

SPORTS MEDICINE 2

ACADEMIC CONTENT & WORKPLACE EMPLOYABILITY STANDARDS



CATALINA FOOTHILLS SCHOOL DISTRICT

Approved by Governing Board on May 24, 2018

Updated May 28, 2019

Catalina Foothills School District

Sports Medicine 2

Grades: 11-12

Sports Medicine 2 course offers students an exciting opportunity to learn more about sports medicine. Students will gain a greater understanding of science and the structure and function of the human body as it relates to injury and illness. The course emphasizes health concepts familiar to medical careers such as anatomy, physiology, and kinesiology. Students will integrate physical skill, clinical experience, and career readiness skills. The main topics of study include recognition of injury, prevention of injury, treatment, injury assessment, evaluation of injury, rehabilitation, emergency care, nutrition, first aid, and CPR. Internship and observation opportunities are part of this course.

| MEDICAL TERMINOLOGY | |
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| SP2.1.1 | Compare terminology based on their context within the body system. |
| SP2.1.2 | Use anatomical terms correctly based on information provided. |
| SP2.1.3 | Define terms associated with disease and body systems. |
| SP2.1.4 | Determine locations of organs, symptoms, etc., using directional terms, planes and sections. |
| MUSCULAR SYSTEM | |
| SP2.2.1 | Describe the components of the neuromuscular junction, and summarize the events involved in the neural control of skeletal muscle contraction and relaxation. |
| SP2.2.2 | Compare the different types of skeletal muscle contraction. |
| SP2.2.3 | Examine the types of muscle fibers to muscle performance. <ul style="list-style-type: none"> ○ discuss muscle hypertrophy, atrophy, and aging ○ describe how physical conditioning affects muscle tissue |
| SP2.2.4 | Describe the arrangement of fascicles in the various types of muscles and explain the resulting functional differences. |
| SP2.2.5 | Describe the classes of levers and explain how they make muscles more efficient. |
| SP2.2.6 | Explain how the name of a muscle can help identify its location, appearance, or function. |
| ARTICULATIONS | |
| SP2.3.1 | Categorize joints according to their structure or range of motion. |
| SP2.3.2 | Distinguish between the two classification schemes to categorize joints. |
| SP2.3.3 | Describe the basic structure of a synovial joint and the common synovial joint accessory structures and their functions. |
| HEALTH AND PERFORMANCE | |
| SP2.4.1 | Apply knowledge of metabolism and nutrient functions, food sources, and physiologic systems. |
| SP2.4.2 | Explain nutritional concepts in relation to basic nutrient caloric intake. |
| SP2.4.3 | Describe general rules of athletic hydration (for example: pre-practice/competition, competition, and post-practice/competition). |
| SP2.4.4 | Interpret tests used to determine fitness for cardiorespiratory endurance, strength, flexibility, and body composition (appropriate fat values). |
| SP2.4.5 | Examine the use of supplements and performance enhancers and their safety and efficacy. |
| SP2.4.6 | Demonstrate an understanding of the concepts and principles related to the development and implementation of a personal physical activity plan. <ul style="list-style-type: none"> ○ general strength and conditioning training principles |

| SAFETY AND INFECTION CONTROL | |
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| SP2.5.1 | Apply strategies of risk management according to OSHA compliance, SDS chemical management, and injury and illness compliance solutions. |
| SP2.5.2 | Demonstrate proper procedures for removing and transporting an injured patient/client, including the use of proper body mechanics (for example: logroll, spine board, stretcher). |
| SP2.5.3 | Select personal protective equipment that prevent, support, or treat injuries and conditions (for example: headgear, mouth guards, shoulder pads, eyewear, thigh and knee pads, shin guards). |
| ACUTE CARE – EMERGENCY AND NON-EMERGENCY SITUATIONS | |
| SP2.6.1 | Describe sudden illnesses and their treatment (for example: fainting, seizures, diabetic shock, anaphylactic shock). |
| SP2.6.2 | Identify cause, signs, symptoms, and treatment of environmentally-related emergencies (for example: effects of heat and cold). |
| SP2.6.3 | Perform CPR (cardiopulmonary resuscitation) and AED (automated external defibrillator) procedures for infants, children, and adults. |
| SP2.6.4 | Demonstrate proper wound care (for example: cleaning, bandaging, and dressing). <ul style="list-style-type: none"> ○ common taping techniques that prevent, support, or treat injuries and conditions ○ splinting techniques (for example: soft, rigid, anatomical) |
| SP2.6.5 | Explain the principles of triage with numerous injuries. |
| SP2.6.6 | Describe key components of emergency action plans and conditions for activation. |
| SP2.6.7 | Describe the appropriate supplies for an athletic first-aid kit. |
| IMPACT OF INJURIES, SPORTS TRAUMA, AND PHYSICAL DYSFUNCTIONS AND DISORDERS | |
| SP2.7.1 | Use the injury assessment and evaluation process (for example: H.O.P.S. [history, observation, palpation, special test]). |
| SP2.7.2 | Identify the signs and symptoms of injuries to the head, axial regions, upper body extremity, and lower body extremity. |
| SP2.7.3 | Explain the etiology (mechanism of injury) for common physical injuries. |
| SP2.7.4 | Describe common special tests used to evaluate joints (for example: ligament, valgus and varus, anterior and posterior drawer, apprehension). |
| SP2.7.5 | Analyze the tissues' response to injury. |
| SP2.7.6 | Investigate the cause of secondary injuries (for example: gait and carrying capacity). |
| SP2.7.7 | Demonstrate the proper use of PRICE (protection, rest, ice, compression, and elevation). |
| THERAPEUTIC EXERCISE, TRAINING, AND RECONDITIONING | |
| SP2.8.1 | Differentiate among various kinds of exercises (for example: isometric, isotonic, manual resistance, isokinetic, circuit training). |
| SP2.8.2 | Identify indications, contraindications, and safety precautions in strength, conditioning and exercise activities (for example: isotonic, isometric, and isokinetic). |
| SP2.8.3 | Explain strength, mobility, and balance as related to performance and injury prevention. |
| SP2.8.4 | Describe types of stretching and flexibility strategies (for example: static, ballistic, dynamic, proprioceptive neuromuscular facilitation). |
| SP2.8.5 | Apply appropriate rehabilitation progression (for example: return- to-play criteria [full strength, free from pain, skill performance tests, emotional readiness]). |
| APPLICATION OF PSYCHOLOGICAL TECHNIQUES – PHYSICAL PERFORMANCE INJURY EVALUATION AND REHABILITATION | |
| SP2.9.1 | Describe emotional/psychological responses to injury and rehabilitation (for example: depression, anxiety, fear). |
| SP2.9.2 | Explain motivational techniques for physical conditioning and rehabilitation (for example: goal-setting, positive reinforcement, celebrate successes). |
| WORKPLACE EMPLOYABILITY: PROFESSIONALISM | |
| SP2.9.1 | Demonstrate professionalism in the workplace (being on time, proper dress, courteousness). |
| SP2.9.2 | Represent the school [or organization] in a positive manner, demonstrating the school's [or organization's] mission and core values. |

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| SP2.9.3 | Demonstrate respect for personal and professional boundaries (distinguish between personal and work-related matters). |
| SP2.9.4 | Interact respectfully with others; act with integrity. |
| SP2.9.5 | Produce high quality work that reflect professional pride and contributes to organizational success. |
| SP2.9.6 | Take initiative to develop skills and improve work performance. |
| WORKPLACE EMPLOYABILITY: COMMUNICATION (TRADITIONAL AND DIGITAL) | |
| SP1. 10.1 | Communicate effectively in preparation for a diverse work environment (required: style, format, and medium appropriate to audience/culture/generation, purpose and context; accuracy; use of appropriate technical/industry language; to resolve conflicts; address intergenerational differences/challenges; persuade others). |
| SP1. 10.2 | Use documentation (for example: itineraries and schedules) to plan and meet client needs. |
| SP1. 10.3 | Use appropriate technologies and social media to enhance or clarify communication. |
| SP1. 10.4 | Use a variety of interpersonal skills, including tone of voice and appropriate physical gestures (for example: eye contact, facing the speaker, active listening) during conversations and discussions to build positive rapport with others. |
| SP1. 10.5 | Pose and respond to questions, building upon others' ideas in order to enhance the discussion; clarify, verify, or challenge ideas and conclusions with diplomacy. |
| WORKPLACE EMPLOYABILITY: SELF-REGULATION | |
| SP1. 11.1 | Apply the skills and mindset of self-regulation to accomplish a task or project. |
| SP1. 11.2 | Select and use appropriate technologies to increase productivity. |
| SP1. 11.3 | Exercise initiative and leadership (for example: recognize and engage individual strengths, plan for unanticipated changes, pursue solutions/improvements). |
| WORKPLACE EMPLOYABILITY: CRITICAL THINKING AND PROBLEM SOLVING | |
| SP1. 12.1 | Identify problems and use strategies and resources to innovate and/or devise plausible solutions |
| SP1. 12.2 | Take action or make decisions supported by evidence and reasoning. |
| SP1. 12.3 | Transfer knowledge/skills from one situation/context to another. |
| WORKPLACE EMPLOYABILITY: COLLABORATION | |
| SP1. 13.1 | Take responsibility for any role on a team and accurately describe and perform the duties of each role, including leadership. |
| SP1. 13.2 | Integrate diverse ideas, opinions, and perspectives of the team and negotiate to reach workable solutions. |
| SP1. 13.3 | Prioritize and monitor individual and team progress toward goals, making sufficient corrections and adjustments when needed. |
| SP1. 13.4 | Submit high-quality products that meet specifications for assigned tasks. |