

## **Department of Kinesiology**

KIN 2080L – Care & Prevention Lab

Spring 2023

Meeting days: Tues/Thurs	Instructor: Joshua Edwards, ATC	
Meeting times: 8:30AM- 9:25AM	E-mail: Jedward1@pointloma.edu	
Meeting location: K-1	Office hours: By appointment	

## 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 will provide an overview of skill acquisition in the techniques and procedures required of the athletic training clinician. Laboratory instruction will include various technique of strapping, binding, and wound management as well as bony/soft tissue palpation of joints and special tests to rule out/in various pathologies.

### **COURSE AIM**

This course aims to provide you with an overview to the basic knowledge and skills to palpate and perform special test to determine joint differential pathologies. It will also provide you with the basic knowledge on crutch/cane fitting, heat & humidity.

Students will learn how to tape, bind, palpate and perform special tests for the various areas:

Foot & Ankle Thigh & Hip
Knee Head & Face
Wrist & Hand Shoulder & Elbow
Back Trunk & Thorax

To be successful in this course, students must synthesize information presented in KIN 280 lecture and this class. This means that studying for skill assessments and practicals should involve reviewing and integrating the essential ideas contained in both the lectures, lab and the textbook. We will have study sessions to improve skill level and proficiency for the skill assessments and practicals.

### **COURSE LEARNING OUTCOMES**

Upon completing this course, the student should be able to:

- Practice and develop competence in binding, wrapping and taping of various anatomic regions for a variety of types and degrees of tissue pathology, and for prevention.
- Perform and develop competence in the process of injury evaluation using H.I.P.S. (History, Inspection, Palpation, and Special Tests).
- Measure the active and passive joint range of motion using commonly accepted techniques,

- including the use of a goniometer and inclinometer.
- Describe strength assessment using resistive range of motion, break tests, and manual muscle testing.
- Learn the basic principles associated with the use of protective equipment and will apply, wear and test various types of prophylactic braces.
- Appreciate the relative value of taping and bracing.
- Learn the principles and concepts related to the fabrication, modification, and appropriate application or use of orthotics and other dynamic and static splints.
- Learn the principles of effective heat loss and heat illness prevention programs.

### **EVIDENCE BASED LEARNING**

Evidence based medicine is the integration of the best research evidence with clinical expertise and patient values to make clinical decisions. The evidence referred to in EBM is patient centered, clinically relevant research found in the medical literature on diagnostic tests, treatment techniques, preventive programs, and prognostic markers. Evidence-based medicine focuses on research dealing with the day-to-day practice of patient care. The foremost reason for using EBM is to improve the care delivered to our patients. In this class you will be introduced to which special test would be the best ones to use based on the literature.

### **TEXTBOOKS**

Required:

### **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 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 the Bond Academic Center. (DRC@pointloma.eduLinks to an external site. or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 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 documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

# **ACADEMIC HONESTY**

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic <u>dis</u>honesty 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 <a href="Academic Policies">Academic Policies</a> for definitions of kinds of academic dishonesty and for further policy information.

### PLNU ATTENDANCE & 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 <a href="Academic Policies">Academic Policies</a> in the Undergraduate Academic Catalog.

### **ACTIVE LEARNING**

Your active participation in this class will be required. You will be responsible for your own learning by reviewing class material before and after class. I will guide you in this process; however, in the end the onus of learning will be your responsibility. **Become intrinsically\_motivated to improve yourself and your understanding of management theories, policy and procedures and application of**; if you do this you will succeed every time.

Here are some KEYS to success:

- EFFORT (Work hard)
- APPROACH (Work smart)
- ATTITUDE (Think positively)

Evidence based medicine (EBM) is the integration of clinically relevant research, clinical skills and experience, and patient preferences and values (Sackett et al 2000). The increased awareness and focus on the practice of Evidence Based Medicine comes from our daily need for valid information about diagnosis, prognosis, therapy, and prevention. We want to ask local questions about the effectiveness of therapeutic modalities and design ways to find answers. The EBM portion of this course is designed so students can explore therapeutic modalities commonly used in the athletic training setting and determine what evidence is available to support their current uses.

## **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.

### **COURSE REQUIREMENTS**

## **Skill Assessment / Exams**

### Practical Exams – 400 points

Will be tested on:

1. Adhesive Tape Application

Preventive Ankle

Severe Ankle

Turf Toe

"Buddy" Toe Tape

Achilles'

Hyperextended Elbow

**Preventive Wrist** 

Hyperextended/Flexed Wrist

**Collateral Finger** 

Hyperextended/Flexed/Abducted Thumb

Arch – tear drop

"Shin Splints"

2. **Biding/Compression Applications** 

Ankle

Knee

Thigh

Hip Spica

**Groin Spica** 

**Shoulder Spica** 

3. H.I.P.S. matrix

Ankle

Knee

Hip/Pelvis

Shoulder

**Elbow** 

Wrist & Forearm

Spine

# Taping, Binding, H.I.P.S. Final – 200 points

Comprehensive assessment of all skills learned during the semester including taping, binding, palpation and special tests.

## **Course Grading**

### **Weighting of Course Requirements:**

Item		Total Points
1. Practical Exams	5 x 80 pts	400
2. Tape tearing	5 pts	5
3. Discussion Boards	4 x 10 pts	40
4. Quizzes	4 x 10 pts	40
Total		485

**Grading:** Course grades will be calculated through absolute and natural break methods.

#### **Course Rules/Guidelines**

## **Class Attendance and Participation**

Class experiences contain information that you will need in order to do well in this course. A pattern of missing classes will cause your grade to be lowered or you may be "de-enrolled" (Six misses, total from all sections, will qualify you for de-enrollment). Each student is required to be in every class meeting without fail. Responsible attendance and promptness are essential to gain the maximum benefits from this class. Expectable reasons for absence include illness, family emergencies and college sponsored activities that are approved in writing by the Academic Dean.

### Make-Ups

Make up exams/quizzes will be given only if the professor is notified of the excused absence prior to the missed class or if the student has a legitimate emergency/illness Missed work will need to be completed by the following class period.

### **Late Work**

Assignments not turned in the day and time they are due will automatically be docked 10% for each day that it is late.

### **Email**

Email will be the MAIN form of communication used by the professor outside of class. Students are expected to check their email at least **ONCE A DAY**. If you know of issues with your @pointloma.edu account, please notify the professor immediately.

### **Acceptable behavior**

Make sure cell phones are turned off and put away (no texting or making/receiving calls during class).

Even if you don't always agree, you will have respect for each other's opinions as to what is being discussed in class.

Everyone learns at a different rate; at no time should you make other's feel inadequate.

### Adding/Dropping

It is the student's responsibility to maintain his/her class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), the student has the responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor. Simply ceasing to attend this course or failing to follow through to arrange for a change of registration (drop/add) may easily result in a grade of F on the official transcript.

## **Cheating and Plagiarism**

Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit; such acts also include assisting another student to do so. Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the material (i.e., their intellectual property) so used as one's own work. Penalties for cheating and plagiarism range from a 0 or F on a particular assignment, through an F for the course, to expulsion from the university. For more information on the University's policy regarding cheating and plagiarism, refer to the student handbook: <a href="http://www.pointloma.edu/Handbook/Policies/Academic Honesty.htm">http://www.pointloma.edu/Handbook/Policies/Academic Honesty.htm</a>

### **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 <u>Graduate Student Life</u> webpage.

## **Important Dates:**

- January 10th Classes Begin
- January 16th Martin Luther King Jr. Day–No Class
- January 20th Last day to add semester class
- March 24th Last day to drop a class
- March 6th-10th— SPRING BREAK-No Class
- April 6th-10th- EASTER-No Class
- April 28<sup>th</sup> Classes End
- May 1st-5th Finals Week

Tentative Introduction to Athletic Training Lab Outline \*\*Subject to Change\*\*

Date	Торіс	Required Reading
Week 1	Introduction; Tearing Tape, Helmet/Shoulder	Perrin Ch. 1
1-10-23	pad fitting; Fabrication & application of	Helmet/shoulder pad handout (on Canvas)
	prophylactic padding;	
Week 2	Environmental factors (temp, humidity,	Heat Injuries; wound care
1-16-23	lightening); wound management; Crutch and	Crutch/Cane Fitting
	cane fitting; manual conveyance.	(on Canvas)
	Review for Exam #1	
Week 3	Practical Exam #1	Ankle pdf on Canvas
1-23-23	Ankle and Cruris H.I.P.S.	
Week 4	Special Tests of Ankle & Foot; Ankle	Perrin Ch. 2
1-30-23	Compression Wrap; Preventive Ankle	
Week 5	Turf Toe, "Shin Splints"; Arches of the Foot	
2-6-23	Review for Exam #2	
Week 6	Practical Exam #2	Knee pdf on Canvas
2-13-23	Knee H.I.P.S.	
Week 7	Knee Compression Wrap; Knee Braces;	Perrin Ch. 3
2-20-23	Collateral Knee Taping	Thigh/Hip pdf on Canvas
	Thigh, Hip, Pelvis H.I.P.S.	
Week 8	Thigh Compressions; Hip/Groin Spica	Perrin Ch. 4
2-27-23	Review for Practical #3	
Week 8	SPRING BREAK MARCH 6 TH-10TH	
3-6-23	Practical Exam #3	Chaulden adf an Canusa
Week 9 3-13-23	Shoulder H.I.P.S.	Shoulder pdf on Canvas
3-13-23 Week 10	Review Shoulder; Shoulder Spica	Perrin Ch. 5
3-23-23	Elbow H.I.P.S.; Elbow taping – hyperextension	Elbow pdf on Canvas
3-23-23	and collaterals	Elbow put off Carivas
Week 11	Shoulder H.I.P.S.	Shoulder pdf on Canvas
3-27-23	Shoulder Hill S.	Shoulder par on carryas
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Week 12	HAPPY EASTER	Forearm, wrist, hand pdf Canvas
4-3-23	Forearm, wrist, hand H.I.P.S.	
Week 13	Elbow H.I.P.S + REVIEW for practical 4	Elbow pdf on Canvas
4-10-23	Practical Exam #4	Review tools on Canvas
Week 14	Abdomen; Thorax H.I.P.S.	Thorax & Abdomen ppt on Canvas
4-17-23	Head/Face – Concussion	Head & Face pdf on Canvas
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Week 15 4-24-23	REVIEW Abdomen, Thorax H.I.F. Head/Face-Concussion	P.S.	Thorax & Abdomen ppt on Canvas Head & Face pdf on Canvas
Week 16	,	NON- Comprehen	·
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## **ATEP Educational Competencies**

## Code Competency/Proficiency

**RM-C8:** Explain the principles of effective heat loss and heat illness prevention programs. Principles include, but are not limited to, knowledge of the body's thermoregulatory mechanisms, acclimation and conditioning, fluid and electrolyte replacement requirements, proper practice and competition attire, and weight loss.

**RM-C16:** Explain the basic principles associated with the use of protective equipment, including standards for the design, construction, fit, maintenance and reconditioning of protective equipment; and rules and regulations established by the associations that govern the use of protective equipment; and material composition.

**RM-C17:** Explain the principles and concepts related to prophylactic taping, wrapping, bracing, and protective pad fabrication.

**RM-C18:** Explain the principles and concepts related to the fabrication, modification, and appropriate application or use of orthotics and other dynamic and static splints. This includes, but is not limited to, evaluating or identifying the need, selecting the appropriate manufacturing material, manufacturing the orthosis or splint, and fitting the orthosis or splint.

RM-P4.5: Prophylactic Knee Brace

**RM-P5:** Select, fabricate, and apply appropriate preventive taping and wrapping procedures, splints, braces, and other special protective devices. Procedures and devices should be consistent with sound anatomical and biomechanical principles.

**DI-C10:** Explain the roles of special tests in injury assessment.

**DI-C12:** Describe strength assessment using resistive range of motion, break tests, and manual muscle testing.

**DI-C17:** Describe the components of medical documentation (e.g., SOAP, HIPS and HOPS).

**DI-P1:** Obtain a medical history of the patient that includes a previous history and a history of the present injury.

**DI-P2:** Perform inspection/observation of the clinical signs associated with common injuries including deformity, posturing and guarding, edema/swelling, hemarthrosis, and discoloration.

**DI-P3:** Perform inspection/observation of postural, structural, and biomechanical abnormalities.

**DI-P4:** Palpate the bones and soft tissues to determine normal or pathological characteristics.

**DI-P5:** Measure the active and passive joint range of motion using commonly accepted techniques, including the use of a goniometer and inclinometer.

**DI-P6:** Grade the resisted joint range of motion/manual muscle testing and break tests.

**DI-P7:** Apply appropriate stress tests for ligamentous or capsular stability, soft tissue and muscle, and fractures.

**DI-P8:** Apply appropriate special tests for injuries to the specific areas of the body as listed above.

**AC-C15:** Describe the appropriate use of aseptic or sterile techniques, approved sanitation methods, and universal precautions for the cleansing and dressing of wounds.

**AC-P4c:** Environmental illness

AC-P4h: Acute musculoskeletal injuries (i.e., sprains, strains, fractures, dislocations)