COURSE OUTLINE

Health 110
Health Education

I. Catalog Statement

Health 110 is a course of in-depth examination of selected topics in sports medicine. The course will provide a thorough knowledge of the prevention and care of injuries commonly occurring during physical activity.

Units – 2.0
Lecture Hours – 2.0
Laboratory Hour – 1.0

Prerequisite: None

II. Course Entry Expectations

Skills Level Ranges: Reading 5; Writing 5; Listening/Speaking 5; Math 2

III. Course Exit Standards

Upon successful completion of the required course work, the student will be able to:

1. Understand the concept of injury prevention.
2. Provide immediate care for athletic injuries based on sound scientific theories.
3. Know the principles and components of conditioning programs.
4. Attain knowledge to allow them to make safe decisions regarding injury recognition, evaluation and treatment.
5. Understand nutrition and other ergogenic aids in relation to sport.
6. Understand specific anatomical and kinesiological principles and theories behind protective bandaging and wrapping techniques.
7. Be able to apply protective taping and wrapping procedures.

IV. Course Content

A. Cause and Prevention of Sports Injuries — 6 hours
   1. Major and contributory factors
   2. Role of physician, athletic trainer, coach
   3. Role of flexibility
   4. Effect of physical conditioning
   5. Psychological factors
   6. Medical examinations

B. Physiology of Trauma — 3 hours
   1. Tissue physiology
   2. Inflammation and healing
   3. Fractures

C. Recognition/Evaluation and General Care of Injuries — 15 hours
   1. Injuries to muscle-tendinous unit
      a. Pathology and mechanics
      b. Recognition
      c. Management
   2. Injuries to the foot, ankle, lower leg
      a. Pathology
      b. Recognition
      c. Management
   3. Injuries to the knee/hip
      a. Pathology and mechanics

b. Recognition
c. Management

4. Injuries to the shoulder girdle
   a. Pathology and mechanics
   b. Recognition
   c. Management
5. Injuries to elbow, wrist, hand
   a. Pathology and mechanics
   b. Recognition
   c. Management
6. Injuries to the head, face, neck
   a. Pathology and mechanics
   b. Recognition
   c. Management

D. Rehabilitation Techniques and Exercises/Therapeutic Modalities 3 hours
   1. PRE – Prog. Resistence Exercise
   2. PNF – Proprioceptive Neuromuscular Facilitation
   3. ROM – Range of Motion
   4. Cold therapy
   5. Thermal Agents
   6. Ultra Sound
   7. TENS - Transcutaneous Nerve Stimulation
   8. Physiology and Contra-indications

E. Nutrition and Ergogenic Aids 3 hours
   1. Basic diet
   2. Role and effect of aids
   3. Drug in sport

F. Medical Effects of Environment on Sports 2 hours
   1. Heat and humidity
   2. Altitude
   3. Cold

G. Specific Taping and Wrapping Techniques 12 hours
   1. Foot and ankle
   2. Knee
   3. Elbow
   4. Hand and wrist
   5. shoulder
   6. spicas/elastic wraps

H. Specific Diagnostic Tests 4 hours

I. Final Test and Examination

V. Methods of Presentation

Students will view a variety of films during the course.

VI. Assignments and Methods of Evaluation

Two comprehensive exams, a taping practical exam, Training Room Observation, sport activity observation.

VII. Textbook(s)

Prentice, William E. Arnheim's Principles of Athletic Training A competency-Based Approach, McGraw-Hill, 2003.