

**Dates:** 9/3 - 10/25

**Meeting Day/Time:** Online

**Location:** Remote

**Credit Hours:** 3

#### **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 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.

#### **INSTRUCTOR INFORMATION**

**Instructor:** Dr. Brent A. Alvar, Ph.D.,  
CSCS\*D, RSCC\*D, FNCSA, FACSM

**Office Phone:** 619.849.3005

**Email:** balvar@pointloma.edu

#### **COURSE DESCRIPTION**

This course will enable students to practice the judicious use of current best evidence in making decisions about the care of individual patients and clients. Students will learn to integrate the best external evidence with their clinical expertise and patient concerns to ask a focused question to satisfy the health needs of a specific patient; find the best evidence by searching the literature; critically appraise the literature; apply the results in clinical practice; and evaluate the outcomes in patients.

#### **COURSE AIM**

This course is intended to help you acquire the fundamental skills of reading and evaluating the research published by others and developing your own research plans in Kinesiology. A combination of approaches will be used including reading and discussion of research methods,

group analysis of research examples, and preparing various elements of a research proposal. As this is a graduate course, there is considerable online discussion around theoretical material. This requires you to read the assigned material and interact with it through various methods (e.g., online quizzes, discussions, etc.).

### **INSTITUTIONAL LEARNING OUTCOMES (ILO)**

**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.

### **PROGRAM LEARNING OUTCOMES (PLO)**

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.

### **COURSE LEARNING OUTCOMES (CLO)**

The following learning outcomes will be achieved by students in this course:

1. Explain the value and importance of evidence-based practice as it relates to solving relevant problems within the exercise and sport sciences. *\*See Information Literacy later in this syllabus.*
2. Employ a systematic approach (e.g., five step approach) to create and answer a relevant clinical question using a pre-defined question format (e.g., PICO= Patients, Intervention, Comparison, Outcomes).
3. Utilize databases and online critical appraisal libraries to conduct a literature search (e.g., Boolean search, Medical Subject Headings) to answer a relevant clinical question.
4. Use standard criteria or developed scales (e.g., Physiotherapy Evidence Database Scale [PEDro], Oxford Centre for Evidence Based Medicine Scale) to critically appraise the

structure, rigor, and overall quality of research evidence and determine the efficacy of a clinical intervention.

5. Explain clinical outcomes assessment (e.g., disablement, health-related quality of life) and describe common methods of outcomes assessment for clinical practice (patient-based and clinician-based).
6. Apply the various methods of assessing patient status and progress (e.g., global rating of change, minimal clinically important difference, and minimal detectable difference).

### CREDIT HOUR INFORMATION

It is anticipated that students will spend a minimum of 50 participation hours per credit hour on their course work. As a graduate course, students can expect the work in this class to be significant, and students should plan on spending 18-22 hours a week engaged in the course. The estimated time expectations for this course are shown below:

Assignments	Pre-Course Hours	Course Hours	Post-Course Hours
Online Participation in discussions, groups, etc.	--	50	--
Writing	--	50	--
Other assignments and learning activities	1	40	1
Exams and Quizzes	--	8	--
<b>Total Course Hours</b>		150	

### RECOMMENDED RESOURCES

Hurley, W, Denegar, C, Hertel, J. (2011). LWW. *Research Methods: A Framework for Evidence Based Clinical Practice*.

#### RECOMMENDED

- Text: Arnold, B.L., Gansneder, B.M., & Perrin, D.H. (2005). *Research Methods in Athletic Training*. Philadelphia, PA: F.A. Davis Company.
- Course Reader and journal articles available in this Canvas course
- [AT Stills University EBM Website \(Links to an external site.\)](#)

*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.*

## **ASSESSMENT AND GRADING**

Your grades will be posted in the Canvas [Grades](#) area 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 Grades as these comments are intended to help you improve your work. Final grades will be posted within one week of the end of the class. Grades will be based on the following:

### *Grade Weighting*

Discussion Boards	40.0%
Assignments	40.0%
Quizzes & Surveys	20.0%
Total	100%

### *Grade Scale*

<b>A</b>	93-100	<b>C</b>	73-76
<b>A-</b>	90-92	<b>C-</b>	70-72
<b>B+</b>	87-89	<b>D+</b>	67-69
<b>B</b>	83-86	<b>D</b>	63-66
<b>B-</b>	80-82	<b>D-</b>	60-62
<b>C+</b>	77-79	<b>F</b>	0-59

## **ATTENDANCE**

Students taking online courses are expected to attend each week of the course. Attendance is defined as participating in an academic activity within the online classroom which includes posting in a graded activity in the course. (Note: Logging into the course does not qualify as participation and will not be counted as meeting the attendance requirement.)

Students who do not attend at least once in any 3 consecutive days will be issued an attendance warning. Students who do not attend at least once in any 7 consecutive days will be dropped from the course retroactive to the last date of recorded attendance.

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.

### **LATE ASSIGNMENTS**

- All assignments are to be submitted by the due date and time listed in the calendar via [Canvas](#).
- While there are due dates for weekly assignments, you are welcome to post your work earlier in the week. In our discussions, late work means that others may not have the opportunity to respond to your comments. It also means that you will not have the benefit of as much interaction with other students as you will have if your assignment is posted on time. If you know you will be away on the day your assignment is due, please post your work before you leave.
- Missed exams or quizzes may **ONLY** be made up with a legal, written excuse.
- Late work will **NOT** be accepted or graded; assignments will be considered late if posted **after midnight Pacific Standard Time on the day they are due**

### **ACADEMIC HONESTY**

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. As explained 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 result of another person's creativity and effort. Violations of university academic honesty include cheating, plagiarism, falsification, aiding the academic dishonesty of others, or malicious misuse of university resources. An instructor 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 following the procedure in the university catalog. Students may appeal using the procedure in the university catalog. See [Academic Policies](#) for further information.

### **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 accommodations or 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 Rm. 312C at the Mission Valley Regional Center via [DRC@pointloma.edu](mailto:DRC@pointloma.edu) or 619.849.2533. The DRC's policies and procedures for assisting such students in the development of an appropriate Accommodation Plan (AP) allows PLNU to comply with Section 504/508 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 (a) 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 and official disability documentation, the DRC will contact the student within 15 business days to schedule an AP meeting. During the AP meeting

an Accommodation Plan will be established to meet the student's specific disability-related needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each quad/semester. The AP must be implemented in all such courses by faculty. All questions should be directed to the DRC for clarification.

## **SPIRITUAL CARE**

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. You'll find faith integration activities throughout this course. In addition, there are resources for your Christian faith journey available on the [Graduate Student Life](#) webpage.

## **INSTRUCTOR FEEDBACK**

Assignments will be graded as soon after the due date as possible and grades will be posted to the Canvas gradebook. If an immediate response is needed, email or phone the instructor.

## **INFORMATION LITERACY**

The curriculum of the MS-KIN is designed so that you develop skills in scientific writing, performing statistical analysis of data, reading and critically appraising primary literature, and incorporating current best evidence into your professional practice. Not all information is equally sound or applicable to your practice. Various assignments within this course are designed to accomplish the goal of informational literacy—to evaluate the validity and importance of information obtained from any source and use the information appropriately to solve relevant problems.

## **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](#) page.

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

If you do need technical help, you may click on the HELP button (located on the top-right corner of Canvas) and choose from whom you want assistance, or you may contact the campus helpdesk (619-849-2222).

## **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.

## Course Summary:

Date	Details	
Thu Sep 5, 2019	Assignment	<a href="#">Creating the PICO question</a>
	Assignment	<a href="#">Introduction Survey</a>
Fri Sep 6, 2019	Assignment	<a href="#">Integrating Faith into Evidence-Bas</a>
Sun Sep 8, 2019	Assignment	<a href="#">Check-in: Week 1</a>
	Assignment	<a href="#">Complete PICO Question For</a>
	Assignment	<a href="#">PICO and EBM Process Quiz</a>
Tue Sep 10, 2019	Assignment	<a href="#">Which Database Do You Lik</a>
Thu Sep 12, 2019	Assignment	<a href="#">Module 2 In-Class Activity</a>
	Assignment	<a href="#">Searching the Literature</a>
	Assignment	<a href="#">Which Database Do You Choose (is i</a>
Sun Sep 15, 2019	Assignment	<a href="#">Check-in: Week 2</a>
	Assignment	<a href="#">Search Strategies: How well do you k</a>
Tue Sep 17, 2019	Assignment	<a href="#">Knowing and Doing: Are They th</a>
Thu Sep 19, 2019	Assignment	<a href="#">Levels of Evidence: What type have</a>
Sun Sep 22, 2019	Assignment	<a href="#">Check-in: Week 3</a>
	Assignment	<a href="#">Determining Levels of Evidence</a>
	Assignment	<a href="#">Week 3 Quiz: Levels of Research</a>

Date	Details	
Tue Sep 24, 2019	Assignment	<a href="#">PEDro vs Jadad Scale</a>
Thu Sep 26, 2019	Assignment	<a href="#">Using PEDro to Critically Appr</a>
Sun Sep 29, 2019	Assignment	<a href="#">Appraisal Skills Quiz</a>
	Assignment	<a href="#">Critical Appraisal Topic (CAT) Chu</a>
Tue Oct 1, 2019	Assignment	<a href="#">Calculation, Interpretation, and Applic</a>
	Assignment	<a href="#">Effect Size: The New P-Value?</a>
Thu Oct 3, 2019	Assignment	<a href="#">Module 4 Discussion: Methods C</a>
Fri Oct 4, 2019	Assignment	<a href="#">MDC - Importance and Clinical</a>
Sun Oct 6, 2019	Assignment	<a href="#">Check-in: Week 5</a>
	Assignment	<a href="#">Critical Appraisal Topic (CAT) - Chunk 2</a>
Thu Oct 10, 2019	Assignment	<a href="#">Module 5 Discussion: Statistics in Rese</a>
	Assignment	<a href="#">Assignment 1: Descriptive Statistics</a>
	Assignment	<a href="#">STEP 1: Turn-in Completed Odds and I</a>
Thu Oct 17, 2019	Assignment	<a href="#">Week 7 First Draft of CAT</a>
Sun Oct 20, 2019	Assignment	<a href="#">Patient Rated Outcome Measure Ca</a>
Mon Oct 21, 2019	Assignment	<a href="#">IDEA Course Evaluation</a>
Tue Oct 22, 2019	Assignment	<a href="#">What Evidence-Based Medicine</a>
Thu Oct 24, 2019	Assignment	<a href="#">Barriers to Implementing EBM into Y</a>
Sun Oct 27, 2019	Assignment	<a href="#">Exit EBP Principles</a>

Date	Details	
	Assignment	<a href="#">Final Draft: Critical Appraisal Topic</a>
Thu Oct 31, 2019	Assignment	<a href="#">Module 8 Discussion: Scientific</a>
Thu Nov 7, 2019	Assignment	<a href="#">Module 9 Discussion: Research Problem</a>
Tue Nov 12, 2019	Assignment	<a href="#">Problem statement and theoretical</a>
Sun Nov 17, 2019	Assignment	<a href="#">Brief Review of Literature OUTLIN</a>
Sun Dec 1, 2019	Assignment	<a href="#">Literature Review</a>
Wed Dec 4, 2019	Assignment	<a href="#">Module 3 Discussion: Ethical Is</a>
Sun Dec 8, 2019	Assignment	<a href="#">Human Subjects Protection certi</a>
Sun Dec 15, 2019	Assignment	<a href="#">Proposed Methods</a>
	Page	<a href="#">Module 14 Overview</a>
Wed Dec 18, 2019	Assignment	<a href="#">End of Program Route</a>
Fri Dec 20, 2019	Assignment	<a href="#">Academic Honesty Verification S</a>
Sat Dec 21, 2019	Assignment	<a href="#">Oral Presentation</a>
	Assignment	<a href="#">Clinical Application of Sensitivity a</a>
	Assignment	<a href="#">Critical Appraisal Topic</a>
	Assignment	<a href="#">Critical Appraisal Topic Assignmen</a>
	Assignment	<a href="#">Critical Appraisal Topic Assignmen</a>
	Assignment	<a href="#">End of Program Route</a>
	Assignment	<a href="#">Evidence Based Practice Statistics I</a>

Date	Details
	Assignment <a href="#">Final Draft</a>
	Assignment <a href="#">Literature Review</a>
	Assignment <a href="#">Literature Search</a>
	Assignment <a href="#">Module 14 Discussion: Final Propo</a>
	Assignment <a href="#">Module 5 In Class Activity: Stats I</a>
	Assignment <a href="#">Official Final Course Evaluation</a>
	Assignment <a href="#">Online NIH Training Certificate of</a>
	Assignment <a href="#">PEDro Assessment #1</a>
	Assignment <a href="#">PEDro vs Jadad Scale</a>
	Assignment <a href="#">Peer Review Points (No Submission</a>
	Assignment <a href="#">Rough Draft</a>
	Assignment <a href="#">Sensitivity and Specificity Assignm</a>
	Assignment <a href="#">STEP 1: Turn-in Completed Odds a</a>
	Assignment <a href="#">STEP 2, 3: Share your Educreation</a>
	Assignment <a href="#">WK 4 Mid-Course Evaluation</a>

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Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25Previous month	26Previous month	27Previous month	28Previous month	29Previous month	30Previous month	31Previous month
1	2	3	4	5Click to view event details	6Click to view event details	7
8Click to view event details	9	10Click to view event details	11	12Click to view event details	13	14
15Click to view event details	16	17Click to view event details	18	19Click to view event details	20	21Today

Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
22Click to view event details	23	24Click to view event details	25	26Click to view event details	27	28
29Click to view event details	30	1Next monthClick to view event details	2Next month	3Next monthClick to view event details	4Next monthClick to view event details	5Next month

**Assignments are weighted by group:**

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**Group**

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