

### **Course Information**

Meeting Days: Tue/Thu Meeting Times: 10:00am – 11:45am Meeting Location: Rohr Hall, Room 111 Semester Units: 4 Final Exam: May 2<sup>nd</sup>, Thursday 10:30pm-1:00pm

### **Faculty Information:**

Instructor: Danielle Burns, LCSW, PhD-c, *Adjunct Professor of Psychology* Phone: (619) 253-8197 E-mail: dburns@pointloma.edu Office: Culbertson Hall (office hours by appointment only)

### Faculty Bio:

I am a Licensed Clinical Social Worker and Doctoral Candidate at Pacifica Graduate Institute. I bring to this role my experience of having worked as a Consultant for the State of California, Department of Health and Human Services, and a Child Welfare Training Administrator for the Los Angeles County Department of Children and Family Services. In my spare time, I enjoy writing poetry, composing songs, offering gifts of healing as a voiceover artist, and traveling the world to explore various cultures.

# **PLNU Mission**

### To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

### **COURSE DESCRIPTION**

Catalog Description: This course is a "study of the major theories and empirical findings in the fields of cognition and learning, as well as practical applications to human behavior. Laboratory activities may be included. Prerequisite(s): PSY 104 and PSY 390 or consent of instructor."

This course will serve as an upper-level introduction to major topics in cognitive psychology, while encouraging students to apply material from the course to topics covered in other courses such as (eyewitness testimony) and to everyday situations such as driving while using cell phones or language acquisition in

children. It provides an overview of topics involving perception, attention, memory, imagery, knowledge representation, categorization, problem solving, language, decision making, and reasoning. Theories dealing with these issues are reviewed with an emphasis on current research findings and applications.

This course also increases student knowledge of the basic principles of learning and behavior. Students will become knowledgeable about how these principles of learning can be practically applied in order to affect behavior. A special emphasis is placed on the social context of theories of learning and their implications of behavioral adjustment for applied practice. Practical applications of the theories and principles are also examined.

### **COURSE LEARNING OUTCOMES**

Upon successful completion of this course, students will be able to:

### **Course Objectives**

1. Describe how mental functioning is studied from an information processing perspective

- 2. Interpret and present the results and significance of published research in cognitive psychology.
- 3. Apply principles of cognitive psychology to mental functioning.
- 4. Discuss the historical antecedents of learning and behavior and examine their connection to modern issues.
- 5. Describe basic operant and classical conditioning procedures, and analyze the significance of both positive and aversive techniques.
- 6. Analyze motor learning, observational learning and other theories of learning.
- 7. Apply various learning principles, techniques and research methodologies to practical situations.
- 8. Present information in writing, using technology, style, and professional conventions as appropriate to the audience.

### **REQUIRED TEXTS**

Gluck, M.A., Mercado, E., & Myers, C.E. (2016). Learning and Memory: From Brain to Behavior. 3<sup>rd</sup> ed. New York, N.Y.: Worth Publishers.

Kahneman, D. (2011). Thinking, Fast and Slow. New York, N.Y.: Farrar, Straus, and Giroux.

### COURSE SCHEDULE AND ASSIGNMENTS

A combination of lecture, group discussion, and hands-on experiences will be implemented throughout the semester. You will be evaluated based on your engagement, knowledge, and ability to apply the material to real world situations. Lectures will highlight selected topics from the required readings and more recent developments in the field. Class discussions are intended to clarify concepts and enhance student learning. Students are responsible for all required readings, whether or not discussed in class. The readings and lectures will be the primary sources of information for tests, papers, and in-class journaling. Exams will consist of multiple choice and fill in the blank questions. The final exam will be comprehensive, but at least 20% of the questions will come from the midterm exam.

Note: The syllabus is not a contract. The professor reserves the right to modify the syllabus to accomplish the learning objectives of the course.

Week	Lecture Topics	Required Readings Before Class	Learning Activities and Assignments
1	<ul> <li>Course Introduction</li> <li>Course Projects Overview</li> </ul>	No readings	Getting to Know You Ice-Breaker Worth 0 points
2	<ul> <li>Current and historical approaches to studying learning</li> <li>Research methods in studying human and animal learning</li> <li>Physiology of learning</li> <li>Interdisciplinary Approaches</li> </ul>	<ul> <li>Gluck, M.A., Mercado, E., &amp; Myers, C.E. (2016)</li> <li>Chapter 1: The psychology of learning and memory</li> <li>Chapter 12: Development and aging</li> </ul>	Journal Reflection Assignment
3	<ul> <li>Reflexes and habituation</li> <li>Classical conditioning</li> <li>Association and learning</li> <li>Classical conditioning research</li> </ul>	<ul> <li>Gluck, M.A., Mercado, E., &amp; Myers, C.E. (2016)</li> <li>Chapter 3: Habituation, sensitization, and familiarization</li> <li>Chapter 4: Classical conditioning</li> </ul>	Journal Reflection Assignment Worth 10 points
4	<ul> <li>Operant conditioning</li> <li>Reinforcement schedules</li> <li>Avoidance and punishment</li> </ul>	<ul> <li>Gluck, M.A., Mercado, E., &amp; Myers, C.E. (2016)</li> <li>Chapter 5: Operant conditioning</li> </ul>	Journal Reflection Assignment Worth 10 points
5	<ul> <li>Observational learning</li> <li>Modeling</li> <li>Motor skill learning</li> </ul>	<ul> <li>Gluck, M.A., Mercado, E., &amp; Myers, C.E. (2016)</li> <li>Chapter 6: Generalization, discrimination learning, and concept formation</li> </ul>	Written Assignment 1: Societal and Theoretical Influences <b>Due February 7</b> <sup>th</sup> Worth 75 points
6	<ul> <li>Cognitive neuroscience</li> <li>Neuropsychology</li> <li>Perception         <ul> <li>Feature Analysis and Integration Theory</li> <li>Perceptual Learning</li> </ul> </li> <li>Pattern Recognition</li> <li>Attention</li> <li>Selected, Divided, and Visual Attention</li> </ul>	<ul> <li>Gluck, M.A., Mercado, E., &amp; Myers, C.E. (2016)</li> <li>Chapter 2: The neuroscience of learning and memory</li> <li>Chapter 7: Episodic and semantic memory</li> </ul>	Journal Reflection Assignment <i>Worth 10 points</i>

7	Models of Memory	Gluck, M.A., Mercado, E., & Myers, C.E. (2016)	Journal Reflection Assignment
	<ul><li>Sensory Memory</li><li>Short-Term or</li></ul>	<ul><li>Chapter 8: Skill memory</li><li>Chapter 9: Working memory and cognitive</li></ul>	Worth 10 points
	Working Memory	control	
	<ul> <li>Long-Term Memory         <ul> <li>Implicit/explicit memory</li> <li>Episodic/Autobio graphical, schemas; false memories</li> <li>Semantic memory</li> </ul> </li> <li>Encoding, Storage, and Retrieval         <ul> <li>Depth of processing</li> <li>Serial Position Effect</li> <li>Recognition</li> </ul> </li> <li>Forgetting         <ul> <li>Decay</li> <li>Interference</li> </ul> </li> </ul>		
	<ul> <li>Retrieval failure</li> <li>Amnesia</li> </ul>		
	Metacognition		
8	<ul> <li>Language         <ul> <li>Acquisition and Production</li> <li>Reading, Writing, and Speaking</li> </ul> </li> <li>Language Comprehension</li> <li>Mid-Semester review</li> </ul>	No Readings	Midterm Exam February 28th (covers weeks 1-8) Worth 80 points
	No Class March 4 <sup>th</sup> - 8 <sup>th</sup> (Sp	ring Break)	1
9	<ul> <li>Problem Solving</li> <li>Reasoning and Decision-making</li> </ul>	<ul> <li>Gluck, M.A., Mercado, E., &amp; Myers, C.E. (2016)</li> <li>Chapter 10: Emotional influences on learning and memory</li> </ul>	Journal Reflection Assignment Worth 10 points
10	<ul> <li>Individual Differences in Cognitive Ability         <ul> <li>social/cultural influences</li> <li>gender differences</li> </ul> </li> <li>Gardner's Theory of Multiple Intelligences</li> </ul>	Gluck, M.A., Mercado, E., & Myers, C.E. (2016) <ul> <li>Chapter 11: Social learning and memory</li> </ul>	Journal Reflection Assignment <i>Worth 10 points</i>
11	<ul> <li>Cognitive Operations         <ul> <li>Systems 1 and 2</li> </ul> </li> </ul>	<ul> <li>Kahneman, D. (2011)</li> <li>Text Kahneman pp. 19-105</li> </ul>	Journal Reflection Assignment Worth 10 points

12	•	Cognition, Heuristics, and Biases	<ul> <li>Kahneman, D. (2011)</li> <li>Text Kahneman pp. 109 - 195</li> </ul>	Written Assignment 2: Research Paper or Policy Proposal
				<b>Due April 4<sup>th</sup></b> Worth 75 points each
13	•	Cognition and Overconfidence	<ul> <li>Kahneman, D. (2011)</li> <li>Text Kahneman pp. 199 - 265</li> </ul>	Journal Reflection Assignment <i>Worth 10 points</i>
14	•	Cognition and Choices	<ul> <li>Kahneman, D. (2011)</li> <li>Text Kahneman pp. 269 - 362</li> </ul>	Journal Reflection Assignment Worth 10 points
15	•	Cognition and Life Experience <b>Guest speaker on</b> <b>April 23<sup>rd</sup></b> (announced mid- semester) Cumulative Course Reflection	<ul> <li>Kahneman, D. (2011)</li> <li>Text Kahneman pp. 377 - 418</li> </ul>	Final Exam May 2 <sup>nd</sup> (covers weeks 2 – 15) Worth 100 points

### ASSESSMENT AND GRADING

Grading Scale

Α	100 – 93
A-	92 – 90
B+	89 – 88
В	87 – 83
B-	82 - 80
C+	79 – 78
С	77 - 73
C-	72 – 70
D+	69 – 68
D	67 – 63
D-	62 – 60
F	59 and below

#### Grading Requirements

10 Journal Reflections	100
Written Assignment 1	75
Written Assignment 2	75
Midterm Exam	80
Final Exam	100
Total:	430

10 Journal Reflections	23%
Written Assignment 1	18%
Written Assignment 2	18%
Midterm Exam	18%
Final Exam	23%
Total:	100%

### WRITTEN ASSIGNMENTS

There are three written assignments worth 75 points each. Write 6-8 pages in Word format. Include introductory and concluding paragraphs, a title page, and a references page. Place the title, paper topic, and your name on the top of the first page. Use 8 ½ by 11 paper, typewritten, on one side only. Use double spacing and one-inch margins. Write the paper as if a friend or relative that knew nothing about psychology were to read it. Apply APA standards to citation of sources. Submit papers electronically on Canvas. Grading rubrics will be provided and reviewed in lecture material.

### Written Assignment 1: Operant Conditioning and Superstitions – Due February 7, 2019:

For many, superstitions are absolutely true and often cause people to believe in and act in ways that are out of the normal in order to avoid a negative outcome or bring about a positive outcome. However, the origins of all superstitions lie in operant conditioning (e.g., wearing the same shirt worn during a victory game to all future games, etc.).

This assignment will have you examine the process by which operant conditioning can lead to a superstition. Research the development of operant conditioning and its basic principles. Then, in a cohesive paper, respond to the following:

### Questions:

- 1. Describe the historical antecedents of operant conditioning. What factors led to the rise of operant conditioning? Describe the principles/concepts.
- 2. Explain the process by which operant conditioning can lead to the development and maintenance of superstitions.
- 3. Brainstorm a number of superstitions you have heard or read about. Using your knowledge and vocabulary of operant conditioning, choose one of these superstitions and describe in detail the thinking processes that was involved that resulted in the acquisition and perpetuation this irrational belief.
- 4. Describe what about the operant conditioning process leads these beliefs to be so deeply ingrained and long standing.
- 5. Explain the following: Can a person ever be rid of superstitions? What methods can be used to help the person?
- 6. Interview a family member or friend to discover a superstition that they he/she has. Explain what event led to the formation of their superstition. Does this fit with your knowledge of operant conditioning's role in the development of superstitions? Why or why not?

# Written Assignment 2: Research Paper or Policy Proposal – Due April 4, 2019:

There are two categories for written papers. Select and submit one assignment from the categories listed. Instructions are as follows:

### Instructions:

**A.** The U.S. legal system places a lot of importance on eyewitness memory. Most people would report that they can accurately convey what they saw in a particular situation. However, these ideas are not supported by research. Instead, research shows that memory is quite malleable and is affected by many factors. This research demonstrates time and again that people do not remember exactly what they experienced.

You are an expert in false memories, and a local district attorney has requested your expertise on the following case:

On Tuesday January 8, 2019, a bank was robbed in San Diego, California. It was just after opening time, 9.04 a.m., and there were barely any customers, when a car parked in the side parking lot of the bank. Two men

came out of the car and walked to the entrance. Both wore dark clothing. Upon entering the bank, they held out their guns and asked for the manager. When the manager identified herself, the shorter of the two robbers ordered her to open the safe. Meanwhile, the other robber, a tall and burley man walked around holding his gun in his outstretched arm threatening the remaining employees and customers. The manager cooperated by opening the safe. The shorter robber collected all the money and valuables from the safe. After 5 minutes, the taller robber asked if his companion was ready to go. When he was, the two men ran back to their car, and drove away.

The district attorney asked that you create a white paper about false memory and how it might influence this case. Specially, he asked that you address the following:

- Describe false memory and false memory experiments. Use lecture and lab material to demonstrate and illustrate false memory experiments, special distracters, normal distracters.
- Describe at least one research study from a peer reviewed journal that investigated how eye-witness memory can be affected by false memories.
- Explain how false memory might influence this particular case. Use specifics from the description of the case and research to support your answer.
- Using evidence from the case and outside research, justify why eye witness testimonies should or should not carry weight in criminal proceedings.
- Discuss any procedures which can increase or reduce the occurrence of false memories when reporting eye-witness events.

Remember, your white paper is designed to help the jury understand false memory and how it might influence the eye witness testimony of this case. The document you construct will serve as a legally binding document in the case.

**B.** You are a political or organizational advocate interested in the issue of public safety within your community or region. You decide to write a policy proposal to recommend a solution for a concerning issue. Your expertise involves exploring issues that are influenced by poor cognitive functioning.

<u>Note: This is not an opinion/position paper.</u> Your conclusions will be based on the scientific research you uncover. Follow the steps below to generate the proposal structure:

### Introduction

In the introduction, you should set-up the purpose for the policy proposal, provide a bit of background on the topic, and present your thesis.

### Recommendations

Now that you have researched a variety of studies, compile the information together to create a recommendation for policy makers.

Step 1: In a one-page summary, compare and contrast the results of the various studies regarding the cognitive abilities that are affected concerning your safety issue you have chosen.

Step 2: Using that research, develop and explain particular recommendations for policy makers. All your recommendations must be supported by the research findings.

Step 3: Based on the gaps in current research, describe the variables, populations, situations would you like to see future research address.

# Conclusion

Review the important current research, your conclusions from that research, and how the future could look in both policy and research. Keep in mind your goal: to convince the reader to support your current policy proposal and future research to examine the chosen issue more closely.

## ACADEMIC INTEGRITY AND BEHAVIORAL EXPECTATIONS

This class will be conducted in accordance with the college student code of conduct and basic standards of academic honesty. It goes without saying that any forms of cheating, plagiarism, or other forms of academic dishonesty are not acceptable and will severely impact your grade and any future letters of recommendation. Is it really worth it? Part of my job is to help create a positive learning community. If you repeatedly have a negative impact on that community, I reserve the right to lower your final grade by one letter grade. Ultimately, everyone has to choose whether they will contribute or break down community, and I invite you to be a contributor.

Attendance is a critical component of this course. Much of the learning comes from class discussion and material not covered in the book. That is why the PLNU attendance policy will be closely followed. Please note that only Provost approved, university-sponsored activities are excused and personal reasons such as illness or family events are not.

Of course, we all have personal reasons why missing class might be necessary, and so each student receives four personal absences. At the end of the semester, each unused absence will be converted into an extra credit point (yes, you can get four extra credit points simply by attending class each day.) Each unexcused absence or tardy beyond three will be minus three points. If absences are excessive, the student may be dropped from the class.

I strongly recommend not using laptops in class. The reasons are three-fold: 1. It is hard to not check other things, which impairs your learning. You most likely are not aware of the impairment, but the research is quite clear. <u>https://www.tandfonline.com/doi/full/10.1080/01443410.2018.1489046</u>

2. Even if it doesn't impair your learning, it impairs others learning. http://www.sciencedirect.com/science/article/pii/S0360131512002254

3. You write more but learn less. Writing your notes creates synthesis which increases your learning. http://pss.sagepub.com/content/early/2014/04/22/0956797614524581.abstract http://chronicle.com/blogs/linguafranca/2014/08/25/why-im-asking-you-not-touselaptops/?cid=at&utm\_source=at&utm\_medium=en

Summary of APA Writing Style. A summary of the Publication Manual of the American Psychological Association (5th edition). <u>http://www.uwsp.edu/psych/apa4b.htm</u>

### INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due including assignments posted in Canvas. Papers will lose 10% for each week they are late. No papers will be accepted after the last day of instruction (i.e. nothing is accepted in finals week). Incompletes will only be assigned in extremely unusual circumstances.

#### FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examination **on its scheduled day**. The final examination schedule is posted on the <u>Class Schedules</u> site. No requests for early examinations or alternative days will be approved.

#### PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

#### PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic <u>dis</u>honesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See <u>Academic Policies</u> for definitions of kinds of academic dishonesty and for further policy information.

### PLNU ACADEMIC ACCOMMODATIONS POLICY

If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at <u>DRC@pointloma.edu</u>. See <u>Disability Resource Center</u> for additional information.

### PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See <u>Academic Policies</u> in the Undergraduate Academic Catalog.