

College of Health Sciences
KIN 6010 Evidence-Based Practice
3 credit hours

Fall 2024

Meeting days: Tuesdays	Instructor title and name: Drs. Alvars, Cosby, Nokes and Professor Lavery
Meeting times: 5:00-6:00 pm (online synchronous meeting)	Phone: See Home Page
Meeting location: Online	Email: rnokes@pointloma.edu , ncosby@pointloma.edu , balvar@pointloma.edu , rlavery@pointloma.edu , asquillante@pointloma.edu
Final Exam: (day/time): Online (Turn in final CAT)	Office location and hours: Kinesiology Floor
Additional info: Take home exam	Additional info: Quad I, 8-week course

PLNU Mission

To Teach ~ To Shape ~ To Send

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 addresses evaluation techniques and care for musculoskeletal injuries to the lower extremities for graduate-level athletic training students. The student must integrate knowledge of anatomical structures, physiology principles, and evaluative techniques to provide a basis for evidence based critical decision-making in an injury management environment.

This course is designed to provide students with a comprehensive hands-on approach to injury evaluation and assessment of lower extremity pathologies. During this lab students will learn and begin

to develop a systematic approach to injury evaluation. Students will learn special testing and injury evaluation techniques.

Pre or Corequisite(s): [ATR 6087](#)

PROGRAM LEARNING OUTCOMES

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

1. Demonstrate the knowledge and skills required to become a certified athletic trainer.
2. Critically evaluate and integrate the best available evidence for clinical decision making.
3. Deliver new evidence that is intended to change clinical practice to various healthcare communities through scholarly research presentations and symposiums.
4. Describe the importance of collaborating with multiple healthcare professionals and diverse patient populations to improve patient care.
5. Demonstrate preparedness for their vocation and calling.

COURSE LEARNING OUTCOMES

At the completion of the course, the student should be able to:

1. Explain the value and importance of evidence-based practice as it relates to solving relevant problems within the exercise and sport sciences. **PLO#2,3 CAATE#62**
2. Employ a systematic approach (e.g., five step approach) to create and answer a relevant clinical question using a predefined question format (e.g., PICO= Patients, Intervention, Comparison, Outcomes). **PLO#2,3 CAATE#62**
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. **PLO#2,3 CAATE#62**
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. **PLO#2, CAATE#62**
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). **PLO#3, CAATE#62**
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). **PLO#3, CAATE#62**

CAATE STANDARDS

Standard 62

Provide athletic training services in a manner that uses evidence to inform practice.

OT PLO

PLO # 1: Use critical reasoning to provide evidence-based occupational therapy services across the lifespan, in a variety of service delivery models, health care settings, and community-based systems.

OT COURSE LEARNING OUTCOMES

The course learning outcomes are the ACOTE Standards and students will be using concepts and skills that will be introduced and/or be expected to show beginning competency. By the end of the course, students will:

1. Apply and analyze scientific evidence to explain the importance of balancing areas of occupation; the role of **occupation in the promotion of health; and the prevention of disease, illness, and dysfunction for persons, groups, and populations** (B.3.4).
2. Critique quantitative and qualitative research in order to analyze and evaluate scholarly activities, which contribute to the development of a body of knowledge. This includes **level of evidence, validity of research studies, strength of the methodology, and relevance to the profession of occupational therapy. Locate, select, analyze, and evaluate scholarly literature to make evidence based decisions. Participate in scholarly activities** that align with current research priorities and advances knowledge translation, professional practice, service delivery, or professional issues (**scholarship of application**) (B.6.1).
3. Demonstrate an understanding and use of quantitative and qualitative methods for data analysis to include: basic descriptive, correlational, and inferential quantitative and qualitative statistics and analysis and synthesis of qualitative data (B.6.2).
4. Demonstrate the skills necessary to **write a scholarly report** in a **format for presentation** or publication, which may be made available to professional or public audiences (B.6.3).
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).

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Recommended Resources

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

Text: Arnold, B.L., Gansneder, B.M., & Perrin, D.H. (2005). Research Methods in Athletic Training. Philadelphia, PA: F.A. Davis Company.

A.T. Stills University EBM Website

GRADING AND ASSESSMENTS

Assessment Methods

Course assessment methods used in this course include the following:

- Online participation in discussions, groups etc
- Writing
 - Critical Appraisal Topic
- Weekly evidence based assignments
- Quizzes

Grading

Grading will be based on the PLNU grading scale below. Grades will be rounded down from .1-.4; and rounded up from .5 to .9.

Letter Grade	GPA	Percent Grade
A	4.00	93-100
A-	3.75	90-92
B+	3.25	87-89
B	3.00	83-86
B-	2.75	80-82
C+	2.25	77-79
C	2.0	73-76
<i>Below a C (70%) is not a passing grade. Students may or may not be placed on academic probation depending on their cumulative GPA, must repeat the failed course within the next cohort of students, and participate in a remediation plan. Students will not be able to take the next class in this series (applied human neuroanatomy).</i>		
C-	1.75	70-72
D+	1.25	67-69
D	1.0	63-66
D-	.75	60-62
F	0	0-59

Grade Intervention Plan

Scoring below a letter grade of a C (73%) in any didactic course is not considered to be a passing grade. All students must develop a remediation plan if their grades do not meet the expected threshold. A remediation plan is a cooperative effort between the student, course instructor, and the faculty advisor to establish specific learning activities and plan to ensure competency and successful progression in the program.

Potential consequences of the above may include any of the following:

- Inability to take the next course in a sequence for which this course is a prerequisite.
- Academic warning.
- Academic probation.

Refer to the MSAT Student Handbook, found on the MSAT Program website for more information.

Course Weighting

Each category below is weighted as a total percentage of the final grade:

Category	% of Course Grade
Discussion boards	40%
Assignments	40%
Quizzes and Surveys	20%

ASSESSMENT & GRADING

Assignment Name	Number	Points	Knowledge Assessed
Class Assignments			
Interprofessional Discussion Boards			
IPE DB #1 Creating the PICO question			
IPE DB #2 Exploring Data Bases			
IPE DB #3 Levels of Evidence	6	25	Discussion Board
IPE DB #4 Effect Sizes the New P-Value			
IPE DB #5 Application of Sensitivity/Specificity			
IPE DB #6 What EBP is NOT?			
Discussion Boards	2	25	Discussion board

DB #1 PEDro vs Jadad Scales			
DB #2 Disablement Models			
PICO Question Development	1	25	Written
Searching the Literature	1	50	Written
Levels of Evidence	1	10	Written
Critical Appraisal using PEDro and STROBE	1	40	Written
MCID and MDC reflection	1	20	Written
Calculation, Interpretation and Application of Effect Sizes	1	30	Written
Sensitivity and Specificity	1	20	Written
Odds and Relative Risk	1	20	Written
Patient Rated Outcome Measures	1	25	Written
Disablement Models Cases	1	25	Written
Critical Appraisal Topic Paper			
Chunk 1 - Tables	1	25	Written
Chunk 2 - Introduction	1	50	Written
Final Critical Appraisal Paper	1	150	Written
Quizzes			
PICO and EBM Process	1	10	Online
Levels of Research Evidence	1	24	Online
Search Strategies	1	10	Online

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 three-unit class delivered over 8 weeks. Specific details about how the class meets the credit hour requirement can be provided upon request.

It is anticipated that students will spend a minimum of 50 participation hours per credit hour on their coursework. 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.

CONTENT WARNING

I acknowledge that each of you comes to PLNU with your own unique life experiences. This contributes to the way you perceive various types of information. In Introduction to Occupational Therapy, all the class content, including that which may be intellectually or emotionally challenging, has been intentionally curated to achieve the learning goals for this course. The decision to include such material is not taken lightly. These topics include the history of occupational therapy, the OT practice framework, and theories and models of practice that guide OT clinical practice. If you encounter a topic that is intellectually challenging for you, it can manifest in feelings of discomfort and upset. In response, I encourage you to come talk to me or your friends or family about it. Class topics are discussed for the sole purpose of expanding your intellectual engagement in the occupational therapy profession, and I will support you throughout your learning in this course.

TRIGGER WARNING

I acknowledge that each of you comes to PLNU with your own unique life experiences. This contributes to the way you perceive several types of information. In Introduction to Occupational Therapy, we will cover a variety of topics, some of which you may find triggering. These topics include the history of occupational therapy, the OT practice framework, and theories and models of practice that guide OT clinical practice. Each time this topic appears in a reading or unit, it is marked on the syllabus. The experience of being triggered versus intellectually challenged are different. The main difference is that an individual must have experienced trauma to experience being triggered, whereas an intellectual challenge has nothing to do with trauma. If you are a trauma survivor and encounter a topic in this class that is triggering for you, you may feel overwhelmed or panicked and find it difficult to concentrate. In response, I encourage you to take the necessary steps for your emotional safety. This may include leaving class while the topic is discussed or talking to a therapist at the Counseling Center. Should you choose to sit out on discussion of a certain topic, know that you are still responsible for the material; but we can discuss if there are other methods for accessing that material and for assessing your learning on that material. Class topics are discussed for the sole purpose of expanding your intellectual engagement in the profession of occupational therapy, and I will support you throughout your learning in this course.

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the by the designated due date and time of day, typically 11:59 pm. Each day an assignment is late, your grade will be reduced by 10%. Incompletes will only be assigned in extremely unusual circumstances.

EXAMS

Honorlock, an online exam proctoring system, will be used for each OT midterm and final exam. It is your responsibility to ensure that your computer can access Honorlock. If you have any questions about your computer's compatibility, you need to contact Honorlock at <https://honorlock.com/support/> prior to the day of the examination. If you are unable to access the exam due to a lack of compatibility, the course

instructor has the right to prohibit you from taking the exam and/or reducing your exam grade until the issue is resolved.

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

Online Portion of the Hybrid Course

PLNU COURSE MODALITY DEFINITIONS

1. Online Courses: These are courses with class meetings where all instruction and interaction is fully online.
 - Synchronous Courses: At least one class meeting takes place at a designated time.
 - 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).

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, two classes for a 16-week course and 1 class for a quad course, 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 a class should contact the instructor prior to the anticipated absence for approval to miss the class. Acceptable absences include illness, family emergencies, family deaths, and/or a significant life event impacting ability to attend class. Students are to develop a plan with the course faculty to complete the required coursework and/or complete alternative assignments assigned. Acceptance of late work and/or absences which do not meet the "acceptable criteria" is at the discretion of the instructor and does not waive attendance requirements.

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

SYNCHRONOUS ATTENDANCE 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.

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by 11:59 PST 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, desire to meet with Rev. Portillo or prayer requests you can contact him directly at KevinPortillo@pointloma.edu.

PLNU COPYRIGHT POLICY

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.

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. Faculty should follow and students may appeal using the procedure in the university Catalog. See the [Academic Honesty Policy](#) in the Graduate and Professional Studies Catalog for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

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.edu or 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.

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 at pointloma.edu/Title-IX. 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 at pointloma.edu/title-ix

If you (or someone you know) have experienced other forms of discrimination or bias, you can find more information on reporting and resources at www.pointloma.edu/bias

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 APA, 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 or bias, you can find more information on reporting and resources at www.pointloma.edu/bias.

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) 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.

COMMUNICATION STRATEGIES AND FEEDBACK

The instructor will respond to email inquiries within 24 hours M-F and within 48 hours on weekends and holidays. Graded feedback on assignments, examinations, and/or other relevant assessments will be provided within 1 week of student submission.

ASSIGNMENTS AT-A-GLANCE

The course summary below lists our assignments. Refer to the course schedule in Canvas for more detailed information.

- Discussion board assignments.
- Assignments
- Final paper (critically appraised topic)

CURRICULAR THREADS, ACOTE STANDARDS, LEARNING METHODS & ASSESSMENT OF STUDENT LEARNING

Course Objectives Based on Curricular Threads: (At the conclusion of this course, students will be able to):	ACOTE Standard *=ACOTE Measurement of Learning	WHAT: Course Learning Outcome	HOW Student Learning Activities	DEMONSTRATE: Assessment of Student Learning
Apply and analyze scientific evidence to explain the importance of balancing areas of occupation; the role of occupation in the promotion of health; and the prevention of disease, illness, and dysfunction for persons, groups, and populations (Curricular Thread=	B.3.4*	Apply and analyze scientific evidence to explain the importance of balancing areas of occupation; the role of occupation in the promotion of health; and the prevention of disease, illness, and dysfunction for persons, groups, and populations.	Online narrated PPT video lectures. Course readings. Synchronous online meetings. Online	Assignments Final paper (CAT)

Occupation)			educational websites. Review of the literature.	
Critique quantitative and qualitative research in order to analyze and evaluate scholarly activities, which contribute to the development of a body of knowledge. This includes the level of evidence, validity of research studies, strength of the methodology, and relevance to the profession of occupational therapy. Locate, select, analyze, and evaluate scholarly literature to make evidence based decisions. Participate in scholarly activities that align with current research priorities and advances knowledge translation, professional practice, service delivery, or professional issues (scholarship of application). (Curricular Thread=Occupation)	B.6.1*	Critique quantitative and qualitative research in order to analyze and evaluate scholarly activities, which contribute to the development of a body of knowledge. This includes the level of evidence, validity of research studies, strength of the methodology, and relevance to the profession of occupational therapy. Locate, select, analyze, and evaluate scholarly literature to make evidence based decisions. Participate in scholarly activities that align with current research priorities and advances knowledge translation, professional practice, service delivery, or professional issues (scholarship of application).	Online narrated PPT video lectures. Course readings. Synchronous online meetings. Online educational websites.	Assignments (Levels of evidence, literature appraisal, minimal detectable change, odds-risk, OT outcome measures,PEDRO) Final critical appraisal topic paper (CAT)
Demonstrate the skills necessary to write a scholarly report in a format for presentation or publication, which may be made available to professional or public	B.6.3		Course readings. Online narrated PPT video lectures. Online	Final critical appraisal topic paper.

audiences. (Curriculum Thread=Occupation)			educational websites. Synchronous online meetings.	
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).	N/A	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).	Course readings. Online narrated PPT video lectures. Online educational websites. Synchronous online meetings.	Assignments Quiz
Apply the various methods of assessing patient status and progress (e.g., global rating of change, minimal clinically important difference, and minimal detectable difference).	N/A	Apply the various methods of assessing patient status and progress (e.g., global rating of change, minimal clinically important difference, and minimal detectable difference).	Course readings. Online narrated PPT video lectures. Online educational websites. Synchronous online meetings.	Assignments Quiz