Psychology 210: Psychology of Learning
FALL 2017

Professor: Julie Neiworth
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Office: Olin 113

Class: Olin 102/104; M, W 9:50 – 11:00, Fridays 9:40 – 10:40 am

Office Hours: Mondays, 1-2 pm, Olin 113
Fridays, 11 - 12, and by appt.
T-Th, end of each lab meeting, in Hulings 12.

Never available for meetings: Wednesdays, 11:00 am– 3:00 pm (monkey chores)

Objective of Course:

The study of learning and the science of behavioral selection have had a profound impact on all aspects of human interaction, including special and regular education, business, health care, rehabilitation therapy, and the treatment of behavioral problems. Behavior analysis is the scientific investigation of the interaction of organisms with the social and physical environment. The underlying message is that all living organisms alter their behavior as a reaction to the consequence of that action. This class covers what we know about learning as an adaptive process. It assumes an objective orientation, invokes a requirement for evidence, and teaches a basic fluency in the experimental analysis of behavior. With these skills, a person may apply learning principles to the treatment of personal, family, professional, or other problematic behavior situations.

Integration of Course with Laboratory:

The course, Psy 210, describes how the investigation of simple behaviors in simple organisms relates to such complex issues as the development of cognitive skills in children or providing therapy for depressed patients. Still, nothing can demonstrate simple principles of learning better than a behavioral demonstration in a living organism. Laboratory experiences wherein college students conduct research with living subjects have become a rare enterprise. When a pigeon is observed and its behavior systematically manipulated in an unadorned environment, many fundamental principles are exposed that apply to all living organisms. The existence of a basic science and the study of empirically determined foundations is part of the experience of Psy 211, the Learning Laboratory. I have no doubt that this experience helps to stamp in these foundations, and I believe that it fosters deep, critical and creative thinking on the topic of learning.

The goal of the laboratory is to clarify theories and principles as described in class. To meet this goal, laboratory exercises will periodically be discussed in the course itself. Students should also feel free to mention any problems with experiments or any conflicting results they observe in lab.

Course Requirements:

Required reading is
Gluck, M.A., Mercado, E., Myers, C. Learning and Memory: From Brain to Behavior (2016).
MANY assorted articles on MOODLE. When possible, individual copies of articles will be distributed in class. Sniffy Pro version 2.0 can be used to write an option for a paper in the class. A version is provided in the Mac Lab (Olin 104) and in the learning lab (Hulings 12). If you want to load a copy onto your own computer, see me. Assigned exercises for class will be denoted Sniffy in the daily assignments that follow.

There are three examinations in this course, covering the readings that precede each. They are scheduled on the following days:

Exam 1: 9/27, Wednesday
Exam 2: 10/20, Friday
Exam 3: 11/15, Wednesday

Test questions consist of definitions, identification items, short-answer questions, graphical analysis, and essay questions. Materials from readings and lectures are the focus of the test. Each exam will test over only the materials specifically assigned during that block of the course, with the exception of the final exam, which will include a single essay question for you to tackle in addition to material over the last 2 weeks of the course.

There are also 2 short paper assignments. Sniffy, the virtual rat, can be used to accomplish one, or alternatively you can conduct a behavioral modification project. A second paper is to evaluate a rewards/loyalty program offered at a store that you frequent or a proposal for an educational application to improve learning and memory, justified by learning and memory theories. A separate handout explains each paper assignment. The papers are due:

Wednesday, 10/18. SNIFFY or BEH MOD paper due, by end of day.
Saturday, Nov 19 by end of day REWARDS PROGRAM or EDUCATIONAL APPLICATION paper due. Both will have a dropbox on MOODLE for you to use to submit your paper(s).

Make Up Policy:
Students are expected to take tests on the dates and at the times specified in order to assure fairness to all. A student who misses an exam without prior approval may receive a substantial penalty on the subsequent make up exam. In cases of unavoidable conflict, arrangements should be made at least one full session prior to the date and time of the scheduled exam.

Special Arrangements:
Students who need special arrangements for taking exams, or who have special needs that might require larger font type on handouts, audio taping of lectures, etc. should see me early in the term. Also, students who feel they do not have the proper background for the course should see me. If you need to take a test in a special environment, that can be planned but I should be alerted 1 full week before the test day, and the form to fill out with student support services needs to be completed 1 class session prior to the exam (for example, completed on a Monday, for a Wednesday exam).
Grading:

Grades are based on a total of the points earned from participation in class, and from proficiency on exams, and excellence on the paper assignment. The distribution of points for assignments follows:
- Exam 1, 2, and 3: 25% each.
- Papers: 10% each (x2)
- Class participation during discussion days/assignments: 5%.

Daily Assignments [readings to be accomplished preceding the class day]:

<table>
<thead>
<tr>
<th>Date</th>
<th>Week</th>
<th>Reading/Event/Discussion</th>
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<tbody>
<tr>
<td>9/11-9/15</td>
<td>One</td>
<td>Ch. 1, Monday, History Ch. 3, Wednesday, Habituation/Sensitization Ch. 2 Friday, Neuroscience, plus Moodle articles</td>
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<td>9/18-9/22</td>
<td>Two</td>
<td>Ch. 4, Monday, Classical Conditioning Ch. 4, Wed, Classical Conditioning, Advanced (cont) Moodle readings and lie detection, Friday</td>
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<td>9/25-9/29</td>
<td>Three</td>
<td>Review for Exam 1, Monday <strong>Exam 1, Wednesday, History, H/S, Neuroscience, Classical Conditioning</strong> Sniffy and Lie Detection lab work and first paper considerations, Friday</td>
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<td>10/2-10/6</td>
<td>Four</td>
<td>Ch. 5, Monday, Operant Conditioning Ch. 5, Wed, Operant Conditioning advanced (cont) Moodle readings on punishment, rewards programs, Friday</td>
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<td>10/9-10/13</td>
<td>Five</td>
<td>Ch. 6, Monday, Generalization, Discrimination Learning, Concept Formation Ch. 6, Wednesday, extensions to comparative psychology Paper work for 1st paper, tamarin studies of all theories, Friday</td>
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<td>10/16-10/20</td>
<td>Six</td>
<td>MidTerm Break MONDAY – take a rewarding break! Wednesday, Review for Exam 2 <strong>Friday, Exam 2, Operant Conditioning, Stimulus Generalization/Discrimination</strong></td>
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<td>10/23-10/27</td>
<td>Seven</td>
<td>Episodic and Semantic Memory, Ch. 7, Monday Skill Memory, Ch. 8, Wednesday Catch-up Friday</td>
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<td>10/30-11/03</td>
<td>Eight</td>
<td>Ch. 9, Monday, Working memory and cognitive control Ch. 12, Wednesday, Development and Aging Catch-up Friday</td>
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<td>Date</td>
<td>Class</td>
<td>Topics</td>
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<td>11/06-11/10</td>
<td>Nine</td>
<td>Ch. 10, Emotional Influences, Monday&lt;br&gt;Ch. 11, Social Learning and Memory&lt;br&gt;Friday, class canceled (Julie at Conference)</td>
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<td>11/13-11/15</td>
<td>Nine.5!</td>
<td>Wrap-up of Integrative topics of Learning and Memory and review for Exam 3. <strong>Essay Question given here.</strong>&lt;br&gt;<strong>Wed, Exam 3, on Memory topics and Integrative Topics</strong></td>
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