POINT 19 02 LOMA
NAZARENE UNIVERSITY

College of Health Sciences | Department of Kinesiology

KIN 6005: Research Methods

Number of Units: 3

Fall 2025

September 2 - December 21, 2025

Modality: Hybrid

Meeting Days: Thursday

Meeting Times: 6:30-8:30 pm

Meeting Location: Balboa Campus, OT Classroom

Final Exam: Day/Time

Instructor: Arnel Aguinaldo, PhD, ATC (Dr. "A")

Co-Instructor: Kristen Synman, PhD, CSCS

Email: aaguinal@pointloma.edu

[Dr. A's Virtual Office Hours](#)

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

This course provides an introduction to analyzing data and designing research experiments in exercise and sport science. Topics will include: 1) selected techniques and designs used in research, with special emphasis given to planning, conducting, and reporting of research; and 2) applied statistical analysis and interpretation of data from the field of exercise and sport science.

Note: KIN 6005, 6010 and 6050 are meant to be taken in sequence. KIN 6005 emphasizes basic theory and understanding of research methodology and statistical analyses; KIN 6010 integrates the application of evidence with clinical decision making; and KIN 6050 provides the opportunity for additional insight and understanding through seminar-style discussion, directed readings (KIN 6060), and practical experience related to Exercise Science.

Course Learning Outcomes

At the end of this course, students should be able to:

1. Explain the value and importance of developing research ideas, conducting research and employing the scientific method within Kinesiology to solve relevant problems.

2. Explain the general principles of research design for experimental and non-experimental research, including literature review, sampling procedures, selection of subjects, ethical treatment of subjects, data collection, and IRB standards.

3. Understand basic measurement constructs such as validity, reliability, scales of measurement, field tests, and laboratory tests

4. Employ statistical analysis for the purpose of exploratory data analysis and hypothesis testing, including t-tests, ANOVAs with post hoc tests, factorial ANOVAs, correlation and regression, power analysis, and selected clinical measures of association.

5. Utilize procedures in R and interpret output for all statistical procedures.

6. Understand and apply qualitative analysis designs in kinesiology research.

7. Develop and present a thesis or capstone project proposal according to committee guidelines and including appropriate formatting (i.e., either journal manuscript or thesis as approved by academic advisor).

Program Learning Outcomes

The Point Loma Nazarene University MS-KIN graduate will be able to:

1. Appraise current research data in Kinesiology and integrate it into professional practice to solve relevant problems and make effective decisions .

2. Work independently and with a team to persuasively communicate essential information in their discipline.

3. Demonstrate appropriate breadth of knowledge of the background and principle research in their specialization in order to conduct an independent research project.

4. Serve various populations, integrating compassionate care and the Christian faith with their professional practice.

5. Pursue an active and growing involvement in their discipline by achieving advanced certification and/or membership in a related professional organization.

Institutional Learning Outcomes

1. **Learning, Informed by our Faith in Christ**
Students will acquire knowledge of human cultures and the physical and natural world while developing skills and habits of the mind that foster lifelong learning.

2. **Growing, in a Christ-centered Faith Community**
Students will develop a deeper and more informed understanding of others as they negotiate complex professional, environmental, and social contexts.

3. **Serving, in a Context of Christian Faith**
Students will serve locally and/or globally in vocational and social settings.

Required Texts and Recommended Study Resources

Thomas, J.R., Martin, P., Eitner, J.L., & Silverman. S. (2022). **Research Methods in Physical Activity (8th ed.).** Champaign, IL: Human Kinetics. Purchase eBook here.

Please also review Required Materials and Recommended Resources for a list of online statistical analyses applications you will use this semester.

Note: Students are responsible for having the required textbooks prior to the first day of class. Students are also encouraged to begin reading the books in preparation for the class as soon as possible.

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. 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.

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 3-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 113 total hours meeting the course learning outcomes. The time estimations are provided below and in the Canvas modules.

Estimated Time to Complete Course

Activity Category	Time Expectation in Hours
Online Participation in Discussions, Groups, etc.	20
Reading Assignments	25
Written Assignments	20
Other Assignments & Learning Activities	24
Quizzes, Surveys	24
Total:	113

Assessment and Grading

Weighted Grades

This course uses weighted grades. Each assignment category is worth a certain percentage of the total grade (100%) for the course, as specified in the table below:

Course Assignments

Assignment Category	Description	Percentage of Total Grade
Participation (Live Meetings and Discussions)	Assesses Course Learning Outcomes #1, #2, #4, #6 We have supplemented the course text and lecture materials with current evidence-based medical literature. It is expected that course material will be read beforehand so that informed and lively discussion may be the primary focus of live class meetings and online discussions. After certain readings, you will respond to questions or prompts on the Live Session Agenda or Discussion Board on Canvas the Thursday of the module in which the discussion is assigned followed by at least two replies to your peers by Sunday. At other times, you will be asked to summarize the key points of outside readings by outlining the major points of the article prior to class. Additionally, you are expected to participate in the Meet & Greet discussion in Week 1 (worth 5 points).	12%

Syllabus and In-Video Quizzes	Assesses Course Learning Outcomes #2-4 The first quiz of the course is a simple syllabus quiz. In order to assess your preparation in course modules, you will complete in-video quizzes created in Canvas Studio to gauge your preparation for discussions. These will also allow the professor to ascertain "sticking points" for students so that class time can be spent in clarifying key concepts.	10%
Protecting Human Research Participants Certification	Course Learning Outcome #2 All investigators engaging in clinical research where human participants are involved must undergo human subjects research training. This training, administered by the Collaborative Institutional Training Initiative (CITI), covers the ethical issues involving human participants in research. You will need to submit your certificate of completion by week 4, which is worth 10 points. You cannot participate in any of the course's assignments involving data collection and analysis (described in 4-6 below) without this certificate.	2%
Assignments	Assesses Course Learning Outcomes #3, #4, and #5 Utilizing JASP and/or Posit Cloud (RStudio) statistical software, you will complete four statistical analyses. All output write ups need to be completed in APA format and submitted via Canvas before class on the due date (see course schedule).	8%
Proposal Presentation	Assesses Course Learning Outcome #5 During the last week of classes, you will be expected to present your thesis/capstone project topic in a formal proposal environment. This session is open to all faculty and your classmates. Your grade for this presentation will be based on the quality of your presentation and mastery of the material, your ability to respond to content questions from the audience, and your overall professionalism.	20%
Proposal Documents	Assesses Course Learning Outcome #7 The culmination of your semester's work will be a completed proposal document to be submitted via Canvas. This document will be graded based on quality of content, the degree to which you have addressed all the major aspects of your thesis/project topic, and your ability to meet department guidelines for completed thesis/capstone project. Your proposal document should include the following items and will be due in parts at various dates throughout the semester: • Research Question(s): You will identify your question	20%

	of interest for the Proposal Project. • Literature Review • Proposed Methods and Data Analysis (student must meet with their advisor prior to submitting this document) • Rough Draft of Project Proposal with Introduction • Final Project Proposal (written)	
Mid-Term Examination	Assesses Course Learning Outcomes #1-3 A unit examination will be administered online on Canvas to formatively measure your mastery of key aspects of the course (i.e., experimental design and statistical analysis using RStudio) after Module 8 (see calendar for exact date).	**10%**
Final Examination	Assesses Course Learning Outcomes #1-4, #6 The final exam will be given at the end of the semester and will be summative over the course content covered in class with emphasis on material covered after the mid-term. This exam will be distributed via Canvas one week before the scheduled exam date to allow you adequate time to review the material and prepare your answers. You are free to work in groups or ask for help from the instructor. However, the final written answers should be in your own words!	**18%**

Student grades for assignments will be posted in the Canvas gradebook no later than midnight on Tuesday of each week beginning in Week Two of this course. It is important to read the comments posted in the gradebook as these comments are intended to help students improve their work. Final grades will be posted by the due date as posted in the Academic Calendar.

Grade Grubbing and Extra Credit

Your final grade at the end of the semester is what you earned and is non-negotiable. Any requests for "rounding up" grades will be ignored. However, I certainly will fix any clerical errors on my part that may have negatively impacted your grade. In addition, you will have opportunities to earn up to 5% above your total grade in extra credit over the course of the semester. Your extra credit contributions will be reflected in your final grade after the last day of the semester.

NOTE: It is your responsibility to maintain your class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), you have the responsibility to first contact the professor. Then if no accommodations can be made, you are responsible to follow through (provided the drop date meets the stated calendar deadline established by the university).

Grading Scale

The following grading scale will be used for all exams and final course grades:

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    - 93 - 100% = A

    - 90 - 92% = A-

    - 87 – 89% = B+

    - 83 – 86% = B

    - 80 – 82% = B-

    - 77 – 79% = C+

    - 73 – 76% = C

    - 70 – 72% = C-

    - 67 - 69% = D+

    - 66 – 66% = D

    - 60 - 62% = D-

    - Below 59% = F

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 Spiritual Care

Balboa Campus

PLNU strives to be a place where you grow as a whole person. To this end, we provide resources for our graduate students to encounter God and grow in their Christian faith. At the Balboa campus, we have an onsite chaplain, Rev. Kevin Portillo, who is available during class break times across the week. If you have questions or a desire to meet or share any prayer requests with Rev. Portillo, you may contact him directly at KevinPortillo@pointloma.edu.

PLNU Copyright Policy

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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

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 Graduate Academic and General Policies for definitions of kinds of academic dishonesty and for further policy information.

During the first week of class, you will be asked to submit an Academic Honesty Verification Statement. Submitting the statement is a requirement of this course. By submitting the Academic Honesty Verification Statement, you will be verifying all assignments completed in this course were completed by you. Carefully review the Academic Honesty Statement below.

Statement: "In submitting this form, I am verifying all the assignments in this course will be completed by me and will be my own work."

Artificial Intelligence (AI) Policy

You are allowed to use Artificial Intelligence (AI) tools (e.g, ChatGPT, iA Writer, Marmot, Botowski) to aid in coding and 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. If you have any doubts about using AI, please gain permission from the instructor.

- APA Style: How to Cite ChatGPT

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.

If you (or someone you know) have experienced other forms of discrimination, you can find more information on reporting and resources at PLNU's Nondiscrimination webpage.

Sexual Misconduct and Discrimination

Point Loma Nazarene University faculty are committed to helping create a safe learning environment for all students. 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 help and support are available through the Title IX Office. Please be aware that under Title IX of the Education Amendments of 1972, it is 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 via our [Sexual Harassment and Discrimination Policy.](#)

If you (or someone you know) have experienced other forms of discrimination or bias, you can find more information on reporting and resources via our [Nondiscrimination and Anti-harassment Policy](#).

PLNU Attendance and Participation Policy

Regular and punctual attendance at all class sessions is considered essential to optimum academic achievement. Therefore, regular attendance and participation in each course are minimal requirements.

If the student is absent for more than 10 percent of class sessions, 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 withdrawal date or, after that date, receive an "F" grade.

Students who anticipate being absent for an entire week of a course should contact the instructor in advance for approval and make arrangements to complete the required coursework and/or alternative assignments assigned at the discretion of the instructor. Acceptance of late work is at the discretion of the instructor and does not waive attendance requirements.

Refer to [Academic Policies](#) for additional details.

Synchronous Attendance/Participation Definition

For synchronous courses that have specific scheduled meeting times (including in-person, hybrid, and synchronous online courses), absences are counted from the first official meeting of the class regardless of the date of the student's enrollment. For courses with specific attendance requirements, those requirements are outlined in the course syllabus.

Note: For synchronous courses with an online asynchronous week, refer to the Online Asynchronous Class Attendance policy listed below.

Online Asynchronous Attendance/Participation Definition

Students taking online courses with no specific scheduled meeting times are expected to actively engage throughout each week of the course. Attendance is defined as participating in an academic activity within the online classroom which includes, but is not limited to:

- Engaging in an online discussion
- Submitting an assignment
- Taking an exam
- Participating in online labs
- Initiating contact with faculty member within the learning management system to discuss course content

Note: Logging into the course does not qualify as participation and will not be counted as meeting the attendance requirement.

Course Modality Definitions

1. Online Courses: These are courses with class meetings where all instruction and interaction are fully online.

    1. Synchronous Courses: At least one class meeting takes place at a designated time.

    2. Asynchronous Courses: All class meetings are asynchronous.

2. **Hybrid Courses**: These are courses with class meetings that take place both in the classroom and online synchronously and/or asynchronously.

3. In-Person Courses: These are courses that meet in person with the instructor and students in a physical classroom setting. With approval by the area dean, this may include up to 25% of qualified class interactions through a Learning Management System (such as Canvas).

Use of Technology

In order to be successful in the online or hybrid 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, microphone, or webcams compatible with their computer available to use. Please note that any course with online proctored exams requires a computer with a camera (tablets are not compatible nor allowable) to complete exams online.

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

GPS Academic Resources

PLNU offers the following free academic resources virtually for Graduate Professional Studies (GPS) Students. Visit myPLNU through the links below for more information.

- **The GPS Writing Center offers:**

    - **Zoom Writers Workshops** offered each quad on a variety of helpful topics

        - **One-to-one appointments** with the Writing Coach

        - **Microlearning YouTube Video Library** for helpful tips anytime

- **Research Help Guide** to help you start your research

- o The physical office is located on the third floor of the [Mission Valley Regional Center](#) off the student lounge

- **[Academic Writing Resources Course](#):** Found on your Canvas Dashboard, this course is non-credit with 24/7 access, no time limits, and self-paced content. [Watch a quick video run-through](#) and take time now to explore!

- **[Grammarly](#)**: Students have unlimited FREE access to Grammarly for Education, a trusted tool designed to help enhance writing skills by providing real-time feedback, identifying areas for improvement, and providing suggestions. Grammarly's Generative AI is NOT available with our student accounts.

- **[Tutoring](#)**: Students have access to 24/7 live or scheduled subject tutoring through Tutor.com, including a Paper Drop-Off Service with feedback within 12 hours.

Assignments-at-a-Glance

The course summary below lists our assignments and their due dates. Click on any assignment to review it.