

Dates: 8/31/21 -10/24/21

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 Contact Information



Instructor: Dr. Nicole Cosby, PhD, ATC

Office Phone: 619.849.2901

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Instructor: Brent Alvar, PhD, CSCS*D

Office Phone: 619.849.3005

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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 and Hours

| 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 | | |

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

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

| 3 | J |
|--------------------------|-------|
| Discussion Boards | 40.0% |
| Assignments | 40.0% |
| Quizzes & Surveys | 20.0% |
| Total | 100% |

Grade Scale

| 0.440 004.0 | | | |
|-------------|--------|---|-------|
| 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 | 0-59 |

ATTENDANCE

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 **Academic Policies** in the Graduate and Professional Studies Catalog. If absences exceed these limits but are due to university excused health issues, an exception will be granted.

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.

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. If a student is in need of technological resources please contact <u>student-tech-request@pointloma.edu</u>.

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

Course Summary:

| Date | Details | Due |
|------------------|---|------------------|
| Tue Aug 31, 2021 | KIN6010-4 FA21 - Evidence Based Practice and Decision Making in Kinesiology | 5:30pm to 6:30pm |
| Thu Sep 2, 2021 | Collaborative Discussion Assignment Creating the PICO question | due by 11:59pm |
| Sun Sep 5, 2021 | Academic Honesty Verification Statement | due by 11:59pm |

| Date | Details | Due |
|---|---|------------------|
| | 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 |
| | Weekly Check-In (NOT required) | 5:30pm to 6:30pm |
| Tue Sep 7, 2021 | Collaborative Discussion Assignment Which Database Do You Like? | due by 11:59pm |
| | Check-in: Week 2 | due by 11:59pm |
| Sun Sep 12, 2021 | Search Strategies: How well do you know them? Quiz | due by 11:59pm |
| | Searching the Literature | due by 11:59pm |
| Tue Sep 14, 2021 | Weekly Check-In (NOT required) | 5:30pm to 6:30pm |
| 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 | Weekly Check-In (NOT required) | 5:30pm to 6:30pm |
| - 1 α σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ | 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 |
| Sun Sep 26, 2021 | Appraisal Skills Quiz | due by 11:59pm |

| Date | Details | Due | |
|------------------|--|------------------|--|
| | Critical Appraisal Topic (CAT) Chunk 1 Tables | due by 11:59pn | |
| | Weekly Check-In (NOT required) | 5:30pm to 6:30pn | |
| Tue Sep 28, 2021 | Collaborative Discussion Assignment Effect Size: The New P-Value? | due by 11:59pr | |
| Fri Oct 1, 2021 | MDC - Importance and Clinical Utility | due by 11:59pr | |
| Sun Oct 3, 2021 | Check-in: Week 5 | due by 11:59pr | |
| | Calculation, Interpretation, and Application of Effect Sizes | due by 11:59pr | |
| | Critical Appraisal Topic (CAT) - Chunk 2 Introduction, Clinical Scenario | due by 11:59pi | |
| Tue Oct 5, 2021 | Weekly Check-In (NOT required) | 5:30pm to 6:30pi | |
| | Collaborative Discussion Assignment Clinical Application of Sensitivity and Specificity | due by 11:59pi | |
| | Sensitivity and Specificity Assignment | due by 11:59pi | |
| Thu Oct 7, 2021 | Odds and Relative Risks Homework | due by 11:59p | |
| Sun Oct 10, 2021 | Evidence Based Practice Statistics II Quiz | due by 11:59pi | |
| Tue Oct 12, 2021 | Weekly Check-In (NOT required) | 5:30pm to 6:30p | |
| Thu Oct 14, 2021 | <u>Disablement Model Case</u> <u>Scenarios</u> | due by 11:59p | |

| Date | Details | Due |
|------------------|---|------------------|
| | End-of-Course Evaluation | due by 11:59pm |
| Sun Oct 17, 2021 | Patient Rated Outcome Measure Case Scenario | due by 11:59pm |
| | Weekly Check-In (NOT required) | 5:30pm to 6:30pm |
| Tue Oct 19, 2021 | Collaborative Discussion Assignment What Evidence- Based Medicine is Not | due by 11:59pm |
| Thu Oct 21, 2021 | Barriers to Implementing EBM into Your Clinical Practice | due by 11:59pm |
| Sun Oct 24, 2021 | Exit EBP Principles | due by 11:59pm |
| | Final Draft: Critical Appraisal Topic Assignment | due by 11:59pm |
| Tue Oct 26, 2021 | Weekly Check-In (NOT required) | 5:30pm to 6:30pm |
| Tue Nov 2, 2021 | Weekly Check-In (NOT required) | 5:30pm to 6:30pm |