

Analysis of Behavior: Advanced (Psych 3400, Sec 01)

Fall, 2008

Class Time: TR 1:30-2:45

Location: CPD151

Instructor: Dr. Shahan
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Office Hours M W 3:00-4:00
or by appointment

Laboratory Graduate Teaching Assistant:

Robert Johnson
Office: Education 450
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Office Hours: T TR 2:45-4:00

Required Texts:

Mazur, J. E. (2006). *Learning and Behavior (6th ed)*. Upper Saddle River, NJ: Prentice Hall.

Publication Manual of the American Psychological Association (5th ed.). (2001). Washington, DC: American Psychological Association.

Required Readings: On electronic reserve at the library: <http://eres.usu.edu/> (password = Sha3400)

Course Description:

This course will examine basic behavioral processes that apply to a wide range of species and situations (i.e., classical and operant conditioning). The processes we will examine govern the acquisition of new behavior, the maintenance of previously learned behavior, and behavior change. Much of what we know about such behavioral processes comes from controlled laboratory experiments with rats and pigeons. As such, the course will focus on these experiments and what they mean for our understanding of behavior. Along the way, we will briefly examine applications of some these basic behavioral principles to important human problems.

Laboratory Component:

The purpose of the laboratory component of the course is to give you hands-on experience with the principles and techniques covered in the course. You will learn how to conduct a real experiment using a live pigeon. **The lab component of the course will start approximately 5 weeks after the semester begins.** Each student will be assigned a partner for the lab. You and your partner will be responsible for taking care of your pigeon and for conducting experimental sessions 5-days per week at the same time each day (during the time of the lab section you registered for). Based on your work in the lab, you will prepare a lab report in APA format. Detailed instructions about the lab and the lab report will be provided as the time for the lab component of the course approaches.

Learning Objectives:

By the end of this course, you should have an advanced understanding of the analysis of behavior and should understand how to conduct laboratory experiments and report the results of such experiments. Specifically, you should be able to:

- Evaluate scientific theories in psychology
- Describe the essential features of behavioral psychology
- Describe the importance of laboratory research with non-human animals
- Describe basic procedures and principles in classical conditioning
- Describe advanced procedures, principles and theories in classical conditioning
- Describe basic procedures and principles in operant conditioning, including variability as operant behavior
- Describe schedules of reinforcement and the resulting performance
- Describe theories of schedule performance
- Describe procedures and principles of choice behavior
- Describe theories of choice behavior, including matching, maximizing, and self-control
- Describe the phenomena involved in stimulus control, including generalization, errorless discrimination learning, and behavioral contrast
- Describe and differentiate theories of stimulus control
- Describe the phenomena of concept formation and transfer of learning
- Conduct laboratory research in a modern computer-controlled laboratory, including animal handling and care, apparatus evaluation, computer control of apparatus, and data maintenance and analysis
- Prepare a laboratory report on an experiment in standard American Psychological Association style

Assessment of Student Performance:

Assessment of your learning will be conducted with 3 exams, 4 Quizzes, laboratory exercises, and a comprehensive final exam.

Assessment	% of Total	Points Possible	Points Earned
Exam 1	18%	180	
Exam 2	18%	180	
Exam 3	18%	180	
Quiz 1	2%	20	
Quiz 2	2%	20	
Quiz 3	2%	20	
Lab Exercises	20%	200	
Final Exam	20%	200	
Total	100%	1000	

925-1000	= A
900-924	= A-
899-875	= B+
825-874	= B
800-824	= B-
775-799	= C+
725-774	= C
700-724	= C-
675-699	= D+
625-674	= D
600-624	= D-
<600	= F

Regular Exams (54%) will cover all the material in a segment of the course. Exams may include short essay and multiple choice questions. There will be three regular exams.

Make-up Exams As a general policy I do not give make-up exams. If, however, you have a very good and **documented** excuse you may be permitted to take a make-up exam during the common Psychology Department make-up exam period. **But, do not assume you will**

be allowed to take a make-up! The format of this exam may differ from the exam given during class and will likely be all essay questions.

Quizzes (6%) will be based on the 3 required readings available on electronic reserve at the library (see below). Quizzes will be conducted in the first 10 min of class on the day that the reading is discussed (see course schedule below). The quizzes will include multiple-choice questions designed to assess your readiness to discuss the readings. **There will be no make-up quizzes.** You may find the required readings challenging. You will almost certainly need to read them more than once. Be sure to leave plenty of time for the readings.

Lab Exercises (20%) will assess work in the laboratory component of the course, including the lab report.

Final Exam (20%). The final for this course is cumulative and designed to assess your mastery of the course material. The final exam will also include some material not covered on the last regular exam. The format of the final will be similar to the regular exams.

Attendance. You are expected to attend every meeting of the class. You are also expected to be prepared to discuss the material to be covered in each class as described in the course schedule below. Finally, you should arrive on time.

Extra Credit. There are two ways to earn extra credit in this course. First, I may give brief assignments designed to help you understand the material at the beginning of some classes. The number of points available throughout the semester is not fixed, but will probably be around 15 points (1.5% of your grade). **You must attend class and arrive on-time to obtain these points. There will be no make-ups for extra credit points.** Second, you can earn extra credit points by serving as a subject in approved research within the Psychology Department

Academic Dishonesty. Cheating of any kind will not be tolerated. This includes copying someone else's work and representing it as your own.

Course Schedule

(Subject to change if needed)

8/26	Introduction
8/28	Ch. 1 The Psychology of Learning & Behavior
9/2	Ch 1 <i>continued</i>
9/4	Ch 1 <i>continued</i>
9/9	Ch. 4 Principles of Classical Conditioning
9/11	Ch. 4 <i>continued</i>
9/16	Reading 1 “Sources of Relapse After Extinction”
9/18	Ch. 4 & Reading 1 <i>continued</i>
9/23	<u>Exam 1 (Ch.1,Ch. 4, Reading 1)</u>
9/25	Ch. 5 Theories and Research on Classical Conditioning
9/30	Ch. 5 <i>continued</i>
10/2	Ch. 5 <i>continued</i>
10/7	Ch. 5 <i>continued</i>
10/9	Ch. 6 Basic Principles of Operant Conditioning
10/14	Ch. 6 <i>continued</i>
10/16	No Class (Friday Schedule)
10/21	Ch. 7 Reinforcement Schedules
10/23	Reading 2 “Behavioral Momentum”
10/28	Ch. 7 & Reading 2 <i>continued</i>
10/30	<u>Exam 2 (Ch. 5, 6, 7 & Reading 2)</u>
11/4	Ch. 8 Avoidance and Punishment
11/6	Ch. 8 <i>continued</i>
11/11	Ch. 14 Choice
11/13	Ch. 14 <i>continued</i>
11/18	Reading 3 “Delay Discounting”
11/20	Ch. 14 & Reading 3 <i>continued</i>
11/25	<u>Exam 3 (Ch. 8, 14 & Reading 3)</u>
11/27	No Class (Thanksgiving Break)
12/2	Ch. 10 Stimulus Control
12/4	Ch. 10 <i>continued</i>

*Final Paper Due
Tuesday 12/2/08*

*Final Exam
Tuesday 12/9/08
11:30 – 1:20*