HPE 232 Health Sciences Applied to Coaching

General Information

Date
September 25th, 2017

Department
Physical Education and Integrated Health Care

Course Prefix
HPE

Course Number
232

Course Title
Health Sciences Applied to Coaching

Course Information

Credit Hours
3

Lecture Contact Hours
3

Lab Contact Hours
0

Other Contact Hours
0

Catalog Description
This course covers topics related to the prevention and care of athletic injuries. This course will be taken by second-year students in the AS Sports Medicine degree, as well as by any students interested in pursuing a New York State Coaching Certification. Principles of human anatomy and physiology, biomechanics, and psychology will be presented, along with liability and administrative issues in sports medicine. Students will also have the opportunity to meet the certification requirements for First Aid/CPR/AED.

Key Assessment
This course does not contain a Key Assessment for any programs

Prerequisites
None

Co-requisites
None

Grading Scheme
Letter

First Year Experience/Capstone Designation

This course DOES NOT satisfy the outcomes applicable for status as a FYE or Capstone.

SUNY General Education

This course is designated as satisfying a requirement in the following SUNY Gen Ed category
None
Institutional Learning Outcomes Addressed by the Course

Vitality  Inquiry  Perseverance  Interconnectedness

Course Learning Outcomes

1. Discuss the roles and responsibilities of members of the sports medicine team.
2. Outline the legal and ethical expectations of sports medicine professionals.
3. Explain methods of injury prevention that are based on current sports medicine protocols.
4. Demonstrate skills for use in emergency situations to earn certification in First Aid/CPR/AED.

Program Affiliation

This course is required as a core program course in the following program
AS Sports Medicine

Outline of Topics Covered

1. The sports medicine umbrella
   1. Members of the sports medicine team
      1. Roles and responsibilities
      2. Educational/certification requirements
   2. Interactions between members of the sports medicine team

2. Liability issues in sports medicine
   1. Liability/Negligence
   2. Sports medicine team chain of command
   3. Consent/Good Samaritan Laws
   4. Methods to decrease the risk of liability
   5. Record keeping

3. Bracing and taping/protective equipment
   1. Purpose of athletic taping/bracing/protective equipment
   2. Legal considerations of taping/bracing/protective equipment
   3.
Indications/contraindications of return to play with taping/bracing

4. Common taping procedures
   1. Ankle taping
   2. Acute ankle injury compression wrap
   3. Elastic wrapping techniques
   4. Knee/ankle bracing

5. Protective equipment
   1. Head protection
   2. Face protection
   3. Neck protection
   4. Trunk/torso protection
   5. Lower extremity protection

4. Techniques of conditioning
   1. Principles of conditioning
   2. Basics of fitness assessment
   3. Techniques of cardiopulmonary endurance training
   4. Techniques of resistance training
      1. Muscular strength
      2. Muscular endurance
      3. Power
   5. Techniques of flexibility training
   6. Sport-specific exercise programs

5. Basics of nutrition/body composition
   1. Energy sources for physical activity
   2. Macronutrients vs. micronutrients
   3. Nutritional recommendations
   4.
Hydration guidelines for physical activity

5. Use of dietary supplements to improve athletic performance

6. Methods of assessing body composition

7. Patterns of disordered eating

8. Techniques for safe weight management

6. Mechanisms and characteristics of injury
   1. Types of mechanical injury
   2. Musculoskeletal injuries
      1. Injuries to bones
      2. Injuries to ligaments
      3. Synovial joint injuries
      4. Injuries to muscles/tendons
      5. Nerve injuries
      6. Head and spinal injuries
      7. Injuries to the chest, abdomen, pelvis

7. Basics of sports psychology
   1. Psychological response to exercise/activity
   2. Psychological response to injury
   3. Psychological response to rehabilitation

8. Management of acute injuries
   1. Principles of injury assessment
      1. Primary survey
      2. Secondary survey
   2. First aid techniques
      1. Controlling bleeding
         1. Bloodborne pathogens
         2.
Universal precautions

2. Treating shock
3. Splinting for musculoskeletal injuries
4. Techniques of spinal immobilization
5. Treatment of soft tissue injuries

9. Non-emergency injury evaluation techniques
   1. Basic knowledge requirements
   2. History
   3. Observation
   4. Palpations
   5. Special tests
   6. Documentation

10. Environmental considerations
    1. Classification of cold emergencies
    2. Treatment of cold emergencies
    3. Prevention of cold emergencies
    4. Classification of heat emergencies
    5. Treatment of heat emergencies
    6. Prevention of heat emergencies
    7. Lightning safety
    8. First aid for lightning strikes
    9. Overexposure to the sun
   10. Impacts of air pollution/altitude/circadian dysrhythmia

11. NYSED Guidelines for Concussion Management

12. Current and on-going health issues and administrative procedures