

Department of Kinesiology
ATR 6087_6087L: Evidence Based Orthopedic Assessment of the
Lower Extremity and Lab
Number of Units: 4
Fall 2021

Point Loma Nazarene University Mission

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.

Kinesiology Department Mission

The mission of the Department of Kinesiology is to prepare students to inform, maintain and improve the health, fitness and quality of life of themselves and the people they serve. The department is committed to educating our students and community in the science and benefits of optimal health and human performance; to developing in all students a lifelong habit of living healthfully; and to preparing students for the variety of career opportunities that utilize Kinesiology as a foundation.

Athletic Training Program Mission

The mission of the Athletic Training Program *is to* challenge and fully equip students to become highly effective allied health care professionals and lifelong learners who incorporate a Christian perspective, academic excellence and professional/relational proficiency. Point Loma's athletic training program will consist of extensive laboratory and clinical experiences designed to provide a multifaceted learning experience that incorporates current research and scholarly instruction. The desired outcome of the curriculum is to emphasize an evidence-based approach to healthcare with the integration of Christian faith to produce intellectually and spiritually sound clinicians who are service oriented and focused on providing patient-centered care. Graduates will achieve the entry-level competencies necessary to take and pass the certification examination offered by the [Board of Certification \(Links to an external site.\)](#) (BOC).

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. To be successful in this course, students must synthesize information presented in the lecture and laboratory and apply it to the clinical setting.

Graded assignments (e.g., tests, quizzes, assessment outlines and review of literature paper) will be used to help students identify, recall, synthesize and apply the key concepts in orthopedic assessment of the lower extremity.

Learning Outcomes Of the Class

Students will be able to perform manipulative and motor skills necessary to perform a comprehensive injury evaluation of the musculoskeletal system

Students will be able to interpret the results of the injury evaluation and make appropriate decisions, actions and medical referrals

Students will be able to objectively measure, muscular strength, girth and other measurements as determined for each anatomical structure.

Identify voluntary muscular movement including proximal to distal attachments of muscles, major motions and functions, and peripheral and segmental nerve innervations in the lower extremity, hip, pelvis and lumbar spine.

Demonstrate neurological assessment procedures.

Students will be able to identify indications and contraindications as they relate athletic participation regarding general medical conditions/illnesses and systemic diseases.

Demonstrate techniques and procedures for evaluating common injuries.

Demonstrate neurological assessment procedures

Demonstrate special tests used to evaluate injuries to the lower extremity, hip, pelvis and lumbar spine.

Commission on Accreditation of Athletic Training

Competency Category	Competency Taught
PCL-70.14	Evaluate and manage patients with acute conditions, including triaging conditions that are life threatening or otherwise emergent. These include (but are not limited to) the following conditions: Other musculoskeletal injuries
PCL-71.1	Obtaining a medical history from the patient or other individual
PCL-71.3	Assessing function (including gait)
PCL-71.4.h	Musculoskeletal system

PCL-71.4.i	Neurological system
PCL-71.4.j	Pain level

Required Books and Materials

	Title	Examination of Orthopedic & Athletic Injuries, 4th
	Author	Chad Starkey and Sara D. Brown.
	Publisher	FA Davis
	ISBN	978-0803639188
	Price	\$60-\$175
	Title	Special Tests for Orthopedic Examination 4th Edition
	Author	Jeff G. Konin PhD ATC PT , Denise Lebsack PhD ATC , Alison Snyder Valier PhD AT , Jerome A. Isear Jr. MS PT ATC-L
	Publisher	Slack
	ISBN	978-1617119828
	Price	\$57-\$77

Spiritual Care

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 mvchaplain@pointloma.edu or gordonwong@pointloma.edu. 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.

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.

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.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.

Final Examination Policy

Successful completion of this class requires taking the final examination **on its scheduled day**. The final examination schedule is posted on the [Class Schedules Links to an external site](#). No requests for early examinations or alternative days will be approved.

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 Links to an external site](#). 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.

PLNU Attendance and Participation Policy

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in 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. See [Academic Policies Links to an external site](#) in the Graduate and Professional Studies Catalog for additional detail.

Academic Dishonesty

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](#)^{Links to an external site.} in the Graduate and Professional Studies Catalog for definitions of kinds of academic dishonesty and for further policy information.

Course Grades

<u>GRADE</u>	<u>Percent - Based off of total points</u>
A	94-100
A-	90-93
B+	88-89
B	84-87
B-	80-83
C+	78-79
C	74-77
C-	70-73
D+	68-69
D	64-67
D-	60-63

F	0-59
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Course at a Glance

Tentative Schedule

ATR 6087: Orthopedic Assessment of Lower Extremity Injuries Lecture and Lab Calendar				
Week	Date	Lecture	Assignments and Reading	Lab
UNIT ONE - THE INJURY EVALUATION PROCESS (CHAPTER 1 and 4)				
1	T (8/31))	Injury Evaluation Process Part I Injury Evaluation Process Part II	Chapter 1	
	R (9/2)	Injury Evaluation Process Part III	Chapter 4 In class: Case Studies Application	SOAP NOTE Review and Medical Terminology Abbreviation Quiz LQS
UNIT TWO - POSTURE and GAIT (CHAPTER 6-7)				
2	T (9/7)	Healthy gait patterns and Static Posture	Reading: Chapter 6 Assignment Due: Concept Mapping - Injury Evaluation Process Assignment Due: Fracture Assignment	
	R (9/9)	Pathological gait patterns	Reading: Chapter 7 Assignment: Online Exam #1	Gait

UNIT THREE - LOWER LEG, ANKLE, FOOT (CHAPTER 8-9)				
3	T (9/14)	Foot and Toes Part I	Reading: Chapter 8 Special Testing Video #1 Assignment: Foot and Toe Special Testing DB Assignment: Muscle Activity Sheets	
	R (9/16)	Foot and Toes Part II	Reading: Chapter 8	LQS Assignment Foot and Toe Lab Part I Foot and Toe Lab Part II
4	T (9/21)	Foot finished Ankle and Lower Leg Part I	Reading: Chapter 8-9 Special Testing Video #2 Assignment: Ankle Special Testing Discussion Board	
	R (9/23)	Ankle and Lower Leg Part I	Reading: Chapter 9	Ankle Lab Part I
5	T (9/28)	Ankle and Lower Leg Part II	Reading: Chapter 9 Assignment Due: Injury Assessment Outlines - The Ankle, Foot, Toes	
	R (9/30)	Written Exam Unit 2	Gait Analysis Video	Foot, Toe, Ankle Lab Practical
UNIT FOUR - KNEE JOINT (CHAPTER 10-11)				
6	T (10/5)	Knee Joint Anatomy Part I	Reading: Chapter 10-11	
	R (10/7)	Knee Joint Anatomy Part II	Reading: Chapter 10-11 Assignment: special Testing Video Knee Group 1	Knee Palpations, Goni and MMT Knee Special Tests

7	T (10/12)	Pathologies of the knee	Reading: Chapter 10-11	
	R (10/14)	Pathologies of the knee	Reading: Chapter 10-11	Knee Special Tests (same video)
8	T (10/19)	PFP Anatomy	Reading: Chapter 10-11 Special Testing Video Knee Group 2	
	R (10/21)	PFP Pathologies	Reading: Chapter 10-11 Assignment Due: Knee Injury Assessment Outline	PFP Lab
9	T (10/26)	Knee Case Studies		
	R (10/28)	Unit Exam		Lab Practical
UNIT FIVE- HIP and THIGH (CHAPTER 12)				
10	T (11/2)	Clinical Anatomy	Reading: Chapter 12 Special Testing Video Hip	
	R (11/4)	Observation, History	Reading: Chapter 12 Assignment Due:	Hip Lab

11	T (11/9)	Pathologies of the Hip and Thigh	Reading: Chapter 12	
	R (11/11)	Pathologies of the hip and thigh (same lecture review)	Reading: Chapter 12	Hip Lab (Same Video As Last Week)
12	T (11/16)	UNIT EXAM	Hip and Thigh	
UNIT SIX- PELVIS (CHAPTER 12)				
12	R (11/18)	Clinical Anatomy of Pelvis	Reading: Chapter 12	Hip Lab Practical
13	T (11/23)	Clinical Anatomy of Pelvis	Assignment: Hip and Pelvis Injury Assessment Outline	
	R (11/25)	THANKSGIVING BREAK	THANKSGIVING BREAK	THANKSGIVING BREAK
14	T (11/30)	SIJ Pathologies	Reading: Chapter 12	
	R (12/2)	SIJ Pathology	Reading: 664-679	Pelvis Lab
15	T (12/7)	UNIT EXAM	Pelvis	

	R (12/9)			Pelvis Lab
Finals	T (12/14)	Final Examination Cumulative 8:00-10:30		
Finals	R (12/16)	Final Lab Practical 8:00-12:00		