PHYSICAL HEALTHCARE SUBCLUSTER
SPORTS MEDICINE 1 - 5555

COURSE DESCRIPTION: Sports Medicine 1 emphasizes sports medicine career exploration and the prevention of athletic injuries, including the components of exercise science, kinesiology, anatomy, first aid, and CPR. Students interested in healthcare careers associated with sports medicine such as athletic training and rehabilitation careers would benefit from this course.

GENERAL REQUIREMENTS: This course is recommended for students in grades 9-12.

PRE-REQUISITES: Previous or concurrent course work in biology is recommended.

CREDIT: CP -1 unit (120 hours)

CONCENTRATOR: Completes SM1 & SM2

COMPLETER:

Example of a three-unit completer: SM1, SM2, SM3 (or in lieu of SM3, Medical Terminology, Health Science Human Structure and Function, PLTW Human Body Systems, AHS 102, or AHS 104)
Example of four-unit completer – SM1, SM2, Med Term, SM WB. Please refer to the completer requirements found on the SCDE website.

STACKABLE CREDENTIAL: Please refer to the updated tiered credential list on the SCDE Website. This course would be suitable for Tier One or Tier Two Credentials. Examples: First-Aid, CPR, Stop the Bleed, or any other applicable credentials as listed in the Student Reporting Guide.

STANDARDS

Foundation Standard 1: Academic Foundation

Understand human anatomy, physiology, common diseases and disorders, and medical math principles.

1. Define and discuss sports medicine and its development throughout history.
2. Identify the major bones and muscle groups of the body.
3. Identify and demonstrate body planes, directional terms, cavities, and quadrants.
    a. Body planes

   b. Directional terms
   c. Cavities (Regions)
   d. Quadrants
4. Differentiate between various types of body tissues
   a. Muscle tissue
   b. Epithelial tissue
   c. Nervous tissue
   d. Connective tissue
5. Identify and define the differences between:
   a. Bone
   b. Tendon
   c. Ligament
   d. Cartilage
   e. Muscle
6. Discuss the mechanical properties of tissues and types of tissue loading.
7. Apply mathematical computations related to sports medicine and healthcare procedures.
8. Utilize diagrams, charts, graphs, and tables related to healthcare.

Foundation Standard 2: Communications

Demonstrate methods of delivering and obtaining information, while communicating effectively

1. Recognize appropriate oral and written communication with:
   a. Coaches
   b. Team physicians
   c. Parents
   d. Athletes
   e. School
   f. Athletic administrators
   g. Other healthcare professionals
2. Demonstrate elements of written and electronic communication (spelling, grammar, formatting, and confidentiality).
3. Demonstrate the use of presentation software and/or presentation techniques for communicating to audiences.
4. Identify athletic training room forms such as:
   a. Treatment logs
   b. Rehabilitation records

   c. Emergency information cards
   d. Consent forms
5. Use appropriate oral and written medical terminology within the scope of practice, to interpret, transcribe, and communicate information, data, and observations.
6. Apply speaking and active listening skills.
7. Interpret and model verbal and non-verbal communication.
8. Recognize and identify common barriers to communication, including:
   a. Physical barriers
   b. Psychological barriers
   c. Interpretation of tone and attitude in written communications
9. Describe strategies and importance of social support for the injured athlete.
10. Describe the healthcare provider's role in dealing with various psychological conditions common to athletics, including appropriate referrals to specialists

Foundation Standard 3: Systems

Identify how key systems affect services performed and quality of care.

1. Describe the roles and responsibilities of athletic training student aides (ATSA's)
2. Discuss the general administrative management roles of sports medicine team members.
3. Understand an organizational chart within the sports medicine team. Identify and comply with principles of the Chain of Command.
4. Identify and describe the components and functionality of sports medicine settings and facilities.

Foundation Standard 4: Employability Skills

Use employability skills to enhance employment opportunities and job satisfaction.

1. Explore potential pathways for careers in sports medicine including but not limited to:
   a. Athletic training
   b. Physical therapy and PT assistant
   c. Occupational therapy and OT assistant
   d. Radiology technician
   e. Physician assistant
   f. Sports Medicine Physician
   g. Exercise physiologist

   h. Registered dietician
   i. Sports psychologist
   j. Family medicine physician
2. Explain the educational process:
   a. Levels of education
   b. Credentialing requirements
   c. Employment opportunities
   d. Workplace environments
   e. Professional development
   f. Career growth potential
3. Compare and contrast various professional and student organizations related to sports medicine. (NATA, HOSA future health professionals, etc.)
4. Identify and discuss religious and cultural values as they impact health care
   a. Ethnicity
   b. Race
   c. Religion
   d. Gender
5. Demonstrate respectful and empathetic interactions and treatment of all patients/clients within a diverse population, such as customer service, patient satisfaction, civility, etc.
6. Demonstrate basic professional standards:
   a. Hygiene
   b. Dress
   c. Language
   d. Confidentiality
   e. Behavior
7. Identify personal traits or attitudes desirable in a member of the career ready healthcare team:
   a. Acceptance of criticism
   b. Competence
   c. Dependability
   d. Discretion
   e. Empathy
   f. Enthusiasm
   g. Honesty
   h. Initiative
   i. Integrity
   j. Patience

   k. Positive attitude
   l. Responsibility
   m. Self-motivation
   n. Social and cultural competence
   o. Tact
   p. Team player
   q. Willingness to learn
8. Identify the components of a job posting:
   a. Position description
   b. Employment type
   c. Qualification
   d. Salary & benefits
   e. Application procedures
9. Demonstrate the process of completing a job application.
10. Identify components of a personal portfolio to include
   a. Resume
   b. Cover letter
   c. Sample projects
   d. Writing sample
   e. Work-based learning documentation
   f. Oral reports
   g. Service learning
   h. Community service
   i. Credentials
   j. Technology skills
   k. Leadership experience
   l. student and professional organizations' documentation and recognition, etc.
   m. Professional and personal references

Foundation Standard 5: Legal Responsibilities

Describe legal responsibilities, limitations, and implications on healthcare worker actions.

1. Identify the legal responsibilities of a healthcare professional.
2. Recognize and explain the standards and differences of the Health Insurance Portability and Accountability Act (HIPAA) and the Federal Education Rights and Privacy Act (FERPA), and the importance of maintaining patient confidentiality.
3. Discuss Title IX and how it relates to equity in sports.

4. Describe the "Good Samaritan Law" and how it relates to student aides vs. certified athletic trainers or other licensed medical professionals.
5. Explore a "Patient's Bill of Rights" and "Athlete's Bill of Rights."

Foundation Standard 6: Ethics

Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment.

1. Identify codes of ethics for various sports medicine professionals.
2. Compare personal and professional ethics.
3. Critique ethical, respectful, and empathetic behaviors throughout scenarios presented in class and lab activities.
4. Identify responsible practices within the ethical framework of the sports medicine profession.
5. Differentiating between ethical and legal issues and practices impacting sports medicine professionals.

Foundation Standard 7: Safety Practices

Identify existing and potential hazards to clients, co-workers, and self. Employ safe work practices and follow health and safety policies and procedures to prevent injury and illness.

1. Explain the importance of appropriate maintenance and inspection of player protective equipment.
2. Describe environmental risk factors associated with specific activities of the physically active.
3. Describe environmental safety considerations for participants in athletic facilities/venues.
4. Discuss the use of various devices and technologies identified in current research and position statements to determine unsafe environmental conditions.
5. Identify various blood borne pathogens.
6. Practice infection control procedures based on the use of standard precautions as established by Occupational Safety and Health Administration (OSHA) and Centers for Disease Control (CDC).
7. Explain personal safety practices:
    a. Hygiene
    b. Sanitation

   c. Body mechanics
   d. Ergonomics
8. Identify and comply with safety signs, symbols, and labels.
9. Identify the components of a venue specific emergency action plan for athletic facilities.
10. Identify fire safety practices related to a sports medicine setting.

Foundation Standard 8: Teamwork

Identify roles and responsibilities of individual members as part of the healthcare team.

1. Identify the members and roles of the sports medicine team.
2. Examine how sports medicine team members interact with each other.
3. Discuss attributes and attitudes of an effective leader.
4. Discuss effective techniques for managing team conflicts.

Foundation Standard 9: Health Maintenance Practices

Differentiate between wellness and disease. Promote disease prevention and model healthy behaviors.

1. Describe current FDA nutritional recommendations.
2. Identify basic nutrients including:
   a. Carbohydrates
   b. Fats
   c. Proteins
   d. Vitamins
   e. Minerals
   f. Water
3. Differentiate between body weight and composition (body mass index - BMI), along with the factors influencing each.
4. Identify methods of calculating percent body fat and considerations associated with each.
5. Discuss how to measure body mass index (BMI) and how it is used to assess health risks.
6. Describe eating disorders, their management, and impact on athletics participation.
7. Describe the significance of health screenings and examinations (pre participation exams).

8. Describe common medical conditions found during a pre-participation exam which may disqualify an athlete from participation.
9. Identify practices that promote prevention of disease and injury through education.
10. Explain the relationships between poor body mechanics and the potential for injury.
11. Discuss complementary and alternative health practices (ex: acupuncture, massage, chiropractic care, etc.)

Foundation Standard 10: Technical Skills

Apply and demonstrate technical skills and knowledge as appropriate while participating as an athletic training student aide or work-based learning student, under the supervision of a sports medicine professional.

1. Demonstrate basic first aid skills.
2. Demonstrate techniques and skills related to Stop the Bleed
3. Introduce cardiopulmonary resuscitation (CPR) and automated external defibrillation (AED) skills.
4. Observe and record vital signs, including normal ranges for:
    a. Temperature
    b. Skin color
    c. Pulse
    d. Respiration
    e. Level of consciousness
    f. Oxygen saturation
    g. Blood pressure
5. Recognize and identify the signs and symptoms of:
    a. Concussion
    b. Heat illness
    c. Cardiac event
    d. Shock
6. Discuss measurement of height and weight as it relates to athletic activity
7. Demonstrate use of the Snellen Eye Chart.
8. Identify basic terminology and components of:
    a. Taping
    b. Wrapping
    c. Padding
9. Compare and contrast various splinting materials and devices used in a sports medicine setting.

Foundation Standard 11: Information Technology Applications

Apply information technology applications common across health professions.

1. Demonstrate the use of basic computer procedures and file organization.
2. Demonstrate appropriate use of email, social, and educational media.