

# Sports Medicine II: High School

## Foundational Standards

- 1 Incorporate safety procedures in handling, operating, and maintaining tools and machinery; handling materials; utilizing personal protective equipment; maintaining a safe work area; and handling hazardous materials and forces. [F.1](#)
- 2 Demonstrate effective workplace and employability skills, including communication, awareness of diversity, positive work ethic, problem-solving, time management, and teamwork. [F.2](#)
- 3 Explore the range of careers available in the field and investigate their educational requirements and demonstrate job-seeking skills including resume-writing and interviewing. [F.3](#)
- 4 Advocate and practice safe, legal, responsible, and ethical use of information and technology tools specific to the industry pathway. [F.4](#)
- 5 Participate in a Career and Technical Student Organization (CTSO) to increase knowledge and skills and to enhance leadership and teamwork. [F.5](#)
- 6 Demonstrate effective infection control techniques as defined by the Centers for Disease Control and Prevention (CDC) and The Joint Commission guidelines. [F.6](#)

## Pharmacology

- 1 Summarize the differences between over-the-counter and prescription medications. [1](#)
- 2 Explain the classifications of common medications and indicate how they are commonly used in sports medicine. [2](#)
- 3 Identify and explain safety guidelines for using medications commonly utilized in sports medicine. [3](#)
- 4 Research and share information about recreational and performance-enhancing drugs and explain problems associated with using drugs to enhance athletic performance.

## Kinesiology

- 5 Explain how knowledge of kinesiology and body systems is utilized in sports medicine. [5](#)

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**6. Describe the articular skeletal system and explain the motion of joints during body movements, including measurable degrees of active and passive movement. 6**

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**7 Explain the differences between open and closed kinetic chains and how they relate to the articular system. 7**

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**8 Describe the cardio-pulmonary system including cardiac conduction, monitoring methods, and implications with athletics. 8**

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## **Injury Assessment**

**9 Identify and explain the components of injury assessment, including inspection, palpation, vital signs, and injury history. 9**

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**10 Utilize the History-Observation-Palpation-Special Test (HOPS), History-Inspection-Palpation-Special Test (HIPS) evaluation tool to create a clear and effective subjective, objective, assessment, and plan (SOAP) note. 10**

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**11 Demonstrate techniques used to assess injuries. 11**

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**12 Describe the three basic types of bleeding and the recommended care for each type. 12**

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**13 Differentiate among types of shock, indicating symptoms and treatment for each type. 13**

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## **Bones and Soft Tissue**

**14 Explain the difference between the axial and the appendicular skeleton and how each bone group facilitates body movement and function in athletes. 14**

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**15 Describe the classifications and degrees of fractures. 15**

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**16 Contrast the functions, locations, and cellular makeup of skeletal, smooth, and cardiac muscles. 16**

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**17 Explain common causes of soft tissue injuries in athletes and indicate appropriate treatment methods. 17**

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**18 Identify symptoms of nervous system injuries and describe appropriate treatment approaches depending on the severity of injuries. 18**

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**19 Describe each phase of the healing process for injuries to bones and soft tissues, including changes on the cellular level. 19**

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## **Upper and Lower Extremity Injuries**

**20 Identify the bony anatomy, muscular structures, and vascular structure of the upper and lower extremities. 20**

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**21 Simulate passive range of motion (PROM) and active range of motion (AROM) tests to the extremities, explaining procedures as they are performed. 21**

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**22** Explain how to assess the strength of extremities using manual muscle tests (MMT). 22

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**23** Describe the prevention, treatment, and rehabilitation of common injuries to the upper and lower body. 23

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**Head, Facial, Spinal,  
Nerve, Thoracic and  
Abdominal Injuries**

**24** Identify the anatomy of the head, face, spine, nerves, thorax, and abdomen. 24

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**25** Demonstrate assessment of cranial nerves, spinal nerves, and injuries to head, face, thorax, and abdomen. 25

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**26** Describe common sports injuries to the head, face, spine, nerves, thorax, and abdomen. 26

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**27** Demonstrate a systematic process for evaluating head and facial injuries, including concussions. 27

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**28** Describe the roles sports medicine professionals play in the prevention, treatment, and rehabilitation of injuries to the head, face, spine, nerves, thorax, and abdomen. 28

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**Special Considerations  
in Sports Medicine**

**29** Describe signs, symptoms, and treatment of bacterial, fungal, and viral skin infections. 29

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**30** Describe signs, symptoms, and treatment of hyperglycemia and hypoglycemia, including diabetic coma. 30

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**31** Describe common cardiac conditions and explain how they influence physical reactions in athletes. 31

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**32** Outline the appropriate actions to take when an athlete has a seizure. 32

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**33** Explain the importance of psychology in sports medicine. 33

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**34** Explain how environmental conditions may have a negative effect on athletic performance and outline ways to avoid injuries or physical problems related to weather. 34

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**Project-Based Learning  
Experience**

**35** Create and present a culminating project utilizing a sports medicine case study related to injury prevention, treatment, rehabilitation, and/or management of an athlete. 35