

# Foundations of Sports Medicine: Grades 9, 10, 11, 12

Adopted 2014

## Applying the historical foundations of sports medicine

### 1.1 Recognize the historical foundations of athletic training

1. Discuss how the profession's history has impacted the profession today as well as the implications are for the future [1.1.1](#)
2. Compare and contrast state, local, and national levels of athletic organizations, summarizing their impact on the profession of Athletic Training [1.1.2](#)

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### 1.2 Investigate the process of attaining certification and licensure for the athletic trainer

1. Discuss the role of the Board of Certification (BOC) and the impact it has made in the field of Athletic training [1.2.1](#)
2. Compare the difference between "certification" and "Licensure." [1.2.2](#)

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### 1.3 Differentiate between the roles and responsibilities of various professionals on the Sports Medicine Team as well as the settings they may work in.

1. Differentiate the roles and responsibilities of the Coach, Athletic Trainer, Athletic Training Student aide, and the Team Physician. [1.3.1](#)
2. Compare and contrast the different settings of employment an athletic trainer may work in. [1.3.2](#)

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## Investigate the roles of the athletic trainer in healthcare administration

### 2.1 Investigate budgetary concerns involved in developing or maintaining a healthcare facility

1. Estimate the pitfalls that may arise due to budgetary concerns. [2.1.1](#)
2. Predict possible concerns for an individual program depending on the setting. [2.1.2](#)

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### 2.2 Design an athletic training healthcare facility with all required components

1. Identify the necessary components for a fully functioning athletic training facility. [2.2.1](#)
2. Identify appropriate policies and procedures that should be enforced in the athletic healthcare facility. [2.2.2](#)

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### **2.3 Explain the legal importance of good record keeping**

1. Determine the types of documents that should be kept. [2.3.1](#)
  2. Explain the importance of pre-participation exams. [2.3.2](#)
  3. Compare and contrast current options for record keeping and injury tracking. [2.3.3](#)
  4. Differentiate between HIPPA and FERPA. [2.3.4](#)
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#### **Understanding legal and ethical concerns in sports medicine**

### **3.1 Investigate the legal considerations for athletic trainer acting as a health care provider**

1. Identify the legal limitations of coaches, athletic trainers, and athletic training student aides. [3.1.1](#)
  2. Hypothesize ways to avoid litigation. [3.1.2](#)
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### **3.2 Explain the legal concepts of liability, negligence, torts, and assumptions of risks**

1. Differentiate between tort and negligence. [3.2.1](#)
  2. Determine the relationship between assumption of risk and liability. [3.2.2](#)
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### **3.3 Identify measures that can be taken to minimize chances of litigation**

1. Categorize the measures required to minimize chances of litigation. [3.3.1](#)
  2. Describe product liability. [3.3.2](#)
  3. Differentiate between legal and ethical responsibility. [3.3.3](#)
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#### **Understanding training and conditioning techniques**

### **4.1 Examine the roles of the athletic trainer and the strength and conditioning coach on an athlete's fitness**

1. Differentiate between two roles and their impact on the athlete [4.1.1](#)
  2. Categorize the job duties of each as being either Medical or Fitness [4.1.2](#)
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### **4.2 Identify the principles of training and conditioning**

1. Express the importance of the warm-up and cool down periods [4.2.1](#)
2. Find the correlation between flexibility, strength, power, core stability, aerobic endurance and how it relates to athletic performance and injury prevention [4.2.2](#)
3. Compare and contrast techniques for improving flexibility, strength, power, core stability, and aerobic endurance [4.2.3](#)

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**4.3 Explain the role that overtraining plays in the risk of injury and how Periodization can help.**

1. Assess the consequences and detrimental effects overtraining can have on a given group of athletes 4.3.1
  2. Determine the negative effects of overtraining 4.3.2
  3. Identify the various training periods in each phase 4.3.3
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**Developing sports nutrition plans**

**5.1 Explain the importance of good nutrition and hydration in enhancing performance and injury prevention**

1. Distinguish the six classes of nutrients 5.1.1
  2. Assess the pros and cons of supplementing nutrients in the athlete's diet 5.1.2
  3. Discuss parameters for consuming a pre-event meal 5.1.3
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**5.2 Differentiate between body weight and body composition along with the factors that influence both of them**

1. Discuss the idea of caloric balance and how to assess it 5.2.1
  2. Compare and contrast the various weight manipulation methods 5.2.2
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**5.3 Identify popular performance enhancing substances**

1. Use the internet to locate substances that are banned by various organizations 5.3.1
  2. Determine the benefits and risks of using performance enhancing drugs 5.3.2
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**Recognizing environmental factors that can lead to injury**

**6.1 Recognize environmental factors that contribute to environmental injury**

1. Identify unstable atmospheric conditions 6.1.1
  2. Determine the effects of Altitude and Air quality on Performance 6.1.2
  3. Determine proper prevention of environmental illness 6.1.3
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**6.2 Identify and Manage Conditions related to environmental factors**

1. Recognize the difference between heat related injuries 6.2.1
  2. Describe cold injuries and their causes 6.2.2
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**Appropriate usage of protective gear, taping, and bracing**

**7.1 Determine factors involved in fitting various types of equipment**

1. Examine various types of equipment and project possible problems for fitting 7.1.1
2. Determine the level of effectiveness for marketed versus fabricated bracing devices 7.1.2

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## 7.2 Explain basic bandaging techniques

1. Determine the most appropriate application of each type of bandage for various types of injuries 7.2.1
  2. Formulate possible uses for the application of a cloth ankle wrap 7.2.2
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## 7.3 Explain basic taping procedures

1. Demonstrate arch, elbow, ankle, hand, wrist, and thumb tape jobs using appropriate basic taping procedures 7.3.1
  2. Compare and contrast effectiveness of taping versus bracing 7.3.2
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## Recognizing common sports injury

### 8.1 List the mechanical properties of tissue as they pertain to the stress-strain-curve

1. Use the stress-strain-curve to explain the role of external stress on a specific injury 8.1.1
  2. Demonstrate each type of tissue loading 8.1.2
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### 8.2 Recognize the difference between chronic versus acute injury

1. Compare and contrast acute versus chronic injuries 8.2.1
  2. Determine what type of injury an athlete has based on signs and symptoms 8.2.2
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### 8.3 Identify anatomical structures of bone

1. Identify different types of bones 8.3.1
  2. Classify different types of fractures based on the Mechanism of Injury 8.3.2
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### 8.4 Recognize types of joint injuries and their Mechanism of Injury

1. Recognize different types of articulations 8.4.1
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### 8.5 Identify anatomical structures of skin, ligaments, and muscle

1. Recognize the differences and the purposes in each structure 8.5.1
  2. Compare the different types of soft tissue injuries 8.5.2
  3. Differentiate between the types of skin lesions and their treatments 8.5.3
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## Prevention and recognition of bloodborne pathogen transmission

### 9.1 Identify the various bloodborne pathogens and their risks

1. Differentiate between various bloodborne pathogens 9.1.1
2. Compare and contrast the difference between viral, bacterial, and fungal 9.1.2

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## 9.2 Examine ways to reduce the risk of infection

1. Discuss the term "Universal Precautions" 9.2.1
  2. Determine OSHA's role in the workplace and how it can effect both employees and employers 9.2.2
  3. Identify OSHA's bloodborne pathogen standards 9.2.3
  4. Infer ramifications for non-compliance 9.2.4
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### Providing on the field emergency management

#### 10.1 Describe the components of an emergency action plan

1. Compare and contrast EAPs for different venues and settings 10.1.1
  2. Determine specific personnel in your school who might be responsible for a specific duty in your EAP 10.1.2
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#### 10.2 Describe the initial management of acute injuries

1. Analyze the purposes for both the primary and secondary assessment procedures 10.2.1
  2. Describe the purpose of Triage. 10.2.2
  3. Recognize the signs and symptoms of a spine injury 10.2.3
  4. Perform the proper techniques for moving and transporting the injured athlete 10.2.4
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#### 10.3 Explain the purpose of cardiopulmonary resuscitation and first aid

1. Identify the steps of CPR and first aid. 10.3.1
  2. Recognize situations in which first aid is necessary. 10.3.2
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### Understanding the psychology of injury

#### 11.1 Differentiate social and professional roles in sports psychology

1. Determine situations that might require referral 11.1.1
  2. Detail the differences between a counselor, psychologist, and a psychiatrist 11.1.2
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#### 11.2 Identify the psychological reactions one may see in the ill or injured

1. Determine the level of an athlete's psychological response to injury 11.2.1
  2. Speculate how some athletes may try to cope and discuss the ramifications if any. 11.2.2
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#### 11.3 Categorize types of socially used drugs, including performance enhancing drugs

1. Describe the role an athletic trainer plays in intervention 11.3.1
2. Determine appropriate outlets of referral. 11.3.2

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#### **11.4 Differentiate between different types of eating disorders**

1. Recognize the signs and symptoms of different eating disorders [11.4.1](#)
  2. Classify the types of people who might suffer from eating disorders [11.4.2](#)
  3. Compare and contrast the differences in the types of athletes with certain eating disorders [11.4.3](#)
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### **Understanding therapeutic intervention**

#### **12.1 Describe the stages of tissue healing from injury to maturation**

1. Identify the factors that may impede the healing process [12.1.1](#)
  2. Speculate how an athlete's nutrition may help or harm the process [12.1.2](#)
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#### **12.2 Recognize the physiology and psychology of pain**

1. Compare various methods of rating pain [12.2.1](#)
  2. Investigate various pain control theories [12.2.2](#)
  3. Differentiate between methods and mediums used for pain control including the role of various medications [12.2.3](#)
  4. Recognize the differences between indications and contra indications of Analgesics and Nonsteroidal anti-inflammatory drugs [12.2.4](#)
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#### **12.3 Describe the problem solving approach**

1. Explain the principles of rehab [12.3.1](#)
  2. Recognize the importance of goal setting in rehabilitation [12.3.2](#)
  3. Discuss importance of following a physician's protocols [12.3.3](#)
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#### **12.4 Differentiate between thermal, electrical, and mechanical agents**

1. Discuss appropriate applications of thermal modalities [12.4.1](#)
2. Identify mechanical modalities and their purpose [12.4.2](#)