LEARNING & MEMORY (PSY 372-01)
Spring, 2013
208 Dansby Hall
T, TH: 100p-215p

Instructor Tina R. Chang, Ph.D.
Office 120A Wheeler Hall
email changtr@gmail.com

Office Hours W: 1130a-1230p; T, TH: 215p-315p

Required Readings


3) Selected current and classic articles provided by the instructor.*

Course Description
This course (along with the laboratory) is designed to provide an empirical and theoretical examination of the processes of learning and memory.

Course Objectives
With the successful completion of this course (and the laboratory), students will be able to:

- Explain the historical influences on the scientific study of learning and cognition;
- Differentiate between Pavlovian conditioning and operant conditioning;
- Describe principles of memory, its models and theories related to remembering and forgetting and general adaptation;
- Explain species-typical behavior in terms of biological predispositions.
- Describe general principles of learning as they relate to human and non-human adaptation;
- Differentiate between central and peripheral nervous system functions in learning, memory, cognition and language;
- Describe the role of biology in learning and cognition;
- Interpret species learning strategies in terms of evolutionary adaptation and behavioral plasticity.

Course Format
The course consists of lectures and discussion. You are expected to complete the assigned readings before each class and to contribute to class discussion. You are also encouraged to come to office hours or to schedule an appointment to discuss any of the course material.
Course Requirements
Exams: There will be 2 exams (20% each) and a final (30%). All exams are cumulative and will consist of multiple-choice, short answer, and essay questions. Article critiques with presentation/debate (30%): You will write 10 critiques of select articles to be presented by you in groups and discussed by the class.

Attendance/Participation
You are expected to attend class. Excessive absences, tardiness, and/or disruptive behavior in class will be reflected in your final grade. If you plan on being absent from class, please let me know ahead of time in order to avoid missing announcements and/or changes in due dates, etc. You are responsible for all class announcements whether you were in class or not. If you are unsure of due dates, assignments, policy, or any other issues related to class, make sure to talk directly with me. Do not rely on your classmates for information.

Academic Integrity
All work in this course must be your own. Any assignments or exams for which you present the work of others as your own will receive a failing grade. However, please do feel free to study and discuss the material with each other and with me. If you do not understand something, please come ask me.

Accommodations
Students who require accommodations for physical and/or learning challenges should present appropriate documentation before the end of the second week of class. Students must also make an individual appointment to discuss the accommodations.

Grading Scale
A  94-above  B  83-86  C  73-76  D  63-66  
A-  90-93  B-  80-82  C-  70-72  D-  60-62  
B+  87-89  C+  77-79  D+  67-69  F  59-below
*Reading List*


<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading/Assignments</th>
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<tbody>
<tr>
<td>1</td>
<td>Course Introduction</td>
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<tr>
<td>2</td>
<td>What is learning?</td>
<td>Chapter 1, Assignment due.</td>
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<td>3</td>
<td>“Instincts”</td>
<td>Chapter 2; Article critiques due</td>
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<td><strong>Discussion:</strong> Harlow, H. F. (1958). <em>The nature of love.</em></td>
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<td>4</td>
<td>Habituation &amp; Sensitization</td>
<td>Article critique due</td>
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<td></td>
<td><strong>Discussion:</strong> Yerkes, R.M. &amp; Dodson, J.D. (1908). <em>The relation of strength of stimulus to rapidity of habit-formation.</em></td>
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<td>5</td>
<td>Habituation &amp; Sensitization (cont’d)</td>
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<td><strong>Exam I</strong></td>
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<td>6</td>
<td>Classical conditioning: What is it?</td>
<td>Chapter 3; Article critique due</td>
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<td><strong>Discussion:</strong> (1) Watson, J.B. &amp; Reynor, R. (1920), <em>Conditioned emotional reactions</em>; (2) Pavlov, I.P. (1927), <em>Conditioned Reflexes (selected lectures).</em></td>
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<td>7</td>
<td>Classical conditioning in everyday life.</td>
<td>Chapter 4</td>
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<td>8</td>
<td>Operant Conditioning: What is it?</td>
<td>Chapter 5; Article critiques due</td>
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<td><strong>Discussion:</strong> Skinner, B.F. (1948), <em>Superstition in the pigeon.</em></td>
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<td>9</td>
<td>Spring Break</td>
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<td>10</td>
<td>Operant Conditioning: How to apply it in your everyday life.</td>
<td>Chapter 6</td>
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*Exam II* | Article critique due |
| 12 | Memory & Cognition: Introduction | Chapter 11, 12; Assigned readings |
| 13 | Memory & Cognition (cont’d) | |
| 14 | Wayfinding  
**Discussion**: Tolman, E.C. (1948), *Maps in the mind.* | Article critique due |
| 15 | Memory, Cognition, and Adaptation  
**Debate**: (1) Shettleworth (2003), *Memory and Hippocampal Specialization in Food-Storing Birds: Challenges for Research on Comparative Cognition*;  
(2) Healy, et al. (2009), *Explanations for variation in cognitive ability: Behavioral ecology meets comparative cognition.* | Article critiques due |
| 16 | **Last Day of Class wrap-up**  
*[Final to be held during Finals Period]* | |