

# KIN 0084 - CARE AND PREVENTION OF ATHLETIC INJURIES

## Catalog Description

Formerly known as PHED 84

Hours: 54 lecture

Description: Designed for students interested in the prevention, evaluation and care of athletic injuries. Introduction to theoretical concepts and practical skills necessary for the proper and effective management of common athletic injuries and medical conditions. Includes the prevention, recognition, evaluation, management and rehabilitation of injuries, taping techniques, and emergency procedures. (CSU, UC)

## Course Student Learning Outcomes

- CSLO #1: Correlate principles of human anatomy as applicable to the athletic training scope of practice.
- CSLO #2: Design rehabilitation program for specific injuries by selecting and incorporating appropriate modalities and exercises (range of motion, proprioceptive, strength and cardiorespiratory).
- CSLO #3: Identify the risk of exposure to blood born pathogens and choose appropriate universal precautions to prevent disease transmission.
- CSLO #4: Select the appropriate taping techniques for specific injuries and demonstrate basic skills in the use of taping for a variety of body parts.

## Effective Term

Fall 2019

## Course Type

Credit - Degree-applicable

## Contact Hours

54

## Outside of Class Hours

108

## Total Student Learning Hours

162

## Course Objectives

1. Relate the principles of human anatomy as applicable to the athletic training scope of practice.
2. Analyze environmental conditions and select the appropriate protocols in order to prevent injury.
3. Differentiate between medical conditions that result from environmental factors and choose the correct management.
4. Evaluate emergency situations and determine the appropriate management.

5. Assess situations for risk of exposure to blood born pathogens and choose appropriate universal precautions to prevent disease transmission.
6. Formulate programs to prevent injuries through cardiorespiratory, strength and flexibility training.
7. Analyze orthopedic injuries and medical conditions using history, signs, symptoms and special tests to identify the injury or condition.
8. Formulate management and treatment plans for specific injuries and conditions.
9. Design rehabilitation programs for specific injuries by selecting and incorporating appropriate modalities and exercises (range of motion, proprioceptive, strength and cardiorespiratory).
10. Select the appropriate taping techniques for specific injuries and demonstrate basic skills in the use of taping for a variety of body parts.
11. Determine causes, modes of transmission and prevention of skin conditions commonly seen in athletics.
12. Assess common non-orthopedic medical and health issues that can affect athletes.

## General Education Information

- Approved College Associate Degree GE Applicability
  - AA/AS - Health Ed/Physical Ed
- CSU GE Applicability (Recommended-requires CSU approval)
  - CSUGE - E1 Lifelong Learning and Self-Development
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

## Articulation Information

- CSU Transferable
- UC Transferable

## Methods of Evaluation

- Essay Examinations
  - Example: Differentiate between the three types of ankle sprains. Describe the tests that you would use and the signs and symptoms for each type.
- Objective Examinations
  - Example: An athlete comes in to you complaining of knee pain. He hurt it doing cutting drills on the field (foot planted and then changing direction). You take a history and find out that the pain is located on the medial side of the knee along the joint line and that he first noticed swelling the day after the injury happened. In addition, he has pain when he squats. What injury do you suspect and how did you come to this conclusion?
- Skill Demonstrations
  - Example: Anatomical Identification: (Show Shabby for sign off) 1) Lateral Malleolus \_\_\_\_ 2) Medial Malleolus \_\_\_\_ 3) Anterior Talofibular Ligament \_\_\_\_ 4) Calcaneofibular Ligament \_\_\_\_ 5) Posterior Talofibular Ligament \_\_\_\_ 6) Tibialis Anterior Muscle \_\_\_\_ 7) Peroneals \_\_\_\_ 8) Medial head of gastroc \_\_\_\_ Taping/Bracing: Apply ankle brace to partner \_\_\_\_ Tape partners' other ankle \_\_\_\_ Special Tests: Anterior Drawer \_\_\_\_ Talar Tilt \_\_\_\_ Squeeze Test \_\_\_\_ Thompson Test \_\_\_\_ Rehabilitation Assessment: Each person in your group is to perform each of the following exercises or techniques. Initial or check off after you have completed. Also, determine what part of rehabilitation each exercise/technique would fall under by placing the appropriate number in front of the description (the left side). Use each only once. Check off each

task when complete (on the right side). 1) Decrease swelling/ inflammation 2) Increase range of motion 3) Increase flexibility 4) Increase strength 5) Neuromuscular control/proprioception 6) Functional tests \_\_\_\_ Slant board \_\_\_\_ \_\_\_\_ Tubing exercises X 4 directions \_\_\_\_ \_\_\_\_ BAPS board \_\_\_\_ \_\_\_\_ Horseshoe compression wrap \_\_\_\_ \_\_\_\_ Box drill \_\_\_\_ \_\_\_\_ Balance on one foot Eyes open, on floor \_\_\_\_ Eyes closed, on floor \_\_\_\_ Eyes open, on foam pad \_\_\_\_ Eyes closed, on foam pad \_\_\_\_ Play catch on Bosu Ball \_\_\_\_

**Other materials and-or supplies required of students that contribute to the cost of the course.**

## Repeatable

No

## Methods of Instruction

- Lecture/Discussion

Lecture:

1. Use power point lecture to demonstrate common mechanisms of knee injury and special tests to identify injured structures. Show projected game film of an athlete sustaining a knee injury and students will identify the mechanism of injury and probable structures involved.
2. Describe and demonstrate the ankle exercises used in a rehabilitation program for a inversion ankle sprain. Observe and critique students as they perform these exercises.

## Typical Out of Class Assignments

### Reading Assignments

1. Read chapter on leg injuries in Prentice's Essentials of Athletic Injury Management. Be prepared to interpret a set of signs and symptoms to determine the specific lower leg injury. 2. Read article from Training and Conditioning on salt loss while exercising and in small group discussion evaluate the methods to identify salty sweaters and dietary strategies to prevent heat illness.

## Writing, Problem Solving or Performance

1. Demonstrate the appropriate taping technique for an athlete with a lateral ankle sprain. 2. You are covering football practice and it starts to storm. You see lightning and determine the flash to bang ratio is 15 seconds. Calculate your distance from the lightning and evaluate the situation to decide if you should get the athletes into enclosed shelter.

## Other (Term projects, research papers, portfolios, etc.)

1. Create a dictionary of medical terms commonly used in athletic training.

## Required Materials

- Essentials of Athletic Injury Management
  - Author: William Prentice
  - Publisher: McGraw-Hill
  - Publication Date: 2016
  - Text Edition: 10th
  - Classic Textbook?:
  - OER Link:
  - OER: