SES-2000: Essentials of Sports Injury Care

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# SES-2000: ESSENTIALS OF SPORTS INJURY CARE

# **Cuyahoga Community College**

Viewing: SES-2000: Essentials of Sports Injury Care

**Board of Trustees:** 

May 2022

**Academic Term:** 

Fall 2022

**Subject Code** 

SES - Sport and Exercise Studies

**Course Number:** 

2000

Title:

**Essentials of Sports Injury Care** 

### **Catalog Description:**

Designed to provide entry level knowledge in the field of sport and fitness related injuries. This course includes basic anatomy of common injuries, evaluation techniques, preventive measures to reduce the incidences of injuries and knowledge of basic treatment procedures. Legal and ethical issues will also be discussed.

### Credit Hour(s):

3

#### Lecture Hour(s):

2

### Lab Hour(s):

2

# Requisites

### **Prerequisite and Corequisite**

HLTH-1320 CPR-AED for Healthcare Providers or concurrent enrollment, or HLTH-1230 Standard First Aid and Personal Safety, or concurrent enrollment, or departmental approval.

# **Outcomes**

## Course Outcome(s):

Apply knowledge of the basic concepts and principles of sport injury care including the role of the athletic health care team, protocols for health records, physicals, and fitness screenings, the development of weather and medical emergency plans, and utilize anatomy and sport injury terminology.

# Objective(s):

- 1. Identify the members of the health care team and their roles in sport injury care.
- 2. Discuss why treatment and rehabilitation are important parts of the first aid followup.
- 3. Identify the components of the sport first aid game plan.
- 4. Identify the components of a first aid kit.
- 5. Examine American School Education Program's (ASEP) Sport Injury Care course for individuals pursuing sport coaching employment.
- 6. Discuss health records and when to incorporate preseason physicals and fitness assessments.
- 7. Discuss how to develop and initiate a weather emergency plan and a medical emergency plan.
- 8. Explain the roles of the musculoskeletal, neurological, digestive, respiratory, circulatory, and urinary systems in sport injury care.
- 9. Distinguish between acute and chronic injuries.
- 10. Recognize the main types of acute and chronic injuries.

## Course Outcome(s):

Develop the components of an emergency action plan, perform, physical assessment and first aid techniques, and follow emergency medical assistance protocols to move injured or sick athletes.

# Objective(s):

- 1. Identify the components of an emergency action plan.
- 2. Discuss the steps of an emergency action plan and providing life support for witnessed sudden cardiac arrest, mild and severe airway blockage in a responsive athlete, and severe airway blockage in an unresponsive athlete.
- 3. Demonstrate the steps of an emergency action plan, including primary survey, CPR, use of an AED, rescue breathing, and obstructed airway techniques.
- 4. Demonstrate how to conduct a physical assessment of an injured or ill athlete using the HIT (history, inspection, and touch) method.
- 5. Demonstrate how to minimize widespread and local tissue damage, splint unstable injuries, and control bleeding.
- 6. Identify emergency medical assistance protocols to move injured or sick athletes.
- 7. Identify emergency medical protocols for moving injured or sick athletes.
- 8. Demonstrate techniques to move injured or sick athletes.

# Course Outcome(s):

Recognize the signs, symptoms, and signals for respiratory injuries, cardiovascular emergencies, cerebrovascular emergencies, closed head and spine injuries, internal organ injuries, sudden illnesses, and weather-related problems, provide standard first aid care for these specific injuries, and utilize prevention strategies for these specific injuries.

## Objective(s):

- 1. Identify the signs and symptoms of respiratory emergencies and illnesses including anaphylactic shock, asthma, collapsed lung, throat contusion, pneumonia or bronchitis, solar plexus spasm, and hyperventilation.
- 2. Discuss strategies to prevent respiratory emergencies from progessing to life-threatening emergencies.
- 3. Recognize the signs and symptoms of head and spine injuries.
- 4. Discuss head and spine injury prevention strategies that can be incorporated in a sport first aid game plan.
- 5. Identify the different types of internal organ injuries.
- 6. Recognize the signs and symptoms of an internal injury.
- 7. Identify the signs and symptoms of sudden illnesses and illnesses including anaphylactic shock, asthma, collapsed lung, throat contusion, pneumonia or bronchitis, solar plexus spasm, and hyperventilation.
- 8. Recognize the signs and symptoms of sudden illnesses and emergencies including stroke, diabetic emergencies, seizures, fainting, influenza, gastroenteritis, and drug overdoses and reactions.
- 9. Discuss strategies to prevent sudden illnesses from progessing to life-threatening emergencies.
- 10. Identify weather-related problems that can occur to athletes.
- 11. Recognize the symptoms and signs of heat cramps, heat exhaustion, heat stroke, frostbite, hypothermia, and lightning injuries.
- 12. Discuss prevention strategies for heat-, cold-, and lightning-related injuries and illnesses.
- 13. Demonstrate first aid protocols and steps for the following: respiratory emergencies and illnesses, closed head and spine injuries, internal organ injuries, sudden illnesses, and emergencies and illnesses due to weather-related problems.

# Course Outcome(s):

Recognize the signs, symptoms, and signals for musculoskeletal injuries, facial and scalp injuries, and skin problems, provide standard first aid care for these specific injuries, utilize injury prevention strategies, and recognize when to refer individuals to qualified medical professionals for treatment.

# Objective(s):

- 1. Recognize upper body musculoskeletal injuries that can occur in the shoulder, chest, upper arm, elbow, forearm, wrist, and hand.
- 2. Demonstrate standard first aid care for upper body musculoskeletal injuries.
- 3. Discuss strategies to prevent upper body musculoskeletal injuries.
- 4. Recognize lower body musculoskeletal injuries that can occur in the abdomen, back, hip, thigh, knee, lower leg, ankle, and foot.
- 5. Demonstrate standard first aid care for lower body musculoskeletal injuries.
- 6. Discuss strategies to prevent lower body musculoskeletal injuries.
- 7. Discuss what conditions are required for an injured athlete to return to play after a musculoskeletal injury.
- 8. Identify serous face, eye, and mouth injuries.
- 9. Demonstrate standard first aid care for face, eye, and mouth injuries.
- 10. Recognize and provide first aid care for common noncontagious skin conditions such as blisters and abrasions.
- Recognize contagious skin conditions.
- 12. Discuss strategies to prevent skin conditions from spreading among athletes.
- 13. Recognize injury situations requiring referral to a qualified medical professional for additional medical care and treatment.
- 14. Demonstrate first aid protocols for musculoskeletal injuries, face and scalp injuries, and skin problems.

# Methods of Evaluation:

- 1. Competency skills test
- 2. Written assignments

- 3. Quizzes
- 4. Written examinations
- 5. Practical skills test
- 6. First aid protocol and case study assignments
- 7. PowerPoint presentations

#### **Course Content Outline:**

- 1. Introduction to sport first aid and injury care
- 2. Your role of the athletic care team
  - a. Fitness professional and coach's role
  - b. Other members of the sport health care team
- 3. Sport first aid game plan
  - a. Health records
  - b. Weather emergency plan
  - c. Checking facilities and equipment
  - d. Getting players ready to perform
  - e. Developing a weather and emergency action plan
- 4. Basic sport first aid skills
- 5. Anatomy terminology
  - a. Musculoskeletal system
  - b. Neurological system
  - c. Digestive system
  - d. Respiratory and circulatory systems
  - e. Urinary system
- 6. Injury terminology
  - a. Causes of injuries/illnesses
- 7. Acute injuries
  - a. Abrasions
  - b. Punctures
  - c. Cuts
  - d. Sprains
  - e. Strains
  - f. Cartilage tears
  - g. Dislocations and subluxations
  - h. Fractures
- 8. Chronic injuries
  - a. Chronic muscle strain
  - b. Bursitis
  - c. Tendinosis and other forms
  - d. Chronic bone injuries
- 9. Emergency action steps and providing life support
  - a. Emergency action steps
  - b. Cardiopulmonary resuscitation steps
    - i. CPR technique
    - ii. Use of an AED
    - iii. Rescue breathing techniques
    - iv. Obstructed airway techniques
- 10. Physical assessment and first aid techniques
  - a. Arterial and venous bleeding
  - b. Shock
  - c. Splinting unstable injuries
  - d. Capillary bleeding
  - e. Local tissue damage
- 11. Moving injured or sick athletes
  - a. Emergency medical assistance protocols
  - b. Moving techniques
- 12. Sport fist aid for specific injuries

- a. Respiratory emergencies and illnesses
  - i. Anaphylactic shock
  - ii. Collapsed lung
  - iii. Asthma
  - iv. Hyperventilation
  - v. Solar plexus spasm
  - vi. Pneumonia or bronchitis
  - vii. Throat contusion
- b. Closed head and spine injuries
  - i. Closed head injuries
  - ii. Spine injuries
  - iii. Nerve injuries
- c. Internal organ injuries
  - i. Ruptured spleen
  - ii. Bruised kidney
  - iii. Testicular trauma
- d. Sudden illnesses
  - i. Stroke
  - ii. Insulin reaction
  - iii. Ketoacidosis
  - iv. Seizure
  - v. Depressant, stimulant, and ecstasy overdose or reaction
  - vi. Creatine and anabolic steroid reaction
  - vii. Fainting
  - viii. Gastroenteritis
  - ix. Influenza
- e. Weather-related problems
  - i. Heat cramps
  - ii. Heat exhaustion
  - iii. Heatstroke
  - iv. Frostbite
  - v. Hypothermia
  - vi. Lightning injury
- f. Upper body musculoskeletal injuries
  - i. Shoulder
  - ii. Chest
  - iii. Upper arm
  - iv. Elbow
  - v. Forearm, wrist, hand
- g. Lower body musculoskeletal injuries
  - i. Abdomen and back
  - ii. Hip and thigh
  - iii. Knee
  - iv. Lower leg, ankle, and foot
- h. Facial and scalp injuries
  - i. Face and scalp lacerations
  - ii. Eye injuries
  - iii. Nose, facial bone, and jaw injuries
  - iv. Tooth injuries
  - v. Ear injuries
- i. Skin problems
- 13. First aid protocols

## Resources

Walker, B. (2018) The Anatomy of Sports Injuries, Berkeley, CA: Lotus Publishing.

Gotlin, R.S. (2020) Sport Injuries Guidebook, Champaign, IL: Human Kinetics.

DK. (2019) Everyday Sports Injuries: The Essential Step-by-Step Guide to Prevention, Diagnosis, and Treatment, London: DK Publishing.

Kahanov, L. & Payne, E.K. (2022) Athletic Training and Therapy: Foundations of Behavior and Practice, Champaign, IL: Human Kinetics.

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