

CAPS Sports Medicine

UNIT 1: Foundations of Sports Medicine

ESSENTIAL QUESTION

What are the fundamental elements of a career in Sports Medicine?

BIG IDEAS

- **Fundamental concepts, principles and terminology in Sports Medicine.**
- **History and evolution of Sports Medicine**
- **Roles of sports medicine professionals including scope of practice in athletic training, physical therapy, and sports rehabilitation.**

GUIDING QUESTIONS

Content

- What are the historical origins and key milestones in the development of sports medicine as a specialized field of healthcare?
- What are the roles and responsibilities of sports medicine professionals, and how do they collaborate to optimize athlete health and performance?
- What are the foundational principles and concepts in sports medicine, and how do they inform injury prevention, management, and rehabilitation strategies?

Process

- How can students critically analyze historical developments and contemporary issues in sports medicine to understand the evolution and current landscape of the field?
- How can students understand the diversity of career opportunities in the field of Sports Medicine?

Reflective

- How do students apply the foundational knowledge and skills gained in this unit to their future academic or career pursuits in sports medicine or related fields?

FOCUS STANDARDS

Sports Medicine I Course No. 14072

BENCHMARK 1: IDENTIFY MEMBERS OF THE SPORTS MEDICINE TEAM.

BENCHMARK 2: EXPLORE A VARIETY OF THERAPEUTIC CAREERS AND DESCRIBE THE JOB DUTIES AND SKILLS, EDUCATION REQUIRED, JOB SETTINGS, AND POTENTIAL SALARY.

BENCHMARK 3: EXPLAIN LEGAL ISSUES AND LEGAL TERMINOLOGY.

BENCHMARK 8: DEMONSTRATE FUNDAMENTAL TERMS ASSOCIATED WITH PERFORMANCE ENHANCEMENT.

BENCHMARK 9: DEVELOP AN UNDERSTANDING OF GENERAL CONDITIONAL PRINCIPLES.

BENCHMARK 10: EXAMINE THE ROLE THE CARDIOVASCULAR/RESPIRATORY SYSTEMS HAVE ON FITNESS/ATHLETIC PERFORMANCE.

BENCHMARK 11: EXAMINE THE EFFECTS OF THE ENVIRONMENT ON TRAINING AND PERFORMANCE.

KEY LEARNING EXPERIENCES

- Introduction to Sports Medicine Workshop:
- Exploration of Common Sports Injuries:
- Sports Medicine Facility Visit:
- Guest Speaker Series:
- CAPSTONE Research Project

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UNIT 2: Anatomy and Physiology for Sports Medicine

ESSENTIAL QUESTION

How does an understanding of human anatomy and physiology enhance the practice of sports medicine and contribute to athlete health, performance, and injury prevention?

BIG IDEAS

- Practical Application of Anatomical and Physiological Concepts in Movement Analysis and Injury Prevention.
- Integration of Anatomy and Physiology learning with Sports Medicine Practice: how anatomical structures and physiological processes influence athlete health, performance, and injury prevention.
- Key vocabulary used in the field of Sports Medicine to assess and communicate.

GUIDING QUESTIONS

Content

- What are the key anatomical structures and physiological mechanisms involved in human movement and athletic performance?
- How do the major body systems, including the musculoskeletal, cardiovascular, respiratory, and nervous systems, contribute to athletic performance and adapt to exercise?
- What are the physiological responses and adaptations to exercise training, and how do these adaptations influence fitness, performance, and injury risk?

Process

- How can students apply anatomical and physiological knowledge to analyze and assess movement patterns, muscle imbalances, and joint mechanics in athletes?
- What laboratory and field-based techniques can students use to measure and evaluate physiological parameters related to fitness, performance, and health?

Reflective

- What ethical considerations arise when applying anatomical and physiological knowledge to athlete care and performance enhancement, and how do you approach ethical

decision-making in sports medicine practice?

FOCUS STANDARDS

Sports Medicine I Course No. 14072

- BENCHMARK 4: IDENTIFY BONES AND SOFT TISSUES.
- BENCHMARK 5: IDENTIFY AND UTILIZE ANATOMICAL POSITIONS, PLANES, AND DIRECTIONAL TERMS.
- BENCHMARK 6: DEMONSTRATE BODY MOVEMENTS.
- BENCHMARK 7: DEFINE TERMS ASSOCIATED WITH EXERCISE SCIENCE.
- BENCHMARK 19: COMPARE AND CONTRAST THE PHYSIOLOGICAL AND PSYCHOLOGICAL EFFECTS OF ERGOGENIC AIDS.

KEY LEARNING EXPERIENCES

- Participation in a course in Medical Terminology.
- Interactive Anatomy Lab Sessions.
- Muscle Action and Movement Analysis
- Injury Mechanisms and Biomechanical Analysis:
- Physiological Responses to Exercise:
- Anatomy and Physiology Simulation Exercises

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UNIT 3: Injury Assessment and Rehabilitation

ESSENTIAL QUESTION

How can the principles of evidence-based practice and interdisciplinary collaboration enhance the assessment, diagnosis, and treatment of sports-related injuries?

BIG IDEAS

- **Comprehensive Injury Management:** principles and techniques of injury assessment, including patient history, physical examination and special tests, to accurately diagnose common sports injuries.
- **Rehabilitation for Optimal Recovery and Return to Play:** rehabilitation process for athletes recovering from sports injuries, aiming to restore function and facilitate a safe return to sport.
- **Injury Prevention and Long-Term Athlete Health:** importance of injury prevention strategies in sports medicine and the promotion of long-term athlete health and performance.

GUIDING QUESTIONS

Content

- What are the key principles and techniques used in the assessment of sports-related injuries, and how do they contribute to accurate diagnosis and treatment?
- What are the common types of sports injuries, their signs and symptoms, and how are they diagnosed and differentiated from one another?
- What are the various treatment modalities available for sports-related injuries, and how are they selected and applied based on the nature and severity of the injury?

Process

- How can students effectively apply the principles of injury assessment, including patient history, physical examination, and special tests, to evaluate and diagnose sports-related injuries?
- What interdisciplinary collaboration strategies can students employ to develop comprehensive treatment plans and ensure continuity of care for athletes recovering from sports injuries?
- How do students demonstrate proficiency in implementing rehabilitation protocols and injury

prevention strategies to facilitate athletes' safe return to play and promote long-term health and performance?

Reflective

- What insights can students gain into the psychological aspects of injury recovery, including coping strategies, motivation, and the psychological impact of injury on athletes, and how can they plan to incorporate this into their future approach to athlete rehabilitation and support?

FOCUS STANDARDS

Sports Medicine I Course No. 14072

BENCHMARK 12: EXAMINE THE ROLE STRENGTH TRAINING HAS ON FITNESS/ATHLETIC PERFORMANCE.

BENCHMARK 13: EXAMINE THE IMPORTANCE OF FLEXIBILITY IN FITNESS/ATHLETIC PERFORMANCE.

BENCHMARK 14: DESCRIBE THE BASIC COMPONENTS OF NUTRITION AND SOURCES OF NUTRIENTS.

BENCHMARK 15: DESCRIBE BASIC BODY COMPOSITION.

BENCHMARK 16: EXAMINE THE IMPORTANCE OF FLUID REPLACEMENT AND HYDRATION.

BENCHMARK 17: IDENTIFY THE COMPONENTS OF A PRE AND POST EVENT MEAL AND EXPLAIN THE VALUE OF EACH.

BENCHMARK 18: RECOGNIZE DISORDERS ASSOCIATED WITH NUTRITION.

BENCHMARK 19: COMPARE AND CONTRAST THE PHYSIOLOGICAL AND PSYCHOLOGICAL EFFECTS OF ERGOGENIC AIDS.

BENCHMARK 21: COMPARE AND CONTRAST INJURY CLASSIFICATIONS.

BENCHMARK 22: EXPLORE THERAPEUTIC MODALITIES.

BENCHMARK 23: DEMONSTRATE AN UNDERSTANDING OF THE PHYSIOLOGIC EFFECTS, INDICATIONS, CONTRAINDICATIONS, AND APPLICATION OF THERAPEUTIC MODALITIES AND REHABILITATION TECHNIQUES.

BENCHMARK 24: DISCUSS THE COMPONENTS AND GOALS OF A REHABILITATION PROGRAM.

BENCHMARK 25: IDENTIFY THE PSYCHOLOGICAL IMPLICATIONS OF AN INJURY TO AN ATHLETE.

BENCHMARK 26: IDENTIFY EFFECTIVE PSYCHOLOGICAL INTERVENTION SKILLS.

BENCHMARK 27: IDENTIFY POTENTIAL PROBLEMS ASSOCIATED WITH OVERTRAINING.

KEY LEARNING EXPERIENCES

- Injury Prevention Workshop.
- Biomechanical Analysis of Movement Patterns.
- Rehabilitation Protocol Development.
- Functional Movement Screening and Assessment: Special Tests
- Rehabilitation Facility Visit and Observation.

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UNIT 4: Professional Skills Development through Career Exploration

ESSENTIAL QUESTION

What are key professional skills needed to prepare future professionals in a career they are exploring?

BIG IDEAS

- Holistic Skill Development: Prioritize a diverse set of skills beyond technical expertise and including an entrepreneurial mindset.
- Experiential Learning: Hands-on experiences, internships, apprenticeships, and project-based learning opportunities provide career exploration opportunities.
- Mentorship and Networking: Facilitate mentorship programs and networking events to connect young professionals with experienced individuals in their field.

GUIDING QUESTIONS

Content

- What are effective communication strategies and tools used in specific professions?
- Why are critical thinking, problem-solving and adaptability important?
- How can professional skill development bridge the gap between theoretical knowledge and practical application and enhance understanding of future career opportunities?
- How can mentors offer guidance, advice, and valuable insight most effectively?

Process

- How can students learn about their current strengths and opportunities for development?
- How can experiential learning opportunities holistically create opportunities to practice professional skills?

Reflective

- How does professional skill development foster lifelong learning and development?
- How can I take these skills and transfer them to post secondary and future careers?

FOCUS STANDARDS

CTE Professionalism Standards

- 1.1 Act as a responsible and contributing citizen and employee.
- 1.2 Apply appropriate academic and technical skills.
- 1.4 Communicate clearly, effectively and with reason.
- 1.5 Consider the environmental, social and economic impacts of decisions.
- 1.6 Demonstrate creativity and innovation.
- 1.7 Employ valid and reliable research strategies.
- 1.8 Utilize critical thinking to make sense of problems and persevere in solving them.
- 1.9 Model integrity, ethical leadership and effective management.
- 1.10 Plan education and career path aligned to personal goals.
- 1.11 Use technology to enhance productivity.
- 1.12 Work productively in teams while using cultural/global competence.

CAPS Professional Profile

Skills: Communication, Collaboration, Time Management, Conflict Resolution, Critical Thinking, Interpersonal Relationship, Creativity, Leadership

Attributes: Adaptability, Curiosity, Self-awareness, Drive, Confidence, Enthusiasm, Resourcefulness, Integrity, Empathy

Actions: Networking, Interviewing, Goal Setting, Professional Manner

KEY LEARNING EXPERIENCES

- Experiential learning opportunities such as project presentations, apprenticeships, client projects and internships.
- Interview opportunities with community members.
- Mentorship events where students are connected to professionals in their chosen careers.
- Development of digital portfolios and resume building that are industry standard and can grow with students.