Introduction to Sports Medicine

Career Cluster	Health Science
Course Code	14062
Prerequisite(s)	Recommended: Anatomy and Physiology
Credit	1
Program of Study and Sequence	Cluster course – Gateway to Certified Nursing Assistant – **Introduction to Sports Medicine** – other pathway courses in the Therapeutic Services pathway or capstone experience
Student Organization	Future Health Professionals (HOSA); Family, Career and Community Leaders of America (FCCLA), or Skills USA
Coordinating Work-Based Learning	Workplace tours, job shadowing, mentoring, internship
Industry Certifications	First Aid/Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED)/First Aid
Teacher Certification	Health Science
Resources	American College of Sports Medicine http://acsm.org/about-acsm; My Fitness Pal www.myfitnesspal.com; Choose MyPlate www.choosemyplate.org , Family, Career and Community Leaders of America (FCCLA) Sports Nutrition STAR event

Course Description:

The Introduction to Sports Medicine Class is designed for students interested in fields such as athletic training, physical therapy, medicine, fitness, exercise physiology, kinesiology, nutrition and other sports medicine related fields. This class includes both classroom work as well as hands-on application in order to provide students with an avenue to explore these fields. Through these connections students will understand the importance that exercise, nutrition, treatment modalities, and rehabilitation play in athletic health. Students will study basic anatomy and the psychological impact of athletic injuries along with assessment and treatment techniques as they apply to athletic injuries.

Program of Study Application

Introduction to Sports Medicine is a pathway course in the Health Science career cluster, Therapeutic Services pathway. The course would follow participation in one or more cluster courses and/or Gateway to Certified Nursing Assistant. Introduction to Sports Medicine would prepare a student to participate in further pathway courses in the Therapeutic Services pathway or a capstone experience.

Career Cluster: Health Science

Course: Introduction to Sports Medicine

Course Standards

ISM 1 Identify the fundamental aspects of medical terminology, the human body systems, kinesiology and careers related to sports medicine.

Webb Level	*Sub-indicator*	*Integrated Content*
Two Skill/Concept	ISM 1.1 Distinguish differences among careers within sports medicine and explain in detail the education level, credentialing/licensure requirements.	Careers may include: cardiac rehabilitation therapist, certified strength and conditioning coach, personal trainer, lifestyle and weight management coach, athletic trainer, and corporate wellness supervisor/instructor.
Two Skill/Concept	ISM 1.2 Interpret medical terms and abbreviations to communicate information.	Refer to Joint Commission official "Do Not Use List" in terms of using entire word rather than abbreviations during client communication
Level 1: Recall	ISM 1.3 Identify basic structures and functions of human body systems.	Skeletal, muscular, integumentary, cardiovascular, lymphatic, respiratory, nervous, special senses, endocrine, digestive, urinary, and reproductive
Four Extended Thinking	ISM 1.4 Analyze concepts of kinesiology in relation to athletic performance.	How joint and bone movement, body motion, and levers can have positive or negative effects on an athlete's performance and development.

Notes

Career Cluster: Health Science

Course: Introduction to Sports Medicine

ISM 2 Understand injury prevention principles and performance enhancement philosophies

Webb Level	*Sub-indicator*	*Integrated Content*
Three Strategic Planning	ISM 2.1 Develop a nutrition and hydration plan for an athlete while implementing personal healthy behaviors.	Example: those training for a variety of intensive sporting event, those with cardiac disease, or those being treated for and/or recovering from illness, etc. Use Choose MyPlate, My Fitness Pal or other nutritional plan management tools.
Two Skill/Concept	ISM 2.2 Describe injury prevention	Student journaling, case studies, Compare and contrast injury classifications, promote behaviors of health and wellness (such as: nutrition, weight control, exercise, sleep habits, and prevention of disease)
Two Skill/Concept	ISM 2.3 Explore and demonstrate safe training practices in sports management	Effects of overtraining on the musculoskeletal system, and relate the importance of adopting safe biomechanical practices when training.
Four Extended Thinking	ISM 2.4 Compare and contrast performance enhancement philosophies	General conditioning principles, role of the cardiovascular/respiratory systems and strength training have on fitness/athletic performance, the effects of the environment on training, the importance of flexibility in fitness

Notes

Career Cluster: Health Science

Course: Introduction to Sports Medicine

ISM 3 Explore and understand common sports injuries, injury management and treatment techniques.

Webb Level	*Sub-indicator*	*Integrated Content*
Three Strategic Thinking	ISM 3.1 Recognize and explain common injuries and conditions that impact athletic performance.	Explain an injury assessment. Identify soft tissue injuries and skin conditions. Recognize abdominal injuries, bleeding, and shock. Discuss immobilization techniques. Describe treatment for medical conditions such as seizures, fainting, asthma etc., as well as heat illness and cold exposure
Three Strategic Thinking	ISM 3.2 Assess common sports injuries to determine treatment modalities	Identify the purpose and how to properly select the correct therapeutic modality. Describe the physiological effects, indications, contraindications, and application of: cryotherapy, thermotherapy, electrotherapy, and massage.
Four Extended Thinking	ISM 3.3 Perform proper treatment techniques of common sports injuries through hands-on application	Utilize various experiences such as role playing, virtual learning, videos or case studies. Field experience would be highly recommended.

Notes

Career Cluster: Health Science

Course: Introduction to Sports Medicine

ISM 4 Explore the psychological impact of injury and the healing process on an individual.

Webb Level	*Sub-indicator*	*Integrated Content*
Level 1: Recall	ISM 4.1 Describe principles of sports psychology.	Identify the psychological implications of an injury to an athlete. Examine potential psychological problems associated with overtraining, including staleness and burnout.
Three Strategic Thinking	ISM 4.2 Explain possible adaptations that can be made to exercise programs to account for different clients' needs.	Given a scenario or profile of a client/patient, develop an exercise program with the following adaptations: immediate effects of exercise, long term effects of exercise (heart/lungs/weight control/disease prevention), effects of acclimatization (such as changes in temperature, altitude, climate, etc.), effects of travel on the client and/or athlete and medications. Modification of the exercise program for post injury for athletes returning to their sport.

Notes