

Psychology 390: Psychology of Learning

Spring Semester, 2020

Mondays, Wednesdays & Fridays 1:00 - 1:50. Maxey 209

Lab: Daily, 2:30 – 3:20 pm. Maxey 337

Instructor: Wally Herbranson

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Office hours: Tuesday and Thursday 2:00 – 3:00 (in Maxey 337); and by appointment

Course Materials:

Required text:

Powell, R.A., Honey, P.L. & Symbaluk, D.G. (2017). *Introduction to Learning and Behavior* (5th ed.). Boston MA: Cengage Learning.

Additional readings will be available on the class web page (see below)

Lab text:

Pryor, K. (2006). *Don't Shoot the Dog: The New Art of Teaching and Training* (3rd ed.). Ringpress Books.

Course overview: This course provides an introduction to one of the cornerstones of modern Psychology: the study of learning. As we will come to appreciate, theories of learning have dominated psychology for much of its history, and are centrally relevant to most current questions about human and non-human behavior.

The course will begin with coverage of the traditional theories and models of conditioning and learning, both associative (especially classical and operant conditioning) and non-associative. After gaining an understanding of these nuts-and-bolts, we will consider their application and relevance to other areas of psychology, and to our everyday lives in the real world. Learning is one of the most practical areas of psychology, and has countless applications that we can use to improve our own lives as well as the world at large. Hopefully between the class and the lab, you will learn to apply the principles of conditioning and learning effectively and ethically, to the things you think are important.

Weekly lab sessions. Learning has a long and venerable tradition of laboratory research. We will take advantage of those powerful and well-established techniques in weekly lab sections. In particular, we will use principles of conditioning and learning to manipulate the behavior of rats. Doing so should not only actively reinforce the material in your minds, but also impress on you the power of various principles of learning in shaping real behavior.

Lab sessions will take place in the Psychology teaching lab (Maxey 337) and the adjacent animal facility. Though lab is scheduled Monday, Wednesday, and Friday, it will be open on Tuesday and Thursdays at the same time as well. You'll need to work with your rat at least 3 days each week (more, if you want), but can choose the days that work best for you and your schedule.

Class Web Page: <http://www.whitman.edu/~herbrawt/classes/390/psych390.html>

I've constructed a thoroughly unimpressive course web page that I'm hoping will remain up-to-date over the semester, and with some luck, perhaps even expand into something less unimpressive. As a means of achieving this goal, I encourage you to send me relevant links should you stumble across anything that connects with course material. I'll also post announcements relating to the class and to Psychology in general (for instance, locations and titles of invited speakers and reminders about upcoming assignments). I'll also try to post handouts and assignments (in adobe acrobat format) for students to download. Thus, if you miss class, the web page might be a good first place to check in.

Grading and Assignments

Your grade in Psychology 360 will be based on the following assignments:

3 Exams – 60% total (20% each)

1 Paper – 10%

Lab work and reports - 10%

Take-home final – 20%

Exams. There will be three exams during the semester. These exams will consist of several short answer and one or two essay items. Most short answer questions can be answered well in a medium size paragraph (about 1/3 of a page, given average handwriting). Answers to essay items will be about a page in length. Exams will be closed-book and should be completed during the class period. I'll distribute a list of practice questions before exams to help you prepare. Exams will primarily cover material since the previous exam (“non-cumulative”). However, this does not indicate that it is wise to forget material immediately after it is tested. Makeup exams are available for legitimate, documented conflicts. Please see me about such conflicts in advance.

Paper. There will be one paper due toward the end of the semester. It will be a report of a self-directed behavior change project, in which you attempt to change your own behavior by manipulating your environment. Thus, you will need to design an intervention and collect some data, and interpret the results. Specific details will be distributed separately as we cover the relevant topics to get you started. The paper should be typed and double-spaced, and about 5 pages in length (perhaps a bit more or less, depending on your individual writing style).

Lab Reports. The primary goal of the lab will be to train your rat to play a game similar to basketball, culminating in a March Madness style tournament at the end of the semester. This will be a challenge, requiring both a solid understanding of operant conditioning and some

creativity. You'll have plenty of flexibility to develop your own training plan, but I'll also assign a few structured activities and assignments to get you moving in the right direction. Thus, there will be periodic lab reports due throughout the semester, to help me monitor your progress and to help you connect your training to course content. I will be available daily in the lab to provide guidance along the way (but especially at the beginning of the semester).

Take-home final. The final exam will be a take-home exam to be completed during finals week. I will distribute the questions on the last day of class, and exams will be due May 16th. The prompt will be broadly based, but draw on both concepts covered in class, and your experience in the lab. As with any take-home exam, these should be well-organized and typed (double-spaced, please). A good, complete answer will likely be around 5 pages in length (but as always, feel free to deviate from this length guideline as necessary)

Grading Scale: Grades will be assigned based on the percentage of all possible points earned (see above for the relative contributions of each assignment). Below are the overall performance ranges that result in various letter grades.

A	93-100%	C	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
B	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	Below 60%

Some important class policies you'll want to know about:

Late Assignments:

I like to think I'm a reasonable fellow, so I'm not against granting deadline extensions from time to time. Here are my guidelines:

1. Extension requests made 1 week (or more) before the due date are almost certain to be granted, without penalty, provided that
 - a) the conflict is a reasonable and legitimate one, and
 - b) you haven't requested an extension for every assignment all semester long. After all, Wally didn't just fall off the turnip wagon yesterday. (No, the turnip incident was *years* ago). In short, make your requests as early as possible, and don't abuse my generosity.

2. Within one week (7 calendar days) of the deadline, extensions may still be granted, subject to the following (no exceptions).
 - a) If supported by the Dean of Students, there will be no late penalty.
 - b) If not, there will be a penalty of 5% per calendar day (e.g., a score of 96% would become a 91%, then an 86% and so on for each day late).

In other words, plan your semester early. Identify your busy weeks early on and get the "free" version of the extension, rather than losing 5% or more. If you're unexpectedly abducted by howler monkeys, the Dean and I will understand. If you simply forgot you had 3 other assignments due tomorrow, we're less forgiving.

Attendance:

If you must miss class because of some commitment that can't be rescheduled, that's fine. I reckon you're a grown-up and can manage your own affairs. Check with me to make sure you didn't miss any important announcements and collect any handouts. Re-read the assigned chapters and ask about any questions you might have. I also recommend borrowing class notes from that attractive classmate you've been dying to meet. Here's your opener: "Herbranson doesn't give out his lecture notes (I know, right?). Can I borrow yours?". From there you're on your own. Good luck. Make eye contact (but not too much), modulate your voice, and remember to smile.

Tentative schedule of topics and reading assignments:*

Reading assignments are in the Powell textbook, or available on the class web page

<u>Date</u>	<u>Topic</u>	<u>Reading Assignment</u>
W, 1-22	What is Learning?	
F, 1-24	Reflexes and Modal Action Patterns	Powell Ch. 1
M, 1-27	Habituation and Sensitization	Powell Ch. 3
W, 1-29	Synaptic Plasticity as Learning	Gluck, Ch. 2
F, 1-31	The Neural Basis of Non-Associative Learning	Kandel
M, 2-3	Classical Conditioning	Powell Ch. 4
W, 2-5	Discrimination and Generalization	Powell Ch. 5
F, 2-7	Overshadowing and Blocking	
M, 2-10	The Neural Basis of Classical Conditioning	Gluck, Ch. 4.2
W, 2-12	Applications of Classical Conditioning	Siegel
F, 2-14	Catch up / Prepare for exam	
M, 2-17	No Class Meeting Today	
W, 2-19	Exam 1	
F, 2-21	<i>A Clockwork Orange</i>	
M, 2-24	<i>A Clockwork Orange</i>	
W, 2-26	<i>A Clockwork Orange</i>	Newman
F, 2-28	The Law of Effect	Wasserman
M, 3-2	Self-Control	Powell Ch. 2, Ariely & Wertenbroch
W, 3-4	Operant Conditioning	Powell Ch. 6
F, 3-6	What is a reward?	White
M, 3-9	What is pain?	Pinel
W, 3-11	Conditioned Reinforcers and Conditioned Punishers	Eisenberger, Epstein
F, 3-13	Schedules of Reinforcement	Powell Ch. 7
3-16 through 3-27: Spring Break		
M, 3-30	Theories of Learning	Powell, Ch. 7
W, 4-1	No Class Meeting Today	
F, 4-1	No Class Meeting Today	

M, 4-6	Punishment	Powell Ch. 9
W, 4-8	Extinction	Powell Ch. 8
F, 4-10	Catch up / Prepare for exam	
M, 4-13	Exam 2	
W, 4-15	Choice	Powell Ch. 10
F, 4-17	When Operant met Classical	Powell Ch. 11
M, 4-20	The Neural Basis of Operant Conditioning	Gluck, Ch. 5.2
W, 4-22	Misbehavior and Constraints on Learning	Powell Ch. 12
F, 4-24	Catch up / Prepare for Exam	
M, 4-27	Exam 3	
W, 4-29	No Class Meeting Today	
F, 5-1	No Class Meeting Today	
M, 5-4	Learning in other areas of Psych: Personality / Clinical * Behavior Change Papers Due	TBA
W, 5-6	Learning in other areas of Psych: Social / Developmental	TBA
F, 5-8	Learning in other areas of Psych: Cognitive	TBA
M, 5-11	Finish up / Distribute take-home final	

Saturday, 5-16, 4:00 Take-Home Final Exam is Due

* Note! This is only a tentative schedule and is almost certain to undergo radical changes during the quarter. If we fall behind, topics scheduled toward the end of the quarter may be ruthlessly deleted.

Some not so commonly asked questions...

Q: I hate this! How do I withdraw?

A: Students may drop without record until February 28th. If you plan to drop this class, please do so as quickly as possible so that others may register. After that date you may withdraw until April 10th, and doing so will leave a nifty “W” on your transcript. I think it’s for “Wally”, to help you remember me.

Q: Is attendance required?

A: No, but it is highly recommended. My official policy is that you are the one paying for the class, so you may attend whenever you deem necessary. Keep in mind though, that you are responsible for any material presented in class. If you do miss a class, it’s a good idea to borrow notes from somebody, in case I happened to reveal the meaning of life or something else important. See the attendance policy elsewhere in the syllabus.

Q: I think I’m going to have smallpox on several critical dates this semester. Can I schedule makeups?

A: Notify me as soon as you realize there will be a serious conflict. Makeups can be arranged for *legitimate* and *properly documented* excuses (i.e., serious illnesses, natural disasters and the like, with a corresponding doctor’s note, CNN footage, subpoena, etc.) Note: The big wedding on Days of our Lives is not a serious conflict. If it’s that important I’ll help you track down a recording. Also see the late assignment policy elsewhere in the syllabus.

Q: Dude, I bombed that first exam... What can I do?

A: I don’t offer extra credit, but keep in mind that the remaining assignments (over 80% of your grade) should provide a good opportunity to correct a rough start.

Q: I have no idea what you were talking about last week...

A: Please feel free to ask questions during class sessions and let me know if I’m moving too quickly or am not explaining something clearly - It’s difficult for me to know what you’re experiencing in class. I’m also glad to take some time at the beginning of class to clarify points from previous lectures or from the text.