# Course Syllabus

**Jump to Today**    ✎ **Edit**
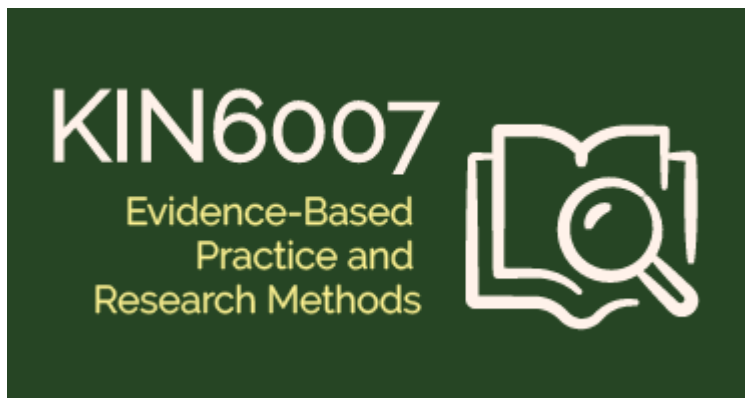


**Dates:** 8/31 - 12/20

**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, FNSCA, 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 | -- |
| **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 (http://www.atsu.edu/ebm/)**

## 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*

| | | | |
|---|---|---|---|
| **A** | 93-100 | **C** | 73-76 |
| **A-** | 90-92 | **C-** | 70-72 |
| **B+** | 87-89 | **D+** | 67-69 |
| **B** | 83-86 | **D** | 63-66 |
| **B-** | 80-82 | **D-** | 60-62 |
| **C+** | 77-79 | **F** | 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 (http://canvas.pointloma.edu/)** .
- 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**   **(http://catalog.pointloma.edu/index.php)** 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** **(http://www.pointloma.edu/experience/faith/graduate-student-spiritual-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* **(https://help.pointloma.edu/TDClient/1808/Portal/KB/ArticleDet?ID=108349)** 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 (mailto: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.

## 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**

**(https://www.pointloma.edu/offices/office-institutional-effectiveness-research/disclosures)** to view which states allow online (distance education) outside of California.

# Course Summary:

| Date | Details | |
|---|---|---|
| Thu Sep 3, 2020 | 📝 **Creating the PICO question** (https://canvas.pointloma.edu/courses/52001/assignments/561625) | due by 11:59pm |
| Sun Sep 6, 2020 | 📝 **PICO and EBM Process Quiz** (https://canvas.pointloma.edu/courses/52001/assignments/561616) | due by 11:59pm |
| | 📝 **Check-in: Week 1** (https://canvas.pointloma.edu/courses/52001/assignments/561613) | due by 11:59pm |
| | 📝 **Complete PICO Question Form** (https://canvas.pointloma.edu/courses/52001/assignments/561628) | due by 11:59pm |
| Tue Sep 8, 2020 | 📝 **Which Database Do You Like?** (https://canvas.pointloma.edu/courses/52001/assignments/561624) | due by 11:59pm |
| Thu Sep 10, 2020 | 📝 **Searching the Literature** (https://canvas.pointloma.edu/courses/52001/assignments/561632) | due by 11:59pm |
| Sun Sep 13, 2020 | 📝 **Search Strategies: How well do you know them? Quiz** (https://canvas.pointloma.edu/courses/52001/assignments/561612) | due by 11:59pm |
| | 📝 **Check-in: Week 2** (https://canvas.pointloma.edu/courses/52001/assignments/561614) | due by 11:59pm |
| Thu Sep 17, 2020 | 📝 **Levels of Evidence: What type have you been using?** (https://canvas.pointloma.edu/courses/52001/assignments/561623) | due by 11:59pm |
| Sun Sep 20, 2020 | 📝 **Check-in: Week 3** (https://canvas.pointloma.edu/courses/52001/assignments/561615) | due by 11:59pm |
| | 📝 **Week 3 Quiz: Levels of Research Evidence** (https://canvas.pointloma.edu/courses/52001/assignments/561617) | due by 11:59pm |

| Date | Details | |
|------|---------|---|
| | 📝 **Determining Levels of Evidence** [(https://canvas.pointloma.edu/courses/52001/assignments/561631)](https://canvas.pointloma.edu/courses/52001/assignments/561631) | due by 11:59pm |
| Tue Sep 22, 2020 | 📝 **PEDro vs Jadad Scale** [(https://canvas.pointloma.edu/courses/52001/assignments/561622)](https://canvas.pointloma.edu/courses/52001/assignments/561622) | due by 11:59pm |
| Thu Sep 24, 2020 | 📝 **Using PEDro to Critically Appraise** [(https://canvas.pointloma.edu/courses/52001/assignments/561635)](https://canvas.pointloma.edu/courses/52001/assignments/561635) | due by 11:59pm |
| Sun Sep 27, 2020 | 📝 **Appraisal Skills Quiz** [(https://canvas.pointloma.edu/courses/52001/assignments/561611)](https://canvas.pointloma.edu/courses/52001/assignments/561611) | due by 11:59pm |
| | 📝 **Critical Appraisal Topic (CAT) Chunk 1 Tables** [(https://canvas.pointloma.edu/courses/52001/assignments/561629)](https://canvas.pointloma.edu/courses/52001/assignments/561629) | due by 11:59pm |
| Tue Sep 29, 2020 | 📝 **Effect Size: The New P-Value?** [(https://canvas.pointloma.edu/courses/52001/assignments/561626)](https://canvas.pointloma.edu/courses/52001/assignments/561626) | due by 11:59pm |
| | 📝 **Calculation, Interpretation, and Application of Effect Sizes** [(https://canvas.pointloma.edu/courses/52001/assignments/561627)](https://canvas.pointloma.edu/courses/52001/assignments/561627) | due by 11:59pm |
| Fri Oct 2, 2020 | 📝 **MDC - Importance and Clinical Utility** [(https://canvas.pointloma.edu/courses/52001/assignments/561621)](https://canvas.pointloma.edu/courses/52001/assignments/561621) | due by 11:59pm |
| Sun Oct 4, 2020 | 📝 **Check-in: Week 5** [(https://canvas.pointloma.edu/courses/52001/assignments/561619)](https://canvas.pointloma.edu/courses/52001/assignments/561619) | due by 11:59pm |
| | 📝 **Critical Appraisal Topic (CAT) - Chunk 2 Introduction, Clinical Scenario** [(https://canvas.pointloma.edu/courses/52001/assignments/561630)](https://canvas.pointloma.edu/courses/52001/assignments/561630) | due by 11:59pm |
| Tue Oct 6, 2020 | 📝 **Clinical Application of Sensitivity and Specificity** [(https://canvas.pointloma.edu/courses/52001/assignments/561620)](https://canvas.pointloma.edu/courses/52001/assignments/561620) | due by 11:59pm |
| | 📝 **Sensitivity and Specificity Assignment** [(https://canvas.pointloma.edu/courses/52001/assignments/561633)](https://canvas.pointloma.edu/courses/52001/assignments/561633) | due by 11:59pm |

| Date | Details | |
|------|---------|---|
| Thu Oct 8, 2020 | 📝 **Turn-in Completed Odds and Relative Risks Exercise** [(https://canvas.pointloma.edu/courses/52001/assignments/561634)](https://canvas.pointloma.edu/courses/52001/assignments/561634) | due by 11:59pm |
| Sun Oct 11, 2020 | 📝 **Evidence Based Practice Statistics II Quiz** [(https://canvas.pointloma.edu/courses/52001/assignments/561618)](https://canvas.pointloma.edu/courses/52001/assignments/561618) | due by 11:59pm |
| Sun Oct 18, 2020 | 📝 **Week 7 First Draft of CAT** [(https://canvas.pointloma.edu/courses/52001/assignments/556011)](https://canvas.pointloma.edu/courses/52001/assignments/556011) | due by 11:59pm |
| | 📝 **IDEA Course Evaluation** [(https://canvas.pointloma.edu/courses/52001/assignments/556040)](https://canvas.pointloma.edu/courses/52001/assignments/556040) | due by 11:59pm |
| Tue Oct 20, 2020 | 📝 **What Evidence-Based Medicine is Not** [(https://canvas.pointloma.edu/courses/52001/assignments/556004)](https://canvas.pointloma.edu/courses/52001/assignments/556004) | due by 11:59pm |
| Thu Oct 22, 2020 | 📝 **Barriers to Implementing EBM into Your Clinical Practice** [(https://canvas.pointloma.edu/courses/52001/assignments/556000)](https://canvas.pointloma.edu/courses/52001/assignments/556000) | due by 11:59pm |
| Sun Oct 25, 2020 | 📝 **Final Draft: Critical Appraisal Topic Assignment** [(https://canvas.pointloma.edu/courses/52001/assignments/556038)](https://canvas.pointloma.edu/courses/52001/assignments/556038) | due by 11:59pm |
| | 📝 **Patient Rated Outcome Measure Case Scenario** [(https://canvas.pointloma.edu/courses/52001/assignments/556047)](https://canvas.pointloma.edu/courses/52001/assignments/556047) | due by 11:59pm |
| Thu Oct 29, 2020 | 📝 **Module 9 Discussion: Scientific Method** [(https://canvas.pointloma.edu/courses/52001/assignments/556015)](https://canvas.pointloma.edu/courses/52001/assignments/556015) | due by 11:59pm |
| Thu Nov 5, 2020 | 📝 **Module 10 Discussion: Research Problems and Hypotheses** [(https://canvas.pointloma.edu/courses/52001/assignments/556017)](https://canvas.pointloma.edu/courses/52001/assignments/556017) | due by 11:59pm |
| Tue Nov 10, 2020 | 📝 **Problem statement and theoretical rationale** [(https://canvas.pointloma.edu/courses/52001/assignments/556019)](https://canvas.pointloma.edu/courses/52001/assignments/556019) | due by 11:59pm |

| Date | Details | |
|------|---------|---|
| Sun Nov 15, 2020 | 📝 **[Brief Review of Literature OUTLINE Assignment](https://canvas.pointloma.edu/courses/52001/assignments/556024)** | due by 11:59pm |
| Sun Nov 22, 2020 | 📝 **[Literature Review](https://canvas.pointloma.edu/courses/52001/assignments/556042)** | due by 11:59pm |
| Wed Nov 25, 2020 | 📝 **[Module 3 Discussion: Ethical Issues](https://canvas.pointloma.edu/courses/52001/assignments/556014)** | due by 11:59pm |
| Sun Nov 29, 2020 | 📝 **[Human Subjects Protection certificate](https://canvas.pointloma.edu/courses/52001/assignments/556039)** | due by 11:59pm |
| Sun Dec 6, 2020 | 📝 **[Proposed Methods](https://canvas.pointloma.edu/courses/52001/assignments/556051)** | due by 11:59pm |
| Wed Dec 16, 2020 | 📝 **[Final Draft](https://canvas.pointloma.edu/courses/52001/assignments/556037)** | due by 11:59pm |
| Fri Dec 18, 2020 | 📝 **[Module 14 Discussion: Final Proposal Oral Presentation](https://canvas.pointloma.edu/courses/52001/assignments/556022)** | due by 11:59pm |
| | 📝 **[End of Program Route](https://canvas.pointloma.edu/courses/52001/assignments/556034)** | due by 11:59pm |
| | 📝 **[Oral Presentation](https://canvas.pointloma.edu/courses/52001/assignments/556046)** | due by 11:59pm |
| Sun Dec 20, 2020 | 📝 **[Turnitin  Draft Document Check](https://canvas.pointloma.edu/courses/52001/assignments/556057)** | due by 11:59pm |
| | 📝 **[Critical Appraisal Topic Assignment - First Draft](https://canvas.pointloma.edu/courses/52001/assignments/556030)** | |
| | 📝 **[End of Program Route](https://canvas.pointloma.edu/courses/52001/assignments/556035)** | |

| Date | Details |
|------|---------|
| | 📝 **[Literature Review](https://canvas.pointloma.edu/courses/52001/assignments/556041)** |
| | 📝 **[Literature Search](https://canvas.pointloma.edu/courses/52001/assignments/556043)** |
| | 📝 **[Module 5 In Class Activity: Stats I](https://canvas.pointloma.edu/courses/52001/assignments/556016)** |
| | 📝 **[Official Final Course Evaluation](https://canvas.pointloma.edu/courses/52001/assignments/556044)** |
| | 📝 **[Online NIH Training Certificate of Completion](https://canvas.pointloma.edu/courses/52001/assignments/556045)** |
| | 📝 **[PEDro Assessment #1](https://canvas.pointloma.edu/courses/52001/assignments/556048)** |
| | 📝 **[PEDro vs Jadad Scale](https://canvas.pointloma.edu/courses/52001/assignments/556049)** |
| | 📝 **[Peer Review Points (No Submission)](https://canvas.pointloma.edu/courses/52001/assignments/556050)** |
| | 📝 **[Rough Draft](https://canvas.pointloma.edu/courses/52001/assignments/556052)** |
| | 📝 **[STEP 1: Turn-in Completed Odds and Relative Risks Exercise](https://canvas.pointloma.edu/courses/52001/assignments/556055)** |
| | 📝 **[STEP 2, 3: Share your Educreation](https://canvas.pointloma.edu/courses/52001/assignments/556021)** |
| | 📝 **[WK 4 Mid-Course Evaluation](https://canvas.pointloma.edu/courses/52001/assignments/555990)** |