Research Methods and Design I PSY 3090(4) 3091(4): Section 3 Spring Semester 2020 Fall Semester 2020

M W F 10:55-12:05

Final Exam: W 4:30-630 FA20 Location: Online

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#### **Course Description**

PSY 3090: 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. Prerequisite(s): PSY 1003.

PSY 3091: Study of design and of research in psychology and the use of statistics. Practice in the integration of design and statistics is included. Students finish a significant research project. This course must be taken in the semester immediately following PSY 3090. Prerequisite(s): PSY 1003 and PSY 3090 or consent of instructor.

### Course Learning Outcomes in PSY 3090-3091: Upon completion of this course you will be able to:

- Solve real-life, practical problems using psychological science and the scientific method.
- Understand and interpret statistical research findings that are presented in writing, in numerical form, or as tables or figures.
- Apply statistical concepts in clinical and non-clinical applications to optimize vocational performance. This
  includes being able to interpret clinical test scores, analyze business and financial performance, and empirically
  assess decision making outcomes.
- Critically evaluate research claims made by academics, business professionals, and media figures by formulating alternative hypotheses, generating alternative explanations, and designing follow-up and replication studies.
- Identify and remediate potential problems in empirical and non-empirical research. This includes recognition of incomplete literature reviews, design flaws, poorly formed hypotheses, ethics violations, incorrect statistical execution and inference, and unsupported conclusions.
- Write a research proposal and submit it to an institutional review board.
- Present the results of empirical research to professional and lay audiences using written, oral, and visual expression. This includes being able to write a research paper using APA style, construct a poster for a research conference, and present research in a brief oral presentation with visual aids.

# **Reading in PSY 3090-3091**

Employers want employees who are good critical thinkers. According to Diane Halpern (2003), there are 4 aspects to critical thinking: (a) a critical thinking attitude, e.g., not accepting claims at face value; (b) the capacity to implement specific critical thinking skills, e.g., deductive reasoning, hypothesis testing, understanding probability; (c) the facility to apply these critical thinking skills to new situations; and (d) the skill to think about one's own thinking, or metacognition. We will use a significant portion of our class time for activities that will enhance your critical thinking skills. It is imperative that you read and study the reading assignment before coming to class.

#### Working in Teams in PSY 3090-3091

This course employs the Team Based Learning (TBL) method. "Team-Based Learning is an evidence based collaborative learning teaching strategy designed around units of instruction, known as "modules," that are taught in a three-step cycle: preparation [completing the assignment before class], in-class readiness assurance testing [RATs, basically quizzes on the assignment], and application-focused exercise [Team Application Exercises]." The fourth essential component of TBL is the Team Member Helpfulness Evaluation (both formative and summative).

#### **Required Textbook**

Mitchell, M. L., & Jolley, J. M. (2013). Research design explained (8th ed.). New York: Thomson-Wadsworth.

How Grades Will Be Earned (A = 93-100; A- = 90-92.99; B+ = 88-89.99; B = 84-87.99; B- = 80-83.99; C+ = 77-79.99; C = 70-76.99; C- = 65-69.99; D+ = 62-64.99; D = 55-61.99; D- = 50-54.99; F  $\leq$  49.99%)

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PSY3090
15%
       Readiness Assurance Tests (RATs)
15%
       Team Application Exercises
5%
       Team Member Helpfulness Evaluation (peer-graded)
40%
       Tests1-4
15%
       Homework
10%
       IRB Proposal
       Final Examination. Minus 10% in overall grade if not present
Note:
15%
       Readiness Assurance Tests (RATs)
10%
       Team Application Exercises
5%
       Team Member Helpfulness Evaluation (peer-graded)
30%
       Tests1-2
15%
       Homework
25%
       Paper
       Final Examination. Minus 10% in overall grade if not present
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#### **Managing Your Life and This Course**

If you cannot take a test due to extreme circumstances, please ask me for permission to take the test at another time before the exam.

Most people need to miss a class due to illness, flight delays, and so on. Therefore, a safety valve is built into the course. For the safety valve to become effective two conditions are met. First, cell phones are put away, and second, 90% of the class completes the IDEA course evaluation the first week it is posted.

Safety Valve: The four lowest Team Application Exercises, two lowest Homework scores, and two lowest RATs, will be dropped.

#### **Academic Honesty**

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.

#### **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. Canvas automatically deducts 10% from late assignment plus an additional 10% per day.

## **SYLLABUS: Part 2**

# 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 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.

#### **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 <a href="State Authorization">State Authorization</a> to view which states allow online (distance education) outside of California.

#### 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. Incompletes will only be assigned in extremely unusual circumstances.

#### 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 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. Faculty should follow and students may appeal using the procedure in the university Catalog. See <a href="Academic Policies">Academic Policies</a> for definitions of kinds of academic dishonesty and for further policy information.

#### PLNU ACADEMIC ACCOMMODATIONS POLICY®

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 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 of 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 particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

### PLNU ATTENDANCE AND PARTICIPATION POLICY®

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 <u>Academic Policies</u> in the Undergraduate Academic Catalog. If absences exceed these limits but are due to university excused health issues, an exception will be granted.

## **Asynchronous Attendance/Participation Definition**

A day of attendance in asynchronous content is determined as contributing a substantive note, assignment, discussion, or submission by the posted due date. Failure to meet these standards will result in an absence for that day. Instructors will determine how many asynchronous attendance days are required each week.

#### 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 the Office of Spiritual Development

#### **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 <u>Technology and System Requirements</u> information. Additionally, students are required to have headphone speakers compatible with their computer available to use. If a student is in need of technological resources please contact 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.

# PSY3091 Schedule

Note: Specific assignments are specified on Canvas. This syllabus is for due dates and tests.

<u>Week</u>	<u>Date</u>	<u>Monday</u>	<u>Wednesday</u>	<u>Friday</u>	
		Week 1 - 2: Have Testing Materials Piloted and Ready for Data Collection			
1	2-Sep	Welcome Back/Check in	Introduction Templates	Work Session	
2	9-Sep	Cover Page	Application Exercises	Cover Page Due	
		Week 3 - 6: Collect Data			
3	16-Sep		Application Exercises	Introduction Due	
4	23-Sep	References	Application Exercises	References Due	
5	30-Sep	Method_Instrument	Application Exercises	Method_Instrument Due	
6	7-Oct	Method_Procedure	Application Exercises	Method_Procedure Due	
	Week 7 - 8: Data Analysis (including Tables and Figures)				
7	14-Oct		RAT1	Work Session	
8	21-Oct		RAT2	Tables and Figures Due	
Week 9 - 10: Write the Results Section (including Participants Section)					
9	28-Oct		RAT3	Particiapants Section Due	
10	4-Nov		RAT4	Results Section Due	
Week 11 - 12: Write the Discussion Section					
11	11-Nov	Discussion	Test1: RAT1-4	Work Session	
12	18-Nov	Application Exercises	Application Exercises	Discusson Section Due	
Week 13 - 14: Complete Paper (including Abstract)					
13	25-Nov	Abstract	Application Exercises	Abstract Due	
14	2-Dec	Statistics Jeapordy?	Test2: Cumulative Statistics	Work Session	
Week 15: Prepare Poster for Final					
15	9-Dec	Paper Due: Poster	Presentations	Work Session	
16	16-Dec		Final: 430 PM @ Colt Hall		