn and Bacon (1989).

Additional Readings: Reserve Readings #1, #2, #3, available at Campus Copy Center;  
 Reserve Reading #4 is on reserve at the Knight Library.