

Course Syllabus: Psychology 3400 Analysis of Behavior: Advanced Fall 2011

Class Time Instructor Office TR 3:00 p.m. – 4:15 p.m. **Lecture:** Amy Odum, Ph.D. Education 496

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Office Hours M 3:00 p.m. – 4:00 p.m.

F 9:30 a.m. – 10:30 a.m.

and by appointment

Class Location BNR 278 Laboratory: Eric Thrailkill, M.S.

Education 450 797-5553

e.thrailkill@gmail.com M 10:00 a.m. – 11:00 a.m. W 3:00 p.m. – 4:00 p.m.

and by appointment

Prerequisite Psy 1400 – Analysis of Behavior: Basic Principles **Required Text** Mazur, J. E. (2006). *Learning and Behavior (6th ed).* Upper Saddle River, NJ:

Prentice Hall. Required Readings On Blackboard.

Course Topic. This course is an advanced treatment of how organisms learn - how behavior is acquired, maintained and changed as a result of our experiences. Much of our behavior is affected by prior experience, so learning is necessarily a broad topic. The focus will be on general principles of behavior that apply across a variety of species (human and nonhuman). The majority of the material we examine will be about fundamental behavioral processes under laboratory conditions. We will also have some indication of how these behavior principles are used to solve practical problems.

Course Method. This course will include learning experiences in both classroom and laboratory settings. In the classroom, we will have lecture and discussion. I really value your contributions to the discussion. Usually we will spend about one week per each major topic (see the Course Schedule later in this syllabus). To prepare, you should read the related material in the text before class. At the end of each chapter are the Summary and Review Questions. These parts of the chapter are there to help you fully integrate and remember the material, and you should devote special care to them. In particular, you should prepare your answers to the Review Questions after you finish reading the material. A substantial portion of the questions on examinations (described below) will come from the Review Questions. You also should prepare your answers to the Learning Objectives and Practices Quizzes, as these are fundamental to answering many examination questions as well.

· You may find this to be a fast-paced, challenging course, so it is in your best interest to keep up with all reading assignments and to **prepare the Learning Objectives**, **Practice Quizzes**, **and Review Questions as the material comes up in class**. You will be much happier with your performance if you keep up and do not get behind.

We will also have selected **Readings** that go along with the major course topics (see the Course Schedule). These readings are to illuminate the course topics and to give you exposure to the basic scientific literature. The readings contain a mixture of classic and modern papers. You will probably find some of them quite challenging, so **give yourself plenty of time to read them** (and to read them again). I will post the readings on Blackboard. There will be a quiz (5 multiple choice questions) at the beginning of class on the day that each reading is assigned. There will be 4 quizzes, each worth 20 points (2% of your grade). To prepare for quizzes, you should answer the questions on the **Reading Guide** that will be posted on Blackboard.



In the laboratory, you will complete advanced laboratory exercises with a pigeon. These exercises are designed to give you direct experience with the procedures and concepts discussed in the classroom. This type of learning will help you to remember and put in practice the principles we discuss in class. The laboratory exercises will start approximately 6 weeks after the semester is underway. You will

be responsible for your pigeon's well being and care. You will weigh your pigeon, place it into an experimental chamber, give computerized directions to the apparatus for that exercise, feed the pigeon appropriately after the session, and record and analyze the data. Each person will choose a partner for the laboratory and together with your partner you will be responsible for conducting the laboratory sessions five days per week at the same time each day (the time that you signed up for as your laboratory section). You will prepare a **laboratory report** in APA format on the major lab experiment. You will receive feedback on drafts of each section of the paper before submitting the final version. Detailed instructions and directions will be given on the laboratory syllabus.

There will be **four examinations** during the semester, each covering two major topics and additional readings (**see the Course Schedule**). You are expected to know material from class meetings, your reading of the text and other assigned readings, and laboratory exercises. Some examination questions will come exclusively from class meetings, some will come exclusively from your reading, and some will come from material that has been covered in multiple formats (e.g., class and reading). Examination questions from the chapters will come extensively from the Learning Objectives, Practice Quizzes, and Review Questions in each chapter of the text. The format of the examinations will be multiple choice and short essays. The comprehensive **final examination** will have the same format. The final exam will have questions from the most recent course material as well as comprehensive questions taken extensively from previous exams.

You will be able take a **missed examination** only if you have a documented and compelling reason for your absence during the exam. You should let me know as soon as you realize you might miss an exam. **If** you are allowed to take a make-up exam, it will be **all-essay format** during a special makeup time at the end of the semester (to be announced).

There will be one source of possible **extra credit points** in this course. I will give you short in-class assignments to help illuminate the material. The times will not be announced beforehand. You can turn these assignments in for extra credit after completing them in class. The number of extra credit points available throughout the entire semester will be approximately 15 (up to 1.5% of your total grade). Extra credit assignments cannot be made up if they are missed.

· You are expected to attend class every day it meets, having read the material associated with the topic, being ready to ask any questions you may have, and being prepared to discuss and engage the

material. For examinations, you are expected to have come to class and laboratory each day scheduled, to have read thoroughly and repeatedly all assignments, to have studied your classroom notes, and to have prepared and studied your answers to the **Learning Objectives**, **Practice Quizzes**, **and Review Questions** from each chapter of the text. Examination questions will cover not only your ability to remember basic facts, but also to apply them, to perform analyses given appropriate information, and to compare and contrast evidence, among other things.

Please do not engage in **academic dishonesty** of any kind in this course. Academic dishonesty of any kind will result in the appropriate consequences under institutional guidelines.

Course Learning Objectives

When you finish this course, you should have advanced knowledge about the experimental analysis of behavior. You should also have an in-depth idea of what it is like to conduct laboratory experiment studies. At the end of the semester, 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
- Describe schedules of reinforcement and the resulting performance
- Describe theories of schedule performance, including behavioral momentum
- 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

Course Readings (On Blackboard)

#1: 09/08/11 Skinner, B. F. (1971). A technology of behavior. In *Beyond freedom and dignity* (pp. 3 – 25). New York: Alfred A. Knopf.

#2: 09/20/11 Bouton, M. E. (2002). Context, ambiguity, and unlearning: Sources of relapse after behavioral extinction. *Biological Psychiatry*, *52*, 976 – 986.

#3: 10/27/11 Nevin, J. A. (1974). Response strength in multiple schedules. *Journal of the Experimental Analysis of Behavior*, *21*, 389-408.

#4: 11/17/11 Odum, A. L. (*in press*). Delay discounting: I'm a *k*, you're a *k. Journal of the Experimental Analysis of Behavior.*

Disability Resource Center Statement:

Students with ADA-documented physical, sensory, emotional or medical impairments may be eligible for reasonable accommodations. Veterans may also be eligible for services. All accommodations are coordinated through the Disability Resource Center (DRC) in Room 101 of the University Inn, (435)797-2444 voice, (435)797-0740 TTY, (435)797-2444 VP, or toll free at 1-800-259-2966. Please contact the DRC as early in the semester as possible. Alternate format materials are available with advance notice.

Assessment Summary

The following chart shows the source of all points available in class. You can keep up with your grade as the semester progresses by filling in the chart with your obtained grade.

Source	Percentage of Total	Possible Points	Your Points (Record Here)	Final Grade	Point Range
Exam 1	12%	120		Α	1000-925
Exam 2	12%	120		Α	924-900
Exam 3	12%	120		B+	899-875
Exam 4	12%	120		В	874-825
Quiz 1	2%	20		В	824-800
Quiz 2	2%	20		C+	799-775
Quiz 3	2%	20		С	774-725
Quiz 4	2%	20		С	724-700
Lab Exercises	20%	200		D+	699-675
Final Exam	24% (6% new, 18% comp)	240		D	674-625
Extra Credit				D	624-600
Total	100%	1000		F	599 and less

- T 08/30 Introduction & Pretest (Extra Credit)
- R 09/01 Chapter 1 Psychology of Learning & Behavior
- T 09/06 Chapter 1 Psychology of Learning & Behavior, continued
- R 09/08 Chapter 1, continued: Reading 1 Technology of Behavior (Skinner, 1971)

earn a great grade in this course, you should do the following:

- 1. Come to class every time it meets
- 2. Read all assigned material
- 3. Complete the Learning Objectives, Practice Quizzes, and Review Questions in the text
- 4. Complete the Reading Guides for Quizzes
- 5. Complete the Sample Exam Questions
- 6. Ask questions if something is not clear

Grade Insurance Policy

At this point in the semester, there are 21 regular class days remaining (excluding exam dates and breaks).

If you come to class at least 19 of those 21 days, you will protect your final grade from the possibility of missing the next letter grade by a few points.

If you are within 5 points of the next letter grade, you will receive the next highest grade.

For example, if you have 895 points, instead of receiving a B+, you will receive an A- in recognition of your effort in attending class regularly.

To

Course Schedule

Day Date Material

Source	Percentage of Total	Possible Points	Your Points (Record Here)	Final Grade	Point Range
Exam 1	12%	120		Α	1000-925
Exam 2	12%	120		Α	924-900
Exam 3	12%	120		B+	899-875
Exam 4	12%	120		В	874-825
Quiz 1	2%	20		В	824-800
Quiz 2	2%	20		C+	799-775
Quiz 3	2%	20		С	774-725
Quiz 4	2%	20		С	724-700
Lab Exercises	20%	200		D+	699-675
Final Exam	24% (6% new, 18% comp)	240		D	674-625
Extra Credit				D	624-600
Total	100%	1000		F	599 and less

- T 08/30 Introduction & Pretest (Extra Credit)
- R 09/01 Chapter 1 Psychology of Learning & Behavior
- T 09/06 Chapter 1 Psychology of Learning & Behavior, continued
- R 09/08 Chapter 1, continued; Reading 1 Technology of Behavior (Skinner, 1971)
- T 09/13 Chapter 4 Basic Principles of Classical Conditioning
- R 09/15 Chapter 4 Basic Principles of Classical Conditioning, continued
- T 09/20 Chapter 4, continued; Reading 2 Sources of Relapse (Bouton, 2002)
- R 09/22 Chapter 4 & Reading 2 continued
- T 09/27 Exam 1 (Chapters 1 & 4; Reading 1 & Reading 2)
- R 09/29 Chapter 5 Theories and Research on Classical Conditioning
- T 10/04 Chapter 5 Theories and Research on Classical Conditioning, continued
- R 10/06 Chapter 6 Basic Principles of Operant Conditioning
- T 10/11 Chapter 6 Basic Principles of Operant Conditioning, continued
- R 10/13 Chapter 6 Basic Principles of Operant Conditioning, continued
- T 10/18 Exam 2 (Chapters 5 & 6)
- R 10/20 NO CLASS
- T 10/25 Chapter 7 Reinforcement Schedules: Experimental Analyses and Applications
- R 10/27 Chapter 7 & Reading 3 Response Strength, Nevin (1974)
- T 11/01 Chapter 7 Reinforcement Schedules, continued
- R 11/03 Chapter 8 Avoidance and Punishment
- T 11/08 Chapter 8 Avoidance and Punishment. continued

Please Remember!

This schedule is given as a guide and is subject to change as necessary.