

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](#)

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

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

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

Injury Assessment

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

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

11 Demonstrate techniques used to assess injuries. 11

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

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

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

15 Describe the classifications and degrees of fractures. 15

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

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

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

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

Upper and Lower Extremity Injuries

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

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

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

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

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

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

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

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

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

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

**Special Considerations
in Sports Medicine**

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

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

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

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

33 Explain the importance of psychology in sports medicine. 33

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

**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