Learning
PSYC 420
Winter 2009
Room 412 Old-Upton
11:50 a.m.-1:05 p.m. MWF

Dr. Robert Batsell
Office: Old-Upton #403 B
Office Hours: 10:00-11:00 MWF (or by appointment)
Office Telephone: 337-7032
[or in case of an emergency: 388-3378]
E-mail: rbatsell@kzoo.edu
Class e-mail: psy420-1@kzoo.edu

T. A.: Katie Reimink
Phone:
E-mail: Office: OU 414
Office Hours:

Required Texts:


Assigned readings (see page 4)

I. COURSE SUMMARY

Historically, scientists and philosophers have attempted to identify the most basic units of our universe. A physicist might try to isolate an electron or a proton, the chemist hopes to find a pure chemical element, but does the psychologist have a similar mission? Yes, in all fields of psychology, the goal of the experimenter is to reduce behavior to its simplest form; in the area of learning, the psychologist attempts to identify the basic units of learning, the simple association. Adult humans frequently forget how basic learning processes underlie all of our complex behaviors. For instance, learning that touching a hot stove will burn your hand, or that eating bad fish will make you sick, or that a yellow light signals the impending change to a red light are all examples of simple learning processes such as classical conditioning and instrumental conditioning. The goal of this class is to re-introduce students to basic learning processes. Although most of psychology is based on the complexities of human behavior, as the previous examples demonstrate the area of learning is based upon the association between an antecedent and its consequence. We will spend the semester discussing how organisms (both humans and animals) learn that Event 'A' becomes associated with Event 'B'. We will discuss the factors that promote the formation and retention of this A-B association and various theories that attempt to explain how organisms learn about their environment. Furthermore, throughout this course we will see how our understanding of basic learning processes (either in humans or animals) can be used to provide practical and clinical solutions to complex human problems, and a better picture of the variety of learning systems available to humans.
II. GRADING

There will be a total of 600 points in this class.

- 90% and above (540 and up total points) = A
- 80% and above (480-440 total points) = B
- 70% and above (420-480 total points) = C
- 60% and above (360-420 total points) = D
- below 60% (below 360 points) = F

1. Exams: There will be a total of four exams. Three tests will be given during the quarter and the fourth will be given when the final is scheduled. Each exam date is marked on the accompanying class outline and will be given on that day. Each exam will consist of short-answer questions. Short-answer questions require a few paragraphs and any necessary diagrams/graphs. Each of the exams will be worth 100 points.

2. Sniffy Assignments: Throughout the quarter, students will be required to complete 6 Sniffy units. Four of the Sniffy units are worth 20 points and the other two are worth 10 points. These reports are worth a total of 100 points.

3. Written Assignments: An additional 100 points will come from various in-class experiments and discussion questions. For the discussion questions, groups of students will be responsible for generating discussion questions over the assigned readings (p. 5).

III. ACCOMMODATIONS.

A. Student Athletes. Student athletes who have College permission to miss classes or tests need to inform the instructor before they miss the assignment.

B. Cultural/Religious Holidays. Kalamazoo College provides reasonable accommodations for observing religious or cultural holidays (such as Yom Kippur, Martin Luther King Day, Easter, Cinco de Mayo). Students can be excused from class to participate in these religious/cultural activities, but they will be responsible for getting all assignments and turning in course work. Each student is responsible for contacting the faculty member in a timely manner to arrange for appropriate accommodations.

C. Students with Disabilities. Kalamazoo College provides reasonable accommodations for students with disabilities. It is the student's responsibility to contact the office of the Dean of Students/Dean Karen Joshua-Wathel in a timely manner to arrange for appropriate accommodations.

IV. CLASS RULES.

A. Honor System. This course will operate in accordance with the Kalamazoo College Honor System: a responsibility for personal behavior, independent thought, respect for others, and environmental responsibility. Students who are caught cheating or plagiarizing will receive a zero for that assignment, will be referred to Student Services, and may fail the class. Students who download papers or any information from the Internet without citing the source may receive an F in this course.
B. Attendance. Attendance will not be taken in this class, but students are expected to attend the scheduled classes. Many of the test questions will come from class lectures and are not in the book. It should be noted that students who have been successful in this class in the past have adopted the strategy of reading the book prior to lecture, attending the lecture, and then rereading the text over the corresponding material.

C. Classroom Behavior. Students are expected to treat all members of this class with respect. Shouting and harassment have no role in a college classroom where students can voice their opinion free of the ridicule of others. These rules also apply when students are engaged in discussion in small break-out groups.

LEARNING Course Outline

DATE LECTURE TOPIC

SECTION 1: INTRODUCTION TO BASIC TYPES OF LEARNING (7 Meetings)

Week #1 Introduction to Learning
Jan 5-9

Week #2 Introduction to Classical Conditioning
Jan 12-16

Week #3
Mon Jan 19 Martin Luther King Day –No Class

Jan 21 & 23 Classical Conditioning Variables

Week #4
Mon. Jan 26 TEST #1

SECTION 2: MECHANISMS/ASSOCIATIONS OF CLASSICAL COND. (6)

Week #4 Associations in Classical Conditioning
Jan 28-30 -Multiple Associations in Classical Conditioning
-Preexposure Effects

Week #5
Feb 2-6 Formal Theories of C.C.
-Rescorla Wagner Model

Week #6
Feb 9  Formal Theories cont’d

Feb 11 (Wed)  TEST #2
 SECTION 3: ANALYSIS OF INSTRUMENTAL CONDITIONING (7)

Week #6  Introduction to Instrumental Conditioning
Feb 13

Week #7  Responding for Appetitive and Aversive Reinforcers
Feb 16-20

Week #8  Theories of Instrumental Conditioning
Feb 23 -27

March 2 (Mon)  TEST #3

SECTION 4: APPLICATIONS OF LEARNING THEORY (6)

Weeks #9 & 10

March 4  Food, Sex, & Aversions

March 6  Food, Sex, & Aversions
[Required: Baker & Cannon, 1982]

March 9  Learned Helplessness & Academics, Achievement
[Required: Kamins & Dweck, 1999; McKean, 1994]

March 11  Drugs
[Required: Miles et al., 2003; Seigel et al., 2003]

March 13  Teaching Language to Autistic Children
[Required: McEachin, Smith, & Lovass, 1993]

TEST #4/ FINAL EXAM: Wednesday, March 14, 1:00 p.m. to 4:00 p.m.
Sniffy Lab Exercises

I. CLASSICAL CONDITIONING EXERCISES

Assignment #1 (20 Points):
Exercise 1: Basic Acquisition
Exercise 2: Extinction
Exercise 3: Spontaneous Recovery
Exercise 4: Varying the Strength of the CS
Exercise 5: Varying the Strength of the US

Assignment #2: (10 Points)
Exercise 10: Inhibitory Conditioning
Exercise 11: Inhibitory Conditioning by Summation

Assignment #3: (10 Points)
Exercise 6: Compound Conditioning
Exercise 7: Blocking
Exercise 8: Overshadowing

Assignment #4 (20 Points)
Nature of the Association in C.C./Ch. 11
Exercises 14-18

II. INSTRUMENTAL CONDITIONING EXERCISES

Assignment #6: (20 Points)
Basic I.C. Chp 3 Exercises 22-27
Schedules of Reinforcement Exercises 31-35

Assignment #8: (20 Points)
Stimulus Discrimination & Stimulus Generalization Chp 13
ASSIGNED LEARNING ARTICLES 2007

SECTION I Readings:

Friday, January 9,


Friday, January 23

Everybody:


Subgroups:


SECTION II Readings:

Friday, February 6


Monday, February 9


SECTION III Readings:

Friday, February 13


SECTION IV Readings:

I. INSTRUMENTAL CONDITIONING ARTICLES


II. CLASSICAL CONDITIONING ARTICLES

