

**SYLLABUS**  
**PSY 3001-1: Physiological and Neuropsychology**  
**Fall 2022**

Faculty: Mitchell R. Spezzaferri, M.A.

Semester Units: 4

Schedule: **Wednesdays 3:00-5:30 pm**

Final Exam: Week 16, 12/12-16

**Class meetings held online via [Zoom](#)**

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Office hours: [By appointment only](#)

**PLNU Mission Statement**

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

**Course Description**

This course is a study of the anatomical and physiological bases of mental events and behavior. Since psychology is the result of biology, and behavior and cognition are the results of biological processes, by studying biological processes we are able to have a better understanding of the psychological phenomena produced. We begin with an introduction to the biological system most relevant to psychology, the nervous system. Using this knowledge we will explore several psychological phenomena, such as vision, movement, sleep, emotion, language, memory in terms of the underlying biology.

**Program Learning Outcomes**

1. Identify basic tenants of psychology

**Course Learning Outcomes**

1. Recognize, identify and explain fundamental principles and theories related to field of biological psychology
2. Identify implications of the course material for understanding oneself and others from a functional perspective
3. Locate and summarize professional journal articles related to the field of biological psychology
4. Demonstrate skill in oral presentation of a biological/neuropsych topic
5. Apply concepts from the fields of biological psychology and neuropsychology

**Course Integration Practices**

1. **Sabbath**: to set apart one day a week for rest and worship of God
2. **Service**: to reflect the helping, caring and sharing love of God in the world
3. **Simplicity**: to curb my addiction to busyness, hurry and workaholism; to leave to savor the moment
4. **Solitude**: to leave people behind and enter into time alone with God
5. **Sharing my life with others**: to connect face-to-face, in person, below the surface in conversation
6. **Scripture memory**: to carry the life-sharpening words of God in me at all times and in all places

### Textbooks

1. Kolb, B., & Whishaw, I. Q. (2021). **Fundamentals of human neuropsychology (Eighth)**. Worth Publishers, a Macmillan Education Imprint. ISBN: 978-1319247164
2. Sacks, O. (1995). **An anthropologist on mars: Seven paradoxical tales**. New York: Random House, Inc.
3. Additional articles that are assigned throughout the semester (available on Canvas)

### Course Credit Hour Information

In the interest of providing sufficient time to accomplish the stated Course Learning Outcomes, this class meets the PLNU credit hour policy for a 4-unit class delivered over 15 weeks. It is anticipated that students will spend a minimum of 37.5 participation hours per credit hour on their coursework. For this course, students will spend an estimated 150 total hours meeting the course learning outcomes. The time estimations are provided in the Canvas modules.

### Attendance

Regular and punctual attendance at all **synchronous** class sessions is considered essential to optimum academic achievement. If the student is absent for more than 10 percent of class sessions (virtual or face-to-face), the faculty member will issue a written warning of 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. In some courses, a portion of the credit hour content will be delivered **asynchronously**, and attendance will be determined by submitting the assignments by the posted due dates. See [Academic Policies](#) in the Undergraduate Academic Catalog. If absences exceed these limits but are due to university excused health issues, an exception will be granted.

### I. Grading

- A minimum of 50% is needed to pass the course. The final grade will be computed on the following basis:
1. 40% Exams (5) (lowest exam grade will be dropped)
  2. 10% Integration & Spiritual Practices (5)
  3. 10% Online quizzes (10)
  4. 20% Discussion Docs (10) from Saks readings and cases studies
  5. 20% Research Project & Presentation

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Z Score				
A	1.33	0.0918	9.2%	
A-	1	0.1587	6.7%	15.9%
B+	0.67	0.2514	9.3%	
B	0.33	0.3707	11.9%	
B-	0	0.5	12.9%	34.1%
C+	-0.33	0.6293	12.9%	
C	-1	0.8413	21.2%	
C-	-1.33	0.9082	6.7%	40.8%
D+	-1.67	0.9525	4.4%	
D	-2	0.9772	2.5%	
D-	-2.33	0.9901	1.3%	
F	<-2.33	1	1.0%	9.2%

Percentage Score		
A =	93-100%	
A -	90-92%	
B +	88-89%	
B	84-87%	
B -	80-83%	
C +	77-79%	
C	70-76%	
C -	65-69%	
D +	62-64%	
D	55-61%	
D -	50-54%	
F	49%	or below

The student will receive the **higher grade** between Z Score and Percentage Score grade calculations. A minimum of 50% is needed to pass the course.

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### Test Policies

If a student cannot take a test due to any circumstances the student needs to notify the professor prior to the examination (in person or by phone/email). Any missed exam will result in a **5% deduction** taken from the final grade of that exam (whether taken early or late).

### Assignments

#### Discussion Documents

Before the synchronous class period, you will have lecture content and case studies to view/read prior to class. You will break out into smaller groups to discuss and respond to the questions provided with your group. With the links to the videos for the lecture content are response questions for you to answer. You will be graded on (a) whether you answered/addressed all the questions asked, and (b) level of effort/engagement displayed in your responses. Even though you work as a group, your responses will be graded independently. **Due each Friday by 11:59 PM.**

#### Online quizzes

You will be given an online quiz for each chapter of the book which will be comprised of 5 questions pulled

from a test bank. You can take the quizzes as many times as you would like, but each time the questions will be pulled randomly from the test bank. Your highest score on a quiz will be kept as your final score. **Due prior to the start of class, Wednesdays at 3:00 PM.**

### Research Project

Students will pick a disorder to research and will create a video presentation. The video should contain information regarding: (1) the prevalence of the disorder, (2) the disorder's clinical signs and symptoms (e.g., diagnostic symptoms and typical age of onset), (3) underlying pathology of the disorder (specifying what underlying neurologic issue is causing the disorder and how that fits into the developmental period), (4) describe the typical neuropsychological (cognitive) deficit(s) associated with the disorder, (5) potential treatments and (6) reference list. The presentation should take 10 minutes.

The presentation must include:

- A minimum of FOUR references in APA format
    - TWO must be ORIGINAL papers from PubMed or PsychInfo (reviews OK, not just the abstracts!)
    - Appropriate sources may also include PsychInfo or PubMed (preferred!), government websites (.gov), or documents published by universities.
      - Newspaper articles, Wikipedia, about.com, or other websites that are not primary sources are not appropriate for this paper.
      - Ask me if you are unsure.
    - You may use your textbook, but it does NOT count as one of the four references
- References should be used in a meaningful way, not just used to meet the minimum requirements of the assignment

Research Presentation Grading:

- Accuracy of Information (10 pts)
- Creativity/Originality of Presentation (5 pts)
- Clarity, organization, and communication skills of presentation (including quality of sources) (10 pts)
- Response to students' presentations (including quality of response) (5 pts)

### Exams

Five (5) exams will be administered throughout the semester via Honorlock on Canvas. The lowest exam score will be dropped at the end of the semester. **Due dates assigned in course calendar below based on course content.** Additionally, Exam 5 (Final Exam) will be given during Finals Week.

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### Integration & Spiritual Practices

Unit	Practice	Assignment
Sensory Systems	Sabbath, Solitude	During your Sabbath time, turn off your phone, and find a beautiful outdoor setting where you can be at least 20-30 feet away from anyone else and/or surrounded by nature (i.e., a big tree, the ocean, etc.). Spend 30 minutes sitting or lying down and take in all that is around you. Breathe deeply and slowly. Begin to catalog all the things in your mind that you can <i>see, hear, smell, taste, and feel</i> . Take a moment and close your eyes if you need to in order to heighten the awareness of your other senses. Reflect on how God has created each of these and gave His creation the ability to sense and perceive each of them uniquely. How is this experience changing your perception of yourself and who God is? Write and submit a 200+ word summary on Canvas of your experience/thoughts including a brief description of where you spent your time. <b>Due Monday, 9/19/22 at</b>

		<b>11:59 PM.</b>
Learning and Memory	Sabbath, Scripture memorization, Solitude	Spend time this week learning and memorizing Mark 1:35 (NIV84) word-perfectly. <i>“Very early in the morning, while it was still dark, Jesus got up, left the house, and went off to a solitary place, where he prayed.”</i> Be sure to remember the verse as well as the reference. As you are learning the verse, be thoughtful of its practice, meaning, and application to your own life. Reflect on your approach to learning the verse and ask God for help if needed. Have a friend or roommate record you reciting the verse and upload it to Canvas along with a 200+ word summary of your experience/thoughts on how this practice and its connection to learning and memory processes in the brain? What ways helped you learn the verse? What parts were easily/difficult? Would you apply these learning strategies to other areas of your life? Is this a spiritual practice you would like to integrate more often in the future? <b>Due Monday, 10/10/22 at 11:59 PM.</b>
Social Cognitive Functioning	Sharing my life with others	This week, share a meal or extended time of coffee with a friend or classmate (no roommates or family). Spend at least 30 minutes together. You can express and reflect on your journey to or at PLNU, a relationship/friendship that God has used to be particularly encouraging, or discuss the real-life change that Jesus has made for you personally. Note that this time should be a balance of sharing and listening. As you share, think through why I might want to share this? How does it help them understand me or what God is doing in my life more clearly? As you listen, don't interrupt. Be attentive and feel free to ask clarifying questions or make a reflective statement about what they have shared. Here are some prompts that might help get the conversation started: How have you seen yourself change so far in PLNU? What about people helping or service drew you to study psychology? What is one thing that God has been growing or challenging you in lately? Write and submit at 200+ word summary on Canvas of your experience/thoughts including a brief description of where you spent your time. <b>Due Wednesday, 10/19/22 at 11:59 PM.</b>
Plasticity, Recovery, & Rehab	Service, Solitude, Sabbath	During your Sabbath time, turn off your phone, and find a beautiful outdoor setting where you can be at least 20-30 feet away from anyone else and/or surrounded by nature (i.e., a big tree, the ocean, etc.). Spend 30 minutes sitting or lying down and pray for God to show you ways in which you can use your hands/eyes/ears/heart to serve Him and care for others around you. How/where is God calling you to serve others with your education, spiritual gifts, or experiences? Write and submit a 200+ word summary on Canvas of your experience/thoughts including a brief description of where you spent your time. <b>Due Wednesday, 11/02/22 at 11:59 PM.</b>
The Human Brain and Behavior	Simplicity	During your Sabbath time, think about the life you have here at PLNU, and the life that you anticipate having after college. What changes can you imagine that would mean a simpler life in terms of stress, busyness of life, and use of time/resources? Think of changes that are realistic, as well as a couple that would be more challenging, but possibly obtainable. Write and submit a 200+ word summary on Canvas of your ideas and thoughts on how practices simplicity can be seen as a spiritual practice. <b>Due Wednesday, 11/16/22 at 11:59 PM.</b>

Any missed or late assignments will result in a **5% deduction** taken from the final grade of that exam or assignment. These deductions occur one time for each exam or assignment and are not cumulative by length of time. All late or missed work must be turned in by the last week of class (**Friday by 11:59pm**), prior to final exams to receive credit.

### **State Authorization**

State authorization is a formal determination by a state that Point Loma Nazarene University is approved to conduct activities regulated by that state. In certain states outside California, Point Loma Nazarene University is not authorized to enroll online (distance education) students. If a student moves to another state after admission to the program and/or enrollment in an online course, continuation within the program and/or course will depend on whether Point Loma Nazarene University is authorized to offer distance education courses in that state. It is the student's responsibility to notify the institution of any change in his or her physical location. Refer to the map on [State Authorization](#) to view which states allow online (distance education) outside of California.

### **Use of Technology**

In order to be successful in the online environment, you'll need to meet the minimum technology and system requirements; please refer to the [Technology and System Requirements](#) information. Additionally, students are required to have headphone speakers compatible with their computer available to use. If a student needs technological resources, please contact [student-tech-request@pointloma.edu](mailto:student-tech-request@pointloma.edu).

Problems with technology do not relieve you of the responsibility of participating, turning in your assignments, or completing your class work.

### **Academic Accommodations**

While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic adjustments, modifications, or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center ([DRC@pointloma.edu](mailto:DRC@pointloma.edu) or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 prohibits discrimination against students with special needs and guarantees all qualified students' equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that course and/or if they do not desire to take advantage of some or all the elements of their AP in that course.

### Academic Dishonesty

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. As stated in the university catalog, “Academic dishonesty 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. Such acts include plagiarism, copying of class assignments, and copying or other fraudulent behavior on examinations. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for a) that particular assignment or examination, and/or b) the course.” See [Academic Policies](#) in the undergrad student catalog.

### 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.

### FERPA Policy

In compliance with federal law, neither PLNU student ID nor social security number should be used in publicly posted grades or returned sets of assignments without student written permission. This class will meet the federal requirements by (each faculty member choose one strategy to use: distributing all grades and papers individually; requesting and filing written student permission; or assigning each student a unique class ID number not identifiable on the alphabetic roster.). Also, in compliance with FERPA, you will be the only person given information about your progress in this class unless you have designated others to receive it in the “Information Release” section of the student portal. See [Policy Statements](#) in the undergrad student catalog.

### Final Exam

Successful completion of this class requires taking the final examination on its scheduled day. The final examination schedule is posted on the Class Schedules site. No requests for early examinations or alternative days will be approved. In the rare case that a student is scheduled for more than three (3) final examinations on the same day, the student is authorized to contact each professor to work out an alternative time for one of those examinations. This professor needs to be contacted at least 2 weeks prior to finals for any and such arrangements.

### Course Schedule

This syllabus is not a contract. It is designed to help you organize your study and meet the requirements of the course. Professor reserves the right to make changes from time to time.

**Note:** Given the hybrid and online modalities being used in the 2022-2023 academic year, the content of the course schedule and assignments will be posted in Canvas.



## Course Calendar

## Week Date Day Assignment

1	8/30/22	T	Fall Semester Starts, but a Monday Schedule
1	8/31/22	W	Introduction to Course/Syllabus Kolb Ch. 1 Development of Neuropsychology
2	9/5/22	M	Kolb Ch. 3 Nervous System Organization <i>Quiz 1</i>
2	9/7/22	W	Kolb Ch. 4/5 Activity & Comm. Between Neurons
3	9/12/22	M	Kolb Ch. 8 Sensory Systems <sup>^</sup> <i>Quiz 2</i>
3	9/14/22	W	Kolb Ch. 9 Motor Systems <b>EXAM 1 (due Saturday, 9/17 by 11:59 PM)</b>
4	9/19/22	M	Kolb Ch. 13 Occipital Lobes <i>Quiz 3</i>
4	9/21/22	W	Kolb Ch. 14 Parietal Lobes Sacks assigned reading – <i>Case of the Colorblind Painter</i>
5	9/26/22	M	Kolb Ch. 15 Temporal Lobes <i>Quiz 4</i>
5	9/28/22	W	Kolb Ch. 16 Frontal Lobes
6	10/3/22	M	Kolb Ch. 18 Learning and Memory <sup>^</sup> <i>Quiz 5</i>
6	10/5/22	W	Kolb Ch. 19 Language Sacks assigned reading - <i>Landscape of His Dreams</i> <b>EXAM 2 (due Saturday 10/8 by 11:59 PM)</b>
7	10/10/22	M	Kolb Ch. 20.1 Emotion Processing Sacks assigned reading - <i>Anthropologist on Mars</i>

7	10/12/22	W	Kolb Ch. 20.2 Social Cognitive Functioning <sup>^</sup>
8	10/17/22	M	Kolb Ch. 21 Spatial Behavior <i>Quiz 6</i>
8	10/19/22*	W	Kolb Ch. 22 Attention and Consciousness Sacks assigned reading - <i>The Last Hippie</i>
9	10/24/22	M	Kolb Ch. 23 Brain Development and Plasticity <i>Quiz 7</i>
9	10/26/22	W	Kolb Ch. 25 Plasticity, Recovery, and Rehab <sup>^</sup> <b>EXAM 3 (due Saturday, 10/29 by 11:59 PM)</b>
10	10/31/22	M	Kolb Ch. 24 Neurodevelopmental Disorders <i>Quiz 8</i>
10	11/2/22	W	Kolb Ch. 26 Neurological Disorders Sacks assigned reading - <i>A Surgeon's Life</i>
11	11/7/22	M	Kolb Ch. 6 Drugs, Hormones, & Behavior <i>Quiz 9</i>
11	11/9/22	W	Kolb Ch. 27 Psychiatric and Related Disorders <sup>^</sup>
12	11/14/22	M	Kolb Ch. 2 Research of Human Brain and Behavior <i>Submit peer-reviewed research article</i>
12	11/16/22	W	Kolb Ch. 7 Imaging the Brain's Activity <b>EXAM 4 (due Saturday, 11/19 by 11:59 PM)</b>
13	11/23/22	M/W	<b>THANKSGIVING BREAK - No Class</b>
14	11/28/22	M	Kolb Ch. 11 Cerebral Asymmetry

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			<i>Quiz 10</i>
14	11/30/22	W	Kolb Ch. 12 Differences in Cerebral Organization <b>Research Project Video Due</b>
15	12/5/22	M	Kolb Ch. 28.1 Neuropsychological Assessment <b>Research Project Responses Due</b>
15	12/7/22	W	Kolb Ch. 28.2 Neuropsych Assessment continued
16	12/12-16/22		<b>Exam 5 – Final (due Friday, 12/16 by 11:59 PM)</b>

\* Psychology Advising Day – no synchronous class meeting this afternoon. Weekly course content and due dates still in effect.

^ Integration and Spiritual Practice assignment incorporated this week and due the following week.