Sports Medicine III

PEIMS Code: N1150044

Abbreviation: SPORTMD3

Grade Level(s): 11-12

Award of Credit: 1.0

Approved Innovative Course

- Districts must have local board approval to implement innovative courses.
- In accordance with Texas Administrative Code (TAC) §74.27, school districts must provide instruction in all essential knowledge and skills identified in this innovative course.
- Innovative courses may only satisfy elective credit toward graduation requirements.
- Please refer to TAC §74.13 for guidance on endorsements.

Course Description:

Sports Medicine III provides students with an opportunity to gain knowledge through clinical experiences with healthcare providers, research projects, and athletic injury investigations related to sports medicine. This course provides opportunities for advanced students in the sports medicine program to prepare and present article reviews, case studies, research projects, visual poster presentations, and multimedia presentations on sports medicine topics. The athletic training student aides are assigned clinical duties and responsibilities in the operation of the athletic training room under the supervision of a licensed athletic trainer.

Essential Knowledge and Skills:

(a) General Requirements. General Requirements. Students shall be awarded one credit for successful completion of this course. Recommended prerequisites: Sports Medicine I and II. This course is recommended for students in Grades 11-12.

(b) Introduction.

(1) *Sports Medicine III* provides students with an opportunity to gain knowledge through clinical experiences with healthcare providers, research projects, and athletic injury investigations related to sports medicine. The course provides opportunities for advanced students in the sports medicine program to prepare and present article reviews, case studies, research projects, visual poster presentations, and multimedia presentations on sports medicine topics. The athletic training student aides are assigned clinical duties and responsibilities in the operation of the athletic training room under the supervision of a licensed athletic trainer.

(2) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and Skills.

(1) [Organizing and administering an athletic training program. The student analyzes the organization and the operation of an athletic training program. The student is expected to:

(A) describe a well-designed athletic training facility;

(B) discuss the importance of the rules of operation that should be enforced in an athletic training program;

(C) develop budgetary priorities for ordering supplies and equipment;

(D) explain the importance of the pre-participation physical exam; and

(E) distinguish among the necessary records that must be maintained by the athletic trainer.

(2) Investigating sports concussion. The student investigates the frequency, definition, management, assessment, and protocols for sports concussions. The student is expected to:

(A) explain the latest incidence of concussion percentages for selected sports;

(B) define "concussion" according to the 2012 Zurich Consensus Statement;

(C) compare the Zurich definition of concussion with the 2020 National Athletic Trainers' Association (NATA) Sport Concussion Statement:

(D) analyze and discuss each level of concussion management in the 2020 National Athletic Trainers' Association (NATA) Sport Concussion Position Statement;

(E) summarize the Texas statute regarding the prevention, treatment, and oversight of concussion affecting student athletes (Texas Education Code, Chapter 38, Subsection D);

(F) evaluate and discuss the most popular types of concussion assessment tools;

(G) research and explain the school's concussion protocol and discuss how it is applied; and

(H) identify the school's concussion oversight team and interview one member.

(3) Preventing injuries through fitness training. The student researches and applies the principles of fitness training for the reduction of sports injuries. The student is expected to:

(A) identify the major conditioning seasons and the types of exercise that are performed in each season;

(B) research and discuss the principles of conditioning;

(C) explain the importance of the warm-up and cool-down periods;

(D) describe the importance of flexibility, strength, and cardiorespiratory endurance for both athletic performance and injury prevention; and

(E) analyze and discuss specific techniques and principles for improving flexibility, muscular strength, and cardiorespiratory endurance.

(4) Selection and fitting of protective sports equipment. The student analyzes how sports equipment protects participants and demonstrates the proper fitting of sports equipment. The student is expected to:

(A) identify the major legal ramifications relating to manufacturing, buying, and issuing commercial protective equipment;

(B) describe the fitting of selected protective equipment;

(C) differentiate among the use of protective devices in various sports and discuss them;

(D) compare the advantages and disadvantages of custom-made versus off-the-shelf lower extremity protective devices;

(E) discuss the controversies surrounding the use of certain protective devices; and

(F) rate the protective value of various materials used to make pads and orthotic devices.

(5) Planning for emergency situations and injury assessment. The student uses critical thinking skills in recognizing emergency situations and assessing injuries. The student is expected to:

(A) develop a plan for handling emergency situations in secondary schools;

(B) Identify and discuss the symptoms that may require the use of CPR and AED devices;

(C) describe the techniques for controlling hemorrhage;

(D) assess the types of shock and their management;

(E) describe the various phases of injury assessment;

(F) discuss the importance of controlling swelling during initial injury management; and

(G) describe techniques for moving and transporting the injured athlete.

(6) Basics of injury rehabilitation. The student researches and describes the best practices for the rehabilitation of athletic injuries. The student is expected to:

(A) explain the principles of the rehabilitative process in sports injuries;

(B) identify the individual short-term and long-term goals of a rehabilitation program; and

(C) analyze the criteria and the decision-making process for determining when an injured athlete may return to full activity.

(7) Application of therapeutic modalities. The student applies knowledge in the use of therapeutic modalities. The student is expected to:

(A) compare the dangers of using the various heat and cold modalities;

(B) research and explain the indications for use of electrical stimulation and ultrasound for athletic injuries;

(C) explain the set-up process of specified modalities such as muscle stimulators, whirlpools, and ultrasound units; and

(D) identify the steps in the application of selected modalities.

(8) Scenarios. The student will use critical-thinking and problem-solving skills in developing scenarios for sports medicine related injury situations. The student is expected to:

(A) describe a knee injury situation and explain the steps in treatment;

(B) describe a head injury and explain the steps in treatment; and

(C) describe a sports related heat illness situation and explain the steps in treatment.

(9) Career investigation. The student analyzes and evaluates the academic requirements and skills necessary for employment in a sports-related healthcare career. The student is expected to:

(A) research information related to the healthcare profession;

(B) develop a presentation to explain the facets of an athletic training career;

(C) describe the healthcare team approach to sports injuries;

(D) research the qualifications or credentials of an athletic trainer;

(E) investigate the post graduate education and training required of a sports physician, physical therapist, or athletic trainer; and

(F) summarize an observation or shadowing experience.

(10) Management of the athletic training room. The student applies, utilizes, and practices advanced skills in the management of the athletic training room. The student is expected to:

(A) describe the skills in cleaning and maintenance of the athletic training room;

(B) describe the skills in filing forms for student athletes;

(C) explain the importance of record keeping procedures; and

(D) perform skills in field set-up and breakdown of athletic facilities.

Recommended Resources and Materials:

Resources:

- Trowbridge, Cynthia A., and Cheryl M. Ferris. Pfeiffer and Mangus's *Concepts of Athletic Training.* Burlington, MA: Jones & Bartlett Learning, 2023.
- "Statements." *NATA*. July 14, 2024. https://www.nata.org/news-publications/pressroom/statements.
- "Home." *Korey Stringer Institute*. Accessed August 14, 2024. https://koreystringer.institute.uconn.edu/.
- "*Health & Safety." University Interscholastic League (UIL)*. Accessed August 14, 2024. https://www.uiltexas.org/health.
- "*Sports Medicine."* Accessed August 14, 2024. https://www.nfhs.org/resources/sports-medicine/.
- "Heads Up." *Centers for Disease Control and Prevention*. Accessed August 14, 2024. https://www.cdc.gov/heads-up/index.html.

Materials:

- Anatomical models: Knee, Ankle, Shoulder
- Equipment and supplies for labs: Disposable gloves, Bandaging materials, TheraBand tubing, Dumbbell weights

Recommended Course Activities:

- Career investigation.
- Visual research poster project for approved topic.
- Multimedia software presentation on specified sports medicine topics or injuries.
- Case study of a specified athletic injury.
- Written summaries of medical procedures, physician visits, etc.
- Article reviews assigned on sports medicine-related topics.
- Application assignment: create a working budget for athletic training room supplies and equipment.
- Interview and write a review of team physicians and professional athletic trainers in various settings such as orthopedics, physical therapists, pharmacists, and nutritionists.

- Research and report on the use of protective equipment in a specific sport.
- Research University Interscholastic League rules associated with protective equipment in specific sports.
- Observe surgical procedures and write a review of the experience.
- Have students select a sport and design a preseason, in-season, and out-of-season conditioning program.
- Design a rehabilitation program for a sports injury.

Suggested methods for evaluating student outcomes:

- Rubrics.
- Standard school district specified grading policies.
- Completion of assigned athletic training student duties such as cleaning, maintenance, record keeping, form filing, field set-up, field breakdown, treatment application, and rehabilitation assistance.
- Presentation of research projects in a group setting.
- Visual Research Poster/Multimedia Software Project:
    - Recommended project guidelines are available upon request
        - Approve the topic with the supervising athletic trainer.
- Case Study Project
    - Case Study Template (Optional Assignment) is available upon request.
        - Approve the topic with the supervising athletic trainer.

Teacher qualifications:

An assignment for the Texas State Athletic Trainers Association (TSATA) *Sports Medicine I* course must hold a valid Texas secondary teacher certificate and shall also:

- Be a licensed athletic trainer by the Texas Department of Licensing and Regulation;
- Have completed the TSATA Sports Medicine Instructor's Curriculum Training Course; and
- Hold the TSATA Sports Medicine Instructor certificate of completion.

School district board of trustees have the option to issue a school district teaching permit (SDTP) for individuals who are not certified to teach. The type of SDTP for sports medicine courses would be for any teaching assignment other than "Noncore Academic CTE Courses" certified by the superintendent of the school district and issued by authority of the local district board of trustees. As directed on the form, the employing school district shall submit the completed application form.

Additional information:

TSATA Sports Medicine Instructor's Curriculum Course; TSATA.com/Sports Medicine Course; Cost $425.00 (One-time fee covers *Sports Medicine I, II, and III*).