

Dates: 8/31 - 12/19

Meeting Day/Time: Online

Location: Canvas

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, FNSCA,

**FACSM** 

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## **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	
Total Course Hours		150	

#### Required Resources

Thomas, J.R., Nelson, J.K., & Silverman. S. (2015). *Research Methods in Physical Activity* (7th ed.). Champaign, IL: Human Kinetics.

#### RECOMMENDED

- Course Reader and journal articles available in this Canvas course
- AT Stills University EBM Website

#### 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 using the below link to view which states allow online (distance education) outside of California. **Disclosures** 

#### 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

Α	93-100	С	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
В	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	

#### **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**

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities. Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center (EAC@pointloma.eduor 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.

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 and/or if they do not wish to utilize some or all of the elements of their AP in that course.

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.

#### 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.

#### **Bakersfield 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 Bakersfield campus we have an onsite chaplain, Rev. Brent Kall, who is available during class break times across the week. If you have questions, desire to meet or share a prayer request with Rev. Brent Kall you can contact him directly at <a href="mailto:bkall@pointloma.edu">bkall@pointloma.edu</a>. Also, there is a weekly Email Newsletter called "The Encourager" that provides a brief devotional and all his contact information.

## **Liberty Station 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 Liberty Station campus we have an onsite chaplain, Rev. Dave Hazel, who is available during class break times across the week. If you have questions, desire to meet or share a prayer request with Rev. Hazel you can contact him directly at <a href="mailto:dhazel@pointloma.edu">dhazel@pointloma.edu</a> or feel free to call or text (913-231-3975).

## Mission Valley:

PLNU strives to be a place where you grow as a whole person. To this end we provide resources for our Graduate and Adult Degree Completion students to encounter God and grow in their Christian faith. At the Mission Valley (MV) campus we have an onsite chaplain, Rev. Gordon Wong, who is available during class break times across the week. If you have questions for, desire to meet or share a prayer request with Rev. Wong you can contact him directly

at <u>mvchaplain@pointloma.edu</u> or <u>gordonwong@pointloma.edu</u>. Rev. Wong's cell number is 808-429-1129 if you need a more immediate response.

In addition, on the MV campus there is a prayer chapel on the third floor which is open for use as a space set apart for quiet reflection and prayer.

## **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 <u>Technology and System Requirements</u> information. Additionally, students are required to have headphone speakers compatible with their computer available to use.

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

# **ASSIGNMENTS AT-A-GLANCE**

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

# Course Summary:

Date	Details	Due
Thu Sep 2, 2021	Creating the PICO question	due by 11:59pm
	Academic Honesty Verification Statement	due by 11:59pm
Sun Sep 5, 2021	Check-in: Week 1	due by 11:59pm
	PICO and EBM Process Quiz	due by 11:59pm
	Complete PICO Question Form	due by 11:59pm
Tue Sep 7, 2021	Collaborative Discussion Assignment   Which Database Do You Like?	due by 11:59pm
Sun Sep 12, 2021	Check-in: Week 2	due by 11:59pm
Suit Sep 12, 2021	Searching the Literature	due by 11:59pm
Thu Sep 16, 2021	Collaborative Discussion Assignment   Levels of Evidence: What type have you been using?	due by 11:59pm
	Check-in: Week 3	due by 11:59pm
Sun Sep 19, 2021	Week 3 Quiz: Levels of Research  Evidence	due by 11:59pm
	Determining Levels of Evidence	due by 11:59pm
Tue Sep 21, 2021	PEDro vs Jadad Scale	due by 11:59pm
Thu Sep 23, 2021	<u>Using PEDro to Critically</u> <u>Appraise</u>	due by 11:59pm

Date	Details	Due
Sun Sep 26, 2021	<u>Critical Appraisal Topic (CAT)</u> <u>Chunk 1 Tables</u>	due by 11:59pm
Tue Sep 28, 2021	Collaborative Discussion Assignment   Effect Size: The New P-Value?	due by 11:59pm
Fri Oct 1, 2021	MDC - Importance and Clinical Utility	due by 11:59pm
	Check-in: Week 5	due by 11:59pm
Sun Oct 3, 2021	Calculation, Interpretation, and Application of Effect Sizes	due by 11:59pm
	Critical Appraisal Topic (CAT) - Chunk 2 Introduction, Clinical Scenario	due by 11:59pm
Tue Oct 5, 2021	Collaborative Discussion  Assignment   Clinical Application of Sensitivity and Specificity	due by 11:59pm
Thu Oct 7, 2021	Odds and Relative Risks Homework	due by 11:59pm
Sun Oct 10, 2021	Evidence Based Practice Statistics II Quiz	due by 11:59pm
Thu Oct 14, 2021	<u>Disablement Model Case</u> <u>Scenarios</u>	due by 11:59pm
	Week 7 First Draft of CAT	due by 11:59pm
Sun Oct 17, 2021	Patient Rated Outcome Measure  Case Scenario	due by 11:59pm
Tue Oct 19, 2021	Collaborative Discussion  Assignment   What Evidence- Based Medicine is Not	due by 11:59pm

Date	Details	[
Thu Oct 21, 2021	Barriers to Implementing EBM into Your Clinical Practice	due by 11:59
	Exit EBP Principles	due by 11:59
Sun Oct 24, 2021	Final Draft: Critical Appraisal Topic Assignment	due by 11:59
Thu Nov 4, 2021	Module 9 Discussion: Scientific  Method	due by 11:59
Thu Nov 11, 2021	Module 10 Discussion: Research Problems and Hypotheses	due by 11:59
Tue Nov 16, 2021	Problem statement and theoretical rationale	due by 11:59
Sun Nov 21, 2021	Brief Review of Literature OUTLINE Assignment	due by 11:59
Sun Nov 28, 2021	Literature Review	due by 11:59
Tue Dec 14, 2021	End-of-Course Evaluation	due by 11:59
	Turnitin Draft Document Check	
	Discussion: Ethical Issues	
	End of Program Route	
	Final Draft	
	Final Paper Draft and Peer Review	
	Human Subjects Protection certificate	
	Literature Review	

Date	Details	Due
	Module 5 In Class Activity: Stats  I	
	Oral Presentation and Review of 5 of your peers presentations	
	Proposed Methods	