

Note: Topics and reading selections are updated slightly each year.

## PSY 320: Learning and Motivation

Dr. Amazeen

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**Office Hours** .....M 12 – 3  
Guaranteed time by appointment only

### Required Text

Mazur, J. E. (2006). *Learning and Behavior, 6<sup>th</sup> Edition*. Prentice Hall.

### Office hours

Priority will be given to anyone who has made an appointment to see me at a particular time. If you miss class, then get notes from someone else before you come to ask me questions.

### Grade

Your final grade will be the average of your highest 3 grades on 4 exams. There are no make-ups for missing an exam; the zero that you receive will be dropped as your lowest exam grade.

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A+	97 – 100	B-	80 – 83
A	94 – 96	C+	77 – 79
A-	90 – 93	C	70 – 76
B+	87 – 89	D	60 – 69
B	84 – 86	E	0 – 59

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**Exams I – III.** 100 pts each. Exams consist of 2 essays (10 pts each) and a maximum\* of 40 multiple choice questions (2 pts each). A portion of each exam grade will be determined by your performance on unannounced quizzes (=2 multiple choice ques.) and class discussions (= 1 multiple choice ques.)\* Exams will cover information from both lectures and reading assignments.

\* For example, if the class has one quiz and one class discussion, then 6 pts. will be determined before the exam and only 37 multiple choice questions will be asked.

**Final Exam.** 100 points. The cumulative final is 50 multiple choice questions.

**Quizzes.** 4 pts each. Unannounced quizzes are four multiple choice questions. There are no make-up options for missing a quiz.

**Class Discussions.** 2 pts each. All attending group members receive 2 pts for the correct answer to the class discussion question. There are no make-up options for missing a class discussion.

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### **Cell phones**

The use of cell phones during class time is rude, so please turn yours off.

### **Academic Dishonesty**

You may not use books, notes, or any other study aids during exams or quizzes. You may not copy material from anyone else during an exam or quiz. Punishment for cheating can range from a failing grade for the course to expulsion from the university.

### **Semester Calendar**

The following is a schedule of lecture topics that we will be covering during the first part of this semester. *\*You are responsible for any changes that are made to the schedule.\**

<b>Day</b>	<b>Topic</b>	<b>Reading Assignment (pages)</b>
1 and 2	Introduction & Associations .....	pp. 1-4; 13-27 ..... (19)
	I. Learning Theories	
	II. Principles of Association	
	A. Aristotle principles	
	B. Brown's principles	
	C. Experimental Proof	
3	Habituation .....	pp. 47-51 ..... (5)
	website: <a href="http://www.owu.edu/~deswartz/introduction.html">http://www.owu.edu/~deswartz/introduction.html</a>	
	I. Defined	
	A. Automatic	
	B. Stimulus Specificity (vs. Generalizability)	
	C. Innate	
	II. Principles of Habituation	
	A. Habituation Curve	
	B. Recovery	
	C. Relearning	
	D. Stimulus Intensity	
	E. Overlearning	
	<b>Classical Conditioning</b>	
4	Pavlov's Dogs.....	pp. 60-62; 64-68 ..... (8)
	I. Experiment	
	II. Discovery	
	III. Basic Classical Conditioning	
	A. Order is important	
	B. Stimulus Substitution Theory	
5 and 6	Principles of Classical Conditioning .....	pp. 68-88 ..... (21)
	website: <a href="http://www.owu.edu/~deswartz/introduction.html">http://www.owu.edu/~deswartz/introduction.html</a>	
	I. Learning it and Losing it	
	A. Learning/Acquisition	
	B. Extinction	



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**Operant Conditioning**

- 11 Introduction to Operant Conditioning..... pp. 118-125; 131-132 . (10)
  - I. Classical vs. Operant Conditioning
  - II. Thorndike’s Law of Effect
    - A. Positive Reinforcement
    - B. Stop Action Principle
    - C. Superstitious Behaviors
  - III. Discrete Trials vs. Free Operant Procedure
  
- 12 and 13 Principles of Operant Conditioning  
..... pp. 125-138; 143- 144; 202-204(19)
  - I. Shaping by Successive Approximation
  - II. Principles of Operant Conditioning
    - A. Discriminative Stimulus and Three-Term Contingency
    - B. Secondary Reinforcer
    - C. Acquisition, Extinction, Spontaneous Recovery, and Re-Acquisition
  
- 14 Reinforcement Schedules ..... pp. 145-159 ..... (15)
  - I. Four Schedules of Reinforcement
    - A. Fixed Ratio (FR)
    - B. Variable Ratio (VR)
    - C. Fixed Interval (FI)
    - D. Variable Interval (VI)
  - II. Reinforcement is more effective when...
  - III. The Cause of the Post-Reinforcement Pause
  
- 15 and 16 *(3/12 - 3/16 is Spring Break)*  
  
Four Contingencies ..... pp. 171-178; 181-190 . (18)
  - I. Negative Reinforcement
  - II. Avoidance Paradox
    - A. Two-Factor Theory
    - B. One-Factor Theory
    - C. Cognitive Theory of Avoidance
  - III. Punishment
    - A. Effectiveness
    - B. Disadvantages (incl. Learned Helplessness)
  - IV. Negative Punishment
  
- 17 Applications of the Four Contingencies  
..... pp. 162-170; 190-199 . (19)
  
- 18 Catch-up and Question Day:  
*Ask any question but “What’s on the exam?”*
  
- 19 **Exam II** **(81)**

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**Supplemental Reading**

Schmidt, R. A., & Lee, T. D. (1999). *Motor Control and Learning: A Behavioral Emphasis, 3<sup>rd</sup> Edition*. Human Kinetics.

<b>Higher-Order Processes: Motor</b>	
20	Motor Learning ..... pp. 300-302 ..... (8) <ul style="list-style-type: none"><li>I. Classes of Motor Skills S&amp;L pp. 358-362<ul style="list-style-type: none"><li>A. Discrete vs. Continuous</li><li>B. Open-loop vs. Closed-loop</li></ul></li><li>II. Power Law of Learning</li><li>III. Stages of Learning<ul style="list-style-type: none"><li>A. First: Verbal-motor (Cognitive)</li><li>B. Second: Motor (Associative)</li><li>C. Third: Autonomous</li></ul></li></ul>
21	Practice and Transfer ..... pp. 302-310 ..... (13) <ul style="list-style-type: none"><li>I. Mass vs. Distributed Practice S&amp;L pp. 292-295</li><li>II. Transfer<ul style="list-style-type: none"><li>A. Positive</li><li>B. Negative</li></ul></li><li>III. Feedback<ul style="list-style-type: none"><li>A. Knowledge of Results (KR)</li><li>B. Knowledge of Performance (KP)</li></ul></li></ul>
22	Motor Schemas ..... pp. 313-316; 317-322 . (10) <ul style="list-style-type: none"><li>I. Overview</li><li>II. Developing a Motor Schema</li><li>II. Quality<ul style="list-style-type: none"><li>A. Feedback</li><li>B. Practice condition variability</li></ul></li></ul>
23	Coordination Dynamics ..... S&L pp. 217-226..... (10) <ul style="list-style-type: none"><li>I. Overview</li><li>II. Intrinsic Dynamics<ul style="list-style-type: none"><li>A. Two patterns</li><li>B. Increasing speed</li><li>C. Drawing</li></ul></li><li>III. Applications<ul style="list-style-type: none"><li>A. Intention</li><li>B. Learning</li></ul></li></ul>

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24	<b>Higher-Order Processes: Cognitive</b> Self-Control Choice Behavior ..... pp. 339-352 ..... (14) <ul style="list-style-type: none"><li>I. Definition<ul style="list-style-type: none"><li>A. Ainslie-Rachlin theory</li></ul></li><li>II. Evidence<ul style="list-style-type: none"><li>A. Children</li><li>B. Individual differences</li><li>C. Role models</li><li>D. Adult examples</li></ul></li><li>III. Improving self-control</li></ul>	
25 and 26	<b>Higher-Order Processes: Social</b> Observational Learning ..... pp. 278-299 ..... (22) <ul style="list-style-type: none"><li>I. Traditional theories of imitation<ul style="list-style-type: none"><li>A. Innate?<ul style="list-style-type: none"><li>Thorpe’s three categories</li></ul></li><li>B. An operant response?</li></ul></li><li>II. Bandura’s theory<ul style="list-style-type: none"><li>A. Experiment – Bobo doll</li><li>B. Four processes for observational learning</li></ul></li><li>III. Applications of Observational Learning</li></ul>	
27	Catch-up and Question Day: <i>Ask any question but “What’s on the exam?”</i>	
28	<b>Exam III</b>	<b>(77)</b>
<b>As scheduled by ASU</b>		<b>Cumulative Final Exam</b>