



## 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:

The Sports Medicine III course will provide a logical progression for students that have advanced through the Sports Medicine courses I and II. The course will provide students with an opportunity to learn how to recognize, evaluate, manage, and treat athletic injuries and to research investigations and applications related to rehabilitation in sports medicine. Instructor-approved topics will provide students further opportunities to research, investigate, prepare, and present article reviews, case studies, research projects, visual poster presentations, and multimedia presentations. Students seeking to become athletic trainers will continue to perform assigned clinical duties and responsibilities in the operation of the athletic training room under the supervision of a licensed athletic trainer. These duties will prepare the students to apply the knowledge and skills acquired in the sports medicine course curriculum.

### Essential Knowledge and Skills:

- (a) General Requirements. Required prerequisites: Sports Medicine I and Sports Medicine II. This course is recommended for grades 11 and 12. Students shall be awarded one credit for successful completion of this course.
- (b) Introduction.
  - (1) Sports Medicine III is the third course in the sports medicine course curriculum designed to provide knowledge and skills in athletic injury recognition, evaluation, management, treatment, and rehabilitation.
  - (2) Sports Medicine III offers students, who are interested in pursuing a career in a sports-related healthcare profession, opportunities to research topics, explore experiences, and develop advanced knowledge and skills in sports medicine.
- (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) identify and describe the purpose of the required records 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 that of the 2020 National Trainers' Association (NATA) Sport Concussion Statement;
  - (D) analyze each level of concussion management in the 2020 National Athletic Trainers' Association (NATA) Sport Concussion Position Statement;
  - (E) summarize the statutory authority regarding the prevention, treatment, and oversight of concussion affecting student athletes (Texas Education Code, Chapter 38, Subsection D);
  - (F) evaluate common types of concussion assessment tools;
  - (G) research 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 performed in research and describe the principles of conditioning;
  - (B) explain the importance of the warm-up and cool-down periods;
  - (C) describe the importance of flexibility, strength, and cardiorespiratory endurance for both athletic performance and injury prevention; and
  - (D) analyze techniques and principles for improving flexibility, muscular strength, and care.
- (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) demonstrate the fitting of selected protective equipment;
  - (C) differentiate among various sports use of protective devices;
  - (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
  - (E) rate the protective value of various materials used to make pads and orthotic devices.
- (5) Planning for emergency situations and injury assessment. The student demonstrates critical thinking and problem-solving 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) evaluate and describe the importance of cardiopulmonary resuscitation (CPR) and the automated external defibrillator (AED) device;
  - (C) demonstrate the techniques for controlling hemorrhage;
  - (D) evaluate and describe the types of shock and how to manage shock;
  - (E) describe the various phases of injury assessment;
  - (F) discuss the importance of controlling swelling during initial injury management;
  - (G) demonstrate techniques for moving and transporting an injured athlete; and
  - (H) demonstrate appropriate care for skin wounds.
- (6) Basics of injury rehabilitation. The student researches and applies the best practices for the rehabilitation of athletic injuries. The student is expected to:
- (A) explain the principles of the rehabilitative process;
  - (B) identify the individual short-term and long-term goals of a rehabilitation program; and
  - (C) analyze the criteria and the decision-making process used to determine when an injured athlete may return to full activity.
- (7) Application of therapeutic modalities. The student applies knowledge and demonstrates skills 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 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 demonstrates critical thinking and problem-solving skills in developing scenarios for sports medicine-related areas. The student is expected to:
- (A) organize and administer an athletic training program;
  - (B) prevent injuries through fitness training;

- (C) explain legal liability insurance coverage;
  - (D) select and fit protective sports equipment; and
  - (E) develop a strategy for the assessment of injuries in emergency situations.
- (9) Career investigation. The student analyzes and evaluates the academic requirements and skills necessary for employment in a sports-related health care career. The student is expected to:
- (A) research and analyze information related to the health care profession;
  - (B) develop a presentation to explain the facets of an athletic training career;
  - (C) describe the health care team approach to sports injuries;
  - (D) research the qualifications or credentials of an instructor-approved mentor in an athletic trainer career
  - (E) investigate the post-graduate education and training of a healthcare career;
  - (F) evaluate the license or board certification requirements of the athletic trainer; and
  - (G) summarize an observation or shadowing experience.
- (10) Visual research poster, multimedia software presentation, and case studies. The student researches, analyzes, and applies critical thinking to develop a visual research poster, a multimedia software presentation, and a case study presentation. The student is expected to:
- (A) develop a visual research poster and a multimedia software presentation a topic such as the concepts of sports injury, law and sports injury, sports injury prevention, the psychology of injury, and the injury process.
  - (B) develop a case study on topics such as injuries to the head and neck, thoracic and coccygeal spine, shoulder region, arm, wrist and hand, hip and pelvis, thigh, leg, and knee; and the lower leg, ankle, and foot.
- (11) 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) demonstrate skills in cleaning and maintenance of the athletic training room;
  - (B) demonstrate skills in filing forms for student athletes;
  - (C) explain the importance of record-keeping procedures;
  - (D) perform skills in field set-up and breakdown of athletic facilities;
  - (E) perform specified modality and rehabilitation management skills; and
  - (F) perform rehabilitation supervision and assistance skills.

**Recommended Resources and Materials:**

- Library Services
- Websites and videos for injury evaluations with associated therapeutic exercises

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- Athletic training room facility will be used as laboratory
- Technical services of the school district
- Local medical professionals
- Subject-related and adopted textbooks
- Websites dedicated to sports medicine topics

### Recommended Course Activities:

- Investigate careers opportunities related to sports medicine
- Create a visual research poster project for an approved topic
- Create a multimedia software presentation on specified sports medicine topics or injuries

### Optional Activities:

- Case study of a specified athletic injury
- Written summaries of medical procedures, physician visits, etc.
- Article reviews assigned on sports medicine-related topics
- Creative assignment: design an athletic training room facility
- 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 (UIL) rules associated with protective equipment in specific sports
- Observe surgical procedures and write a review of the experience
- Investigate personal liability insurance and discuss different types of policies
- Have students select a sport and design a preseason, in-season, and out-of-season conditioning program
- Perform a nutritional analysis of athletes' diets
- Prepare a pre-game menu for an athletic team
- Design a rehabilitation program for a sports injury

### Suggested methods for evaluating student outcomes:

- Follow local school district-specified grading policies.
- Rubrics (example below)
  - Ability to follow instructions (5 pts.) Did the student follow all the guidelines?
  - Use of correct grammar and punctuation (15 pts.) Did the student use correct grammar?
  - Is the information plagiarized?
  - Credibility of sources (dictionary vs. journal) professional websites is acceptable.
  - Use of research materials for an in-depth presentation is considered (15 pts.)
  - How well did the student use their credible sources to provide information?
  - Use of research materials (20 pts.)
  - How well did the student research the topic?
  - Difficulty of the topic (5 pts.) Instructor determined.
  - Creativity (20 pts.) How creative was the student with the layout, graphics, and text?
  - Appearance (20 pts.) Are the layout, graphics, and text organized?

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- Assign a point value to each criterion. Total points equal 100.
- Completion of assigned athletic training student duties such as cleaning, maintenance, record-keeping, form filing, field set-up, field break-down, treatment application, and rehabilitation assistance
- Presentation of research projects in a group setting
- Visual Research Poster/Multimedia Software Project
- Case study project (example below)
  - I. Clinical presentation and history
    - a. Athlete’s sport
  - II. Injury case
    - a. Mechanism of injury
    - b. Subjective and objective findings
    - c. Immediate treatment
    - d. Brief description of any surgical intervention (if applicable a more detailed operative report, see details below\*)
    - e. Rehabilitation
      - i. Rehab goals and techniques used for both short- and long-term goals
      - ii. Chronological summary of rehab
      - iii. Return to play criteria
    - f. Operative/Surgical Summary: In your own words summarize the surgical procedure. Include the name of the physician, the pre-operative diagnosis, method of diagnosis (i.e., X-ray, MRI, etc.), and surgical procedure performed. Include post-operative instructions (NWB Immobilize x 6 weeks). If surgical treatment is not warranted, please write a summary of why the more conservative method of treatment is usually successful.
  - III. Conclusion
    - a. Describe what you learned from the case study.

### Teacher qualifications:

An assignment for the Texas State Athletic Trainers Association (TSATA) Sports Medicine I, II, and III courses 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
- 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 non-core academic CTE courses certified by the superintendent of the school district and authorized by the local district board of trustees.

TSATA Sports Medicine Instructor’s Curriculum Course Cost \$425.00 (One-time fee)

Update Courses are available, but not required Cost \$100.00

### Additional information: