# Department of Kinesiology

### ATR 5088/6088 Lab:

Evidence Based Orthopedic Assessment of the Upper Extremity (1)

**Course Instructor** 

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# **Course Description**

This course addresses evaluation techniques and care for musculoskeletal injuries to the upper 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., lab practical exams, assessment outlines and case studies) will be used to help students identify, recall, synthesize and apply the key concepts in orthopedic assessment of the upper extremity.

## **Learning Outcomes**

- 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 head, spine and upper extremity.
- Demonstrate neurological assessment procedures.
- Students will be able to identify indications and contraindications as they relate to athletic participation regarding general medical conditions/illnesses and systemic diseases.
- Demonstrate special tests used to evaluate injuries to the lower extremity, hip, pelvis and lumbar spine.
- Demonstrate techniques and procedures for evaluating common injuries.

### **Required Books and Materials**

**Title** Examination of Orthopedic & Athletic Injuries – 4th edition

**Author** Starkey, C and Brown, S.

Publisher F.A. Davis

**ISBN** 978-0-8036-3918-8

**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

### **Course Grading**

GRADE	Percent - Based off of total points
А	94-100
A-	90-93
B+	88-89
В	84-87
B-	80-83
C+	78-79
С	74-77
C-	70-73
D+	68-69

# **Tentative Schedule**

ATR 688L - Evidence Based Orthopedic Assessment of the Upper Extremity

Week Date Laboratory Assignments

Injury Evaluation Process (Examination 1-10 Process Map)

Review R.O.M. and MMT Assessment

2	1-17	Eye & Face Examination: Palpation, Special Tests	
		Abdomen & Thorax Review	
3	1-24	History, Palpation Lumbar Spine Examination History, Palpation, Range of motion	Find your neighbor  Use NATA Doc
4	1-31	Lumbosacral Spine Examination  MMT, Special Tests (i.e. Ligamentous, Neurologic tests)	Clinical Exam Tutorial:  L Spine Group Presents
5	2-7	LAB PRACTICAL #1: Lumbar, Thoracic Spine and Thorax (Case Study based differential diagnosis)  Sign Up (choose partner)	5-Minute Reflection Due
		Cervical Spine Examination	Clinical Exam Tutorial:
6	2-14	History, Palpation, Range of motion	C Spine Group Presents
7	2-21	Cervical Spine Examination  MMT, Special Testing	
			Clinical Exam Tutorial:
		Head Examination	mTBI & TBI Group Presents
8	2-28	Palpation, Special Tests	

## VOMS, SCAT 3&5, BTrackS, EyeSync 5-Minute Reflection

9	3-7	SPRING BREAK = NO CLASS	
10	3-14	Shoulder & Upper Arm Examination  History, Palpation, Range of motion, Manual Muscle Testing	Clinical Exam Tutorial: Shoulder Group Presents
11	3-21	Shoulder & Upper Arm Examination  MMT & Special Tests  CASE STUDIES	
12	3-28	Lab Practical #2: Shoulder, C Spine and Head  Sign Up (choose partner)	5-Minute Reflection
13	4-4	Elbow Examination  History, Palpation, Range of motion, Manual Muscle Testing, & Special Tests	Clinical Exam Tutorial:  Elbow & Wrist Group  Presents

Wrist, Hand & Finger Examination

History, Palpation, Range of motion, Manual Muscle Testing, & Special Tests

14 4-11

15 4-18 Easter Recess

Final 4-25 Oral Lab Practical Final Exam (Case study based differential diagnosis)

#### **Academic Accommodations**

While all students are expected to meet the minimum academic standards for completion of this course, students with disabilities may require academic accommodations. To request academic accommodations, you'll need to file documentation with the <u>Disability Resource Center</u> (DRC), located in the Bond Academic Center. Once documentation is filed, the DRC will contact your instructors and provide written recommendations for reasonable and appropriate accommodation to meet your needs. If you have questions or would like to discuss those or any learning problems, please feel free to contact me. See <u>Academic Policies.for full text</u>.

## **FERPA Policy**

As a student at Point Loma, you have a legal right to privacy as outlined in the federal FERPA (Family Educational Rights and Privacy Act) legislation. If I post grades or return assignments, I'll do so in a way that does not publicly reveal your name, PLNU student ID, or social security number without your written permission. See <u>Policy</u> Statements Links to an external site.for full text.

# **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 <u>Class Schedules Links</u> to an external site. No requests for early examinations or alternative days will be approved.

# Use of Technology

Point Loma Nazarene University encourages the use of technology for learning, communication, and collaboration. In this course, we will rely on Canvas for accessing course materials, submitting assignments, and collaborating in discussion boards and blogs. We will also use cell phone polling when it enhances our in-class activities. You'll want to make sure you are comfortable with these tools, so take advantage of our computer LabTechs to answer questions and help you with any technology issues. You may also call the Help Desk at x2222.

You are welcome to bring your laptop, iPad, and/or cell phone to class—but please make sure you use them appropriately and responsibly. If a tech tool becomes a distraction or disruption while class is in session, I will ask you to put it away or invite you to no longer bring it to class.