Department of Psychology

PSY 3090-2 - Research Methods and Statistics I

4 Units

Spring 2026

Meeting days/times: Monday, Wednesday, and Friday from 10:55am-12:05pm

Meeting location: Ryan Library, Room 106

Final Presentations: Wednesday, May 6th, 2026 from 8:30-10:00am **(Observe),** and

Wednesday, May 6th, 2026 from 10:30am-1:00pm **(Present)**

Instructor title and name:	Dr. Ross Oakes Mueller
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Email:	RossOakesMueller@pointloma.edu
Office location and hours:	Culbertson Hall, Room 213 To Schedule: https://tinyurl.com/DrOakesMuellerOfficeHours

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.

Rev 08.27.24

Course Description

Students gain experience in methods of design, data collection, management and analysis. Students begin a significant research project. This course must be taken in the semester immediately preceding PSY 3091.

Program Learning Outcomes

Students who complete the program in Psychology will be able to:

1. Identify basic tenets of psychology.

2. Summarize and apply facets of "The Good Life" as conceptualized in contemporary positive-moral psychology.

3. Display an increase in personal growth and development (for the purpose of serving others).

4. Demonstrate care for others.

5. Understand careers in psychology.

Course Learning Outcomes

Overview – The field of psychology requires a unique blend of competence both a) in practicing therapeutic **techniques** and b) in understanding and conducting psychological **research**. This course aims to develop your language, logic, and skills related to the latter. Specifically, you will not only learn to **identify the basic tenets of research psychology**, but will learn to *locate, critique, synthesize, conduct, and present* psychological research.

Locating Psychological Research – With the vast mountain of human knowledge becoming ever more accessible on the internet, most people simply trust in a global search engine (e.g., Google) to locate the answers to their questions. In fact, in a typical search, only 10% of people look past the first 10 search results to find the best answer for their question (Hearne, 2006). As you will soon see, these search results are often not the best source of quality information, and finding the best answer to your question usually requires a more careful "search" process. This course will provide you with the skills and opportunity to search through the vast field of psychological research to find *quality* articles and theories that relate to a topic that is of interest to *you*.

Critiquing Psychological Research – How often have you found two different articles or individuals making competing claims about reality? A thorough "literature review" will reveal multiple competing theories and ideas, each of which claim to be "valid." Such confusion becomes especially important in a field such as psychology, in which we are trying to relieve suffering and promote

growth. This course will help you to identify specific "criteria of validity," and use them to understand and evaluate the published articles of others who have conducted research. In the current "Age of Information," the ability to critically analyze competing truth claims and separate the so-called "wheat" from the "chaff" is absolutely necessary to navigate the flood of data available to you.

Synthesizing Psychological Research – So you've become a search-wizard, and have now located dozens of different articles on your topic of interest. But what do they all mean? How do they fit together? And, perhaps most importantly, What is missing? The flood of search results are like millions of puzzle pieces (many of which don't even belong to your puzzle!). This course will help you in the process of [becoming a modern "puzzle master,"](#) learning to first sort relevant information from irrelevant information, and then learning to put the pieces together into a "literature review" that makes sense of many different pieces of data. Finally, this course will help you to identify important missing pieces, and to develop research questions that could help fill in the blanks.

Conducting Psychological Research – Once you've figured out the important questions to ask, how do you go about answering them? In particular, how do you avoid the pitfalls of other "less valid" articles and researchers? This course will teach you to apply the principles of basic scientific research to answering one or more questions that interest you. Specifically, you will learn to develop and conduct a study of your own. This will involve gaining skills in research design, problem solving, and (perhaps most importantly) group work. In fact, students in the past have found that the ability to work well with others is often the make-it-or-break-it factor that can create a successful research study.

Presenting Psychological Research – As students of psychology, you are studying to become relative experts in this field of knowledge. You have been blessed with tremendous academic and technological privilege; and with this privilege comes a great responsibility for this information. In a world that equates information with power, you now possess the power to either hurt or harm the world in profound ways. In short, the world needs the information you possess. Families need it. Churches need it. Suburban schools, inner-city programs, homeless shelters, all need what you have. And the only way that they can get it is if you learn to communicate it lovingly and coherently. This course will provide you with the opportunity both to present your research, and to critically (and lovingly) analyze the research of your peers.

1) You will gain a proficiency in using online tools to locate and gather both electronic and hard-copies of journal articles.

Rev 08.27.24

2) You will increase your ability to appropriately select, understand, interpret, and critically evaluate relevant published articles of others who have conducted research.

3) You will develop skills in "annotating" and organizing information from articles that they have read, so as to accurately understand the theories, findings, and "lingering questions" in the current "literature" on a given psychological topic.

4) You will develop a working understanding of the concepts of research ethics, validity, and reliability, and apply them to the process of developing an appropriate research question and testable hypotheses.

5) You will learn to critically evaluate, select, "pilot test," and revise empirical measures of psychological constructs.

6) You will develop a proficiency in writing in APA format by memorizing common formatting requirements, by practicing your application, and by identifying and editing your own formatting errors.

5) You will increase your ability to accurately and effectively synthesize existing research into a formal "review of the literature" (or "Introduction" section).

6) You will gain experience and proficiency in conducting oral presentations of your work, and in providing helpful critical feedback to other students regarding their presentations.

The objectives will be achieved through your reading of the written materials, through the lectures given and discussions led by the instructor, through in-class exercises, and (most importantly) through active participation by you in the production of your own experimental project.

Whether these objectives have been achieved or not will be measured by your scores on quizzes, exams, class participation, and both oral and writen versions of your research project.

Required Texts and Recommended Study Resources

Students are responsible for having the required course textbooks prior to the first day of class.

All supplemental materials posted on this course site (including articles, book excerpts, or other documents) are provided for your personal academic use. These materials may be protected by copyright law and should not be duplicated or distributed without permission of the copyright owner.

Lomabooks Instructions for Students:

This course is part of our course material delivery program, **LomaBooks***. The bookstore will provide each student with a convenient package containing all required physical materials; all digitally delivered materials will be integrated into Canvas.*

You should have received an email from the bookstore confirming the list of materials that will be provided for each of your courses and asking you to select how you would like to receive any printed components (in-store pick up or home delivery). If you have not done so already, please confirm your fulfillment preference so the bookstore can prepare your materials.

For more information about **LomaBooks,** *please go:* HERE

Required Texts

American Psychological Association. (2019). *Publication Manual of the American Psychological Association*. (7th ed.). Washington, D.C.: Author. (Spiral Binding Recommended)

Morling, B. (2021). *Research Methods in Psychology* (5th ed.). WW Norton. **Including InQuisitive**.

      FOR STUDENTS NOT USING LOMABOOKS (**Purchase for $78 Directly from the Publisher Here** … includes access to InQuisitive).

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.

Assessment and Grading

Grades will be based on the following:

In-Class Exercises	5%
Reading Quizzes	10%
Homework	10%

Rev 08.27.24

Examinations	25%			
Paper	30%			
Group Work Grade	10%			
Presentations	<u>10%</u>			
	100%			

A	**B**	**C**	**D**	**F**
A 93-100	B+ 87-89.99	C+ 77-79.99	D+ 67-69.99	F Less than 60
A- 90-92.99	B 83-86.99	C 73-76.99	D 63-66.99	
	B- 80-82.99	C- 70-72.99	D- 60-62.99	

Quizzes

Much of the information that you will need to construct a stellar research study is found in your book. As this is a class that focuses on gaining information from written sources, it is of utmost importance that you practice this skill on your assigned readings. Class time is a unique opportunity to use your professor and your classmates as consultants. However, this can only happen if everyone has done the reading. Therefore, you will complete open-book, online equizzes (through InQuizitive) on a regular basis. These quizzes will be non-comprehensive, and serve two purposes: 1) to give you an extra incentive to read before class, and 2) to help you gauge whether or not you have properly understood the concepts in the reading. However, because my goal is to help you to best make use of your written text, I will provide you with a list of questions that you should be able to answer after reading each chapter. It is likely that many of the quiz questions will overlap with these questions. Also, because my goal is for you to thoroughly understand the material, the equizzes are structured in such a way that they allow you to make mistakes, learn from those mistakes, and still earn up to full credit. Because we may review the answers to quizzes in class, there will be **no** opportunities to make up a missed equiz.

Final Examination Policy

Successful completion of this class requires taking the final examination on its scheduled day. **The final exam for this class will be on Wednesday, May 6th, 2026 from 8:30am-1:00pm** (includes both observing presentations and giving a presentation). If you find yourself scheduled for three (3) or more final examinations on the same day, you are authorized to contact each professor to arrange a different time for one of those exams. However, unless you have three (3) or more exams on the same day, no requests for alternative final examinations will be granted.

Incompletes and Late Assignments

Part of good paper-writing is effective time-management strategies. We could all write better papers if we had unlimited time to do so. However, there are certainly life situations that may prevent you from turning in your paper on time. How to balance these two conflicting issues? In order to provide you with some flexibility, and nevertheless to ensure that all of your papers are evaluated on an "even playing field," I have created a tiered grading system for late work. **If you miss a deadline to turn in a paper, for any reason, you can still turn it in with a 5% deduction per day late. For example, you will have 24 hours past the due date to turn in the paper for a 5% deduction. After that, you then have up to 24 additional hours to turn it in for a 10% deduction.** After that, you can turn it in up to three days late for a 15% deduction. Following that, you will receive a 20% deduction. **Canvas automatically enforces the deduction at the second it becomes due, so be sure to plan ahead to turn in your paper BEFORE the time it is due. No papers will be accepted after the date on which the professor sends grades/feedback to the class for that paper.**

A Bit of Grace…in Exchange for Works…

Some of the best learning opportunities occur during in-class discussions. Participating in these discussions can be immensely valuable to your learning. To acknowledge this importance, I will give some weight in your final grade to your classroom participation. **In the event a student's final grade is within one percentage point of the next highest grade, an exceptional level of classroom participation will be considered in assigning the final grade.**

Spiritual Care

Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith.

If students have questions, a desire to meet with the chaplain or have prayer requests you can contact your professor or the Office of Student Life and Formation.

Rev 08.27.24

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 distance education outside California.

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 Recording Notification

In order to enhance the learning experience, please be advised that this course may be recorded by the professor for educational purposes, and access to these recordings will be limited to enrolled students and authorized personnel.

Note that all recordings are subject to copyright protection. Any unauthorized distribution or publication of these recordings without written approval from the University (refer to the Dean) is strictly prohibited.

PLNU Academic Honesty Policy

As the overarching goal of this course includes the ability to effectively use and summarize the research of others, it is of utmost importance that you do your best to acknowledge the work of others in an ethical manner. To this point, I have found that even well-intentioned students sometimes accidentally commit acts of plagiarism.

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. 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. 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. For all student appeals, faculty and students should follow the procedures outlined in the

University Catalog. See [Academic Policies](#) for definitions of kinds of academic dishonesty and for further policy information.

In this class, this involves accurately **quoting** any passages that were written by others, and accurately **citing** the ideas of others in your paper. Because Academic integrity is of tremendous importance both at PLNU and in the larger psychological community, **academic dishonesty (plagiarism) in PSY 3090/3091 will result in a failing grade for the course**.

Artificial Intelligence (AI) Policy*

You are **allowed** to use Artificial Intelligence (AI) tools (e.g., ChatGPT, Gemini Pro 1.5, GrammarlyGo, Perplexity, etc) to **generate ideas**, but **you are not allowed to use AI tools to generate content (text, video, audio, images) that will end up in any work submitted to be graded for this course** (unless specifically included in the assignment description). If you have any doubts about using AI, please gain permission from the instructor.

1. **All non-journal, written work must be created in GoogleDocs.** (it saves a time stamp of every word that you create … you can later use this to demonstrate the process of your original writing).
2. **You must share the document with me (rmueller@pointloma.edu), make me an "Editor", and paste the link to the GoogleDoc at the top of each assignment (see this video for how to do this).**

If you use any auto-proofreading software (e.g., Grammarly), I would strongly recommend that you take these three steps:

1. **do ALL of your writing in GoogleDocs** (it saves a time stamp of every word that you create … you can later use this to demonstrate the process of your original writing)
2. **do NOT use the advanced features** of GrammarlyGO (or other generative AI tools);
3. **do ALL of your original writing FIRST** (without Grammarly), **save a draft**, and **THEN apply Grammarly edits afterwards** (that way you and your professors can directly trace back what your writing looks like, and you have a draft of the paper that should be clear of all AI screening) and **save a second draft of your edited work**, and
4. **use a writing tracker like "[Origin](#)" ([https://chromewebstore.google.com/detail/origin-by-gptzero-chatgpt/kgobeoibakoahbfnlficpmibdbkdchap](#)) or Passed.AI ([https://chromewebstore.google.com/detail/passedai-extension-beta/nmkodlgnddendacmkpghbnjmaknnegfo](#)) which functions as a plug-in to Google Docs, and records your writing character-by-character, so your professors can see the entire creation process (in case you ever have a false-positive AI flag).**

Rev 08.27.24

PLNU Academic Accommodations Policy

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities in accordance with the Americans with Disabilities Act (ADA). Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center (EAC@pointloma.edu or 619-849-2533). Once a student's eligibility for an accommodation has been determined, the EAC will work with the student to create an Accommodation Plan (AP) that outlines allowed accommodations. Professors are able to view a student's approved accommodations through Accommodate.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course. Accommodations are not retroactive so clarifying with the professor at the outset is one of the best ways to promote positive academic outcomes.

Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC. Students cannot assume that because they had accommodations in the past, their eligibility at PLNU is automatic. All determinations at PLNU must go through the EAC process. This is to protect the privacy of students with disabilities who may not want to disclose this information and are not asking for any accommodations.

Language and Belonging

Point Loma Nazarene University faculty are committed to helping create a safe and hospitable learning environment for all students. As Christian scholars we are keenly aware of the power of language and believe in treating others with dignity. As such, it is important that our language be equitable, inclusive, and prejudice free. Inclusive/Bias-free language is the standard outlined by all major academic style guides, including MLA, APA, and Chicago, and it is the expected norm in university-level work. Good writing and speaking do not use unsubstantiated or irrelevant generalizations about personal qualities such as age, disability, economic class, ethnicity, marital status, parentage, political or religious beliefs, race, gender, sex, or sexual orientation. Inclusive language also avoids using stereotypes or terminology that demeans persons or groups based on age, disability, class, ethnicity, gender, race, language, or national origin. Respectful use of language is particularly important when referring to those outside of the religious and lifestyle commitments of those in the PLNU community. By working toward precision and clarity of language, we mark ourselves as serious and respectful scholars, and we model the Christ-like quality of hospitality.

Rev 08.27.24

Sexual Misconduct and Discrimination

In support of a safe learning environment, if you (or someone you know) have experienced any form of sexual discrimination or misconduct, including sexual assault, dating or domestic violence, or stalking, know that accommodations and resources are available through the Title IX Office at pointloma.edu/Title-IX. Please be aware that under Title IX of the Education Amendments of 1972, faculty and staff are required to disclose information about such misconduct to the Title IX Office.

If you wish to speak to a confidential employee who does not have this reporting responsibility, you can contact Counseling Services at counselingservices@pointloma.edu or find a list of campus pastors at pointloma.edu/title-ix.

If you (or someone you know) have experienced other forms of discrimination or bias, you can find more information on reporting and resources at www.pointloma.edu/nondiscrimination

PLNU Attendance and Participation Policy

Perhaps more than any other course in the psychology major, your attendance in this class is paramount to your success and your group's success. Outside of your academic achievement, your group work is the most important part of this course. It is not fair to your group or your academic development if you miss class without good cause. That is why the PLNU attendance policy will be strictly followed. This attendance policy is specified in the University Catalog. Please note the following key points and elaborations of the attendance policy.

Regular and punctual attendance at all class sessions is considered essential to optimum academic achievement. If the student is **absent for more than 10 percent of class sessions (four times)**, the faculty member will issue a written **warning of de-enrollment**. If the **absences exceed 20 percent (eight times)**, the student may be **de-enrolled without notice** until the university withdrawal date or, after that date, **receive an "F" grade**. See Academic Policies in the Undergraduate Academic Catalog

Save your absences for situations that are outside of your control. Do not consider your allowable absences as the number of times that you can miss class without being de-enrolled. If you become ill after you used your allowable absences, you will be de-enrolled from the course.

If you miss a test for any reason, you will need to notify the professor **prior** to the examination for consideration to be administered a make-up test (if you fail to do so you may receive a 0% on the test). **If a make-up test is administered there will be a 10% penalty** (unless the absence is associated with a University-sponsored activity that is approved in writing by the Academic Provost).

Rev 08.27.24

Loma Writing Center

The Loma Writing Center exists to help all members of the PLNU community cultivate transferable writing skills to engage their academic, professional, personal, and spiritual communities. We work toward this goal by conducting one-on-one consultation sessions, supporting writing education across the PLNU community, and participating in ongoing writing center research.

Getting feedback from the Loma Writing Center while you're in the process of working on an assignment is a great way to improve the quality of your writing and develop as a writer. You are encouraged to talk with a trained writing consultant about getting started on an assignment, organizing your ideas, finding and citing sources, revising, editing for grammar and polishing final drafts, and more. For information about how to make in-person or online appointments, see Loma Writing Center webpage or visit the Loma Writer Center on the first floor of the Ryan Library, room 221.

- Appointment Calendar: https://plnu.mywconline.com/
- Website: https://www.pointloma.edu/centers-institutes/loma-writing-center
- Email: writingcenter@pointloma.edu

Assignments At-A-Glance

The table below lists our assignments and their due dates. Click on any assignment to review it (once it is "unlocked").