

# Department of Kinesiology KIN 280L: Introduction to Athletic Training - Laboratory Spring 2019

Section1: T/R 11:15-12:10pm Section2: M/W 12:15-1:10pm

Professors:Susan Ganz, PhD, ATCOffices:Kinesiology Department #6Office Phone:(619) 849-2704Cell Phone:(619) 701-2567Email:susanganz@pointloma.edu

#### **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 techniques of strapping, binding, and wound management as well as bony/soft tissue palpation of joints and special tests to rule out 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
- ✓ Knee
- ✓ Wrist &Hand
- ✓ Back

- ✓ Thigh & Hip
- ✓ Head & Face
- ✓ Shoulder & Elbow
- ✓ 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 practical's 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 practical's. 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 through the use of 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 Medicine**

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

Academic Accommodations: All students are expected to meet the standards for this course as set by the instructor. However, students with learning disabilities who may need accommodations should discuss options with the instructor during the first two weeks of class and provide approved documentation and verification of need. The Academic Support Center is available to students for a variety of tutorial needs.

### **Course Requirements**

## <u>Skill Assessment / Exams</u>

### <u> Practical Exams – 500 points</u>

Will be tested on:

- 1. Adhesive Tape Application
  - Preventive Ankle
  - Severe Ankle
  - ➤ Turf Toe
  - "Buddy" Toe Tape
  - > Achilles'

ATHLETIC TAPING AND BRACING BRACING WILLIAM TABLET TAPING TAPINA TAPING	Title	Athletic Taping And Bracing; 3 <sup>rd</sup> Ed.		
	Author	David H. Perrin		
	ISBN-13:	978-1-4504-1352-7		
	Publisher	Human Kinetics		
	Publication Date	2012		

- 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

### <u> Taping, Binding, H.I.P.S. Final – 200 points</u>

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	4 @ 100 pts	400
2. Comprehensive Final.	200 pts	200
3. Tape tearing	5 pts	5
Total		605

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

# Course Rules/Guidelines

# A. 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. There are no allowed or excused absences. (Exceptions: When necessitated by certain college-sponsored activities and are approved in writing by the Academic Dean.)
- Participation requires that students are wearing proper clothing for activity. Appropriate clothing may include: athletic shorts, T-shirt or tank top, sweats etc.
- Each student is expected to participate with a genuine effort to learn and improve skills in taping, binding and evaluation of joints and special tests.
- Inform the instructor in advance if you will not be able to attend a particular class session and be prepared to make up the absence.
- Final exams may not be taken early. (Please make travel plans accordingly.)
- B. Academic Honesty
  - The Point Loma Nazarene University community holds the highest standards of honesty and integrity in all aspects of university life. Academic honesty and integrity are strong values among faculty and students alike. Any violation of the university's commitment is a serious affront to the very nature of Point Loma's mission and purpose. If a situation involving academic dishonesty has been detected the professor may assign a failing grade for a) that particular assignment or examination, and/or b) the course.
- C. <u>Acceptable behavior:</u>

- 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 others' opinions as to what is being discussed in class.
- Everyone learns skills at a different rate; at no time should you make other's feel inadequate.

## D. <u>Adding/Dropping</u>:

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.

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

### Section 1:

Date	Торіс	Assignment s Due	Required Reading
1/10/19 (R)	Introduction; Tearing Tape,		Perrin Ch. 1
1/15/19 (T)	Helmet/Shoulder pad fitting; splinting & padding		Helmet/shoulder pad handout (on Canvas)
1/17/19 (R)	Environmental factors (temp, humidity, lightening); wound management		Heat Injuries; wound care (on Canvas)
1/22/19 (T)	Crutch and cane fitting; manual conveyance; Review for Exam		Crutch/Cane Fitting (on Canvas)
1/24/19 (R)	Practical Exam #1		
1/29/19 (T)	Ankle and Cruris H.I.P.S.		Ankle pdf on Canvas
1/31/19 (R)	Ankle Compression Wrap; Preventive Ankle		Perrin Ch. 2
2/5/19 (T)	Severe Ankle, "Buddy" Toe, Turf Toe, Heel Contusions		
2/7/19 (R)	Achilles'; "Shin Splints"		
2/12/19 (T)	Arches of the Foot		
2/14/19 (R)	Practical Exam #2		
2/19/19 (T)	Knee H.I.P.S.		Knee pdf on Canvas
2/21/19 (R)	Knee Compression Wrap; Knee Braces; Collateral Knee Taping		Perrin Ch. 3
2/26/29 (T)	Thigh, Hip, Pelvis H.I.P.S.		Thigh/Hip pdf on Canvas
2/28/19 (R)	Thigh Compressions; Hip/Groin Spica		Perrin Ch. 4
3/4/39 - 3/8/19	SPRING BREAK – No Class		
3/12/19 (T)	Practical Exam #3		
3/14/19 (R)	Shoulder H.I.P.S.		Shoulder pdf on Canvas
3/19/19 (T)	Review Shoulder; Shoulder Spica		Perrin Ch. 5
3/21/19(R)	Elbow H.I.P.S.		Elbow pdf on Canvas
3/26/19 (T)	Elbow taping – hyperextension and collaterals		Perrin Ch. 6
3/28/19 (R)	Forearm, Wrist and Hand H.I.P.S.		Wrist & Hand pdf
4/2/19 <b>(T)</b>	Preventive Wrist, Wrist Hyperextension/flexion, Collateral Finger, Buddy Finger		Perrin Ch. 7
4/4/19 (R)	Practical Exam #4		
4/9/19 (T)	Spine H.I.P.S.		Spine pdf on Canvas
4/11/19 (R)	Abdomen; Thorax H.I.P.S.		Thorax & Abdomen pdf
4/16/19 (T)	Head/Face – Concussion		Head & Face pdf
4/18/19 - 4/22/19	EASTER RECESS – No Class		
4/23/19 (T)	Practical Exam #5		
4/25/19 (R)	Mass Review – Taping, Binding, Palpations & Special Tests		
Finals	FINAL EXAMINATION: 4/30/19 10:30	<mark>– 1:00</mark>	Comprehensive

Date	Торіс	Assignment s Due	Required Reading	
1/8/19 (T)	Introduction; Tearing Tape,		Perrin Ch. 1	
1/9/19(W)	Helmet/Shoulder pad fitting; splinting & padding		Helmet/shoulder pad handout (on Canvas)	
1/14/19 (M)	Environmental factors (temp, humidity, lightening); wound management		Heat Injuries; wound care (on Canvas)	
1/16/19 (W)	Crutch and cane fitting; manual conveyance; Review for Exam		Crutch/Cane Fitting (on Canvas)	
1/21/19 (M)	MLK DAY – No Class			
1/23/19 (W)	Practical Exam #1			
1/28/19 (M)	Ankle and Cruris H.I.P.S.		Ankle pdf on Canvas	
1/30/19 (W)	Ankle Compression Wrap; Preventive Ankle		Perrin Ch. 2	
2/4/19 (M)	Severe Ankle, "Buddy" Toe, Turf Toe, Heel Contusions			
2/6/19 (W)	Achilles'; "Shin Splints"			
2/11/19 (M)	Arches of the Foot			
2/13/19 (W))	Practical Exam #2			
2/18/19 (M)	Knee H.I.P.S.		Knee pdf on Canvas	
2/20/19(W)	Knee Compression Wrap; Knee Braces; Collateral Knee Taping		Perrin Ch. 3	
2/25/29 (M)	Thigh, Hip, Pelvis H.I.P.S.		Thigh/Hip pdf on Canvas	
2/27/19 (Ŵ)	Thigh Compressions; Hip/Groin Spica		Perrin Ch. 4	
3/4/39 - 3/8/19	SPRING BREAK – No Class			
3/11/19 (M)	Practical Exam #3		·	
3/13/19 (W)	Shoulder H.I.P.S.		Shoulder pdf on Canvas	
3/18/19 (M)	Review Shoulder; Shoulder Spica		Perrin Ch. 5	
3/20/19(W)	Elbow H.I.P.S.		Elbow pdf on Canvas	
3/25/19 (M)	Elbow taping – hyperextension and collaterals		Perrin Ch. 6	
3/27/19 (W)	Forearm, Wrist and Hand H.I.P.S.		Wrist & Hand pdf	
4/1/19 <b>(M)</b>	Preventive Wrist, Wrist Hyperextension/flexion, Collateral Finger, Buddy Finger		Perrin Ch. 7	
4/3/19 (W)	Practical Exam #4			
4/8/19 (M)	Spine H.I.P.S.		Spine pdf on Canvas	
4/10/19 (W)	Abdomen; Thorax H.I.P.S.		Thorax & Abdomen pdf	
4/15/19 (M)	Head/Face – Concussion		Head & Face pdf	
4/17/19 (W)	Practical Exam # 5			
4/18/19 - 4/22/19	EASTER RECESS – No Class			
4/24/19 (W)	Mass Review – Taping, Binding, Palpations & Special Tests			
Finals	FINAL EXAMINATION: 5/1/19 10;30 -	<mark>- 1:00</mark>	Comprehensive	

### **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)