

SM 220

Prevention and Care of Athletic Injuries

RISK MANAGEMENT AND INJURY PREVENTION

Cognitive Domain

- Identifies the physical and environmental risk factors associated with specific activities the physically active person may engage in.
- Appraises the risk factors associated with common congenital and acquired abnormalities, disabilities, and diseases.
- Implements the recommended or required components of a pre-participation examination based on governing authorities' rules, guidelines, and recommendations.
- Outlines the basic concepts and practice of wellness screening. This includes, but is not limited to, various baselines and standards and other fundamental methods used to screen for wellness.
- Identifies areas that athletic personnel or supervisors must be familiar with in order to avoid or reduce the possibility of injury or illness occurring to athletes and others engaged in physical activity (e.g., CPR and first aid).
- Describes the principles of effective heat loss and heat illness prevention programs. These principles include, but are not limited to knowledge of the body's thermoregulatory mechanisms for acclimation and conditioning, fluid and electrolyte replacement requirements, proper practice and competition attire, and weight loss.
- Evaluates the accepted guidelines, recommendations, and policy and position statements of applicable governing agencies relating to practice during extreme weather conditions (e.g., heat, cold, and lightning).
- Describes the use of a sling psychrometer, and possesses the ability to apply wet bulb globe thermometer (WBGT) reading and other heat and humidity indices to determine the scheduling, type, and duration of practice.
- Identifies the components of a physical conditioning program (pre-season, in-season, post-season, off-season).
- Lists the safety precautions, hazards, and contraindications of various stretching, strengthening, or flexibility routines and/or equipment.
- Describes the basic principles regarding protective equipment, including standards for design, construction, maintenance, and reconditioning of protective sports equipment (e.g., football, hockey, and lacrosse pads and headgear).
- Identifies basic legal concepts and considerations associated with protective equipment, including product and personal liability.
- Accesses and interprets the rules and regulations established by the associations that govern the use of protective equipment.
- Describes the principles and concepts relating to prophylactic taping, wrapping, and bracing and protective pad fabrication.
- Explains the basic principles and concepts of protective equipment and material composition (e.g., tensile strength, maximum tolerances, heat dissipation).
- Relates the principles and concepts involved in the fabrication and appropriate application of dynamic and static splints.

Psychomotor Domain

- Performs appropriate tests and examinations for pre-participation physical exam as required by the appropriate governing agency and/or physician.
- Collects and interprets climatic data (temperature, humidity, distance of lightning from practice or competition areas) with use of appropriate instruments or personal observation and applies this data to schedule physical activity.

- Implements prevention and treatment of environmental stress factors that pertain to acclimation and conditioning, fluid and electrolyte replacements, proper practice and competition attire, and weight loss.
- Selects, fabricates, and applies appropriate preventive taping and wrappings, splints, braces, and other special protective devices that are consistent with sound anatomical and biomechanical principles.

Affective Domain

- Accepts the moral, professional, and legal responsibilities to conduct safe programs to minimize injury and illness risk factors for individuals involved in physical activity.
- Acknowledges the importance of developing and implementing a thorough, comprehensive injury and illness prevention program.
- Understands the need for cooperation among administrators, athletic personnel, certified athletic trainers, parents/guardians, other health care professionals, and athletes and others engaged in physical activity in the implementation of effective injury and illness prevention programs.
- Appreciates and respects the role of athletic personnel and supervisors in injury and illness prevention programs.
- Accepts moral, professional, and legal responsibility of conducting appropriate pre-participation examinations.
- Values the importance of collecting data on temperature, humidity, and other environmental conditions that can affect the human body when exercising in adverse weather conditions.
- Appreciates and respects the importance of correct and appropriate fitting in the use of protective equipment.

PATHOLOGY OF INJURIES AND ILLNESSES

Cognitive Domain

- Analyzes the normal physiological responses of the human body to trauma and inactivity of specific body tissues (ligaments/capsules, muscles, tendons, and bones).
- Defines tissue lesions by body system in terms of etiology, pathogenesis, pathomechanics, treatment options, and expected outcomes.
- Describes the healing process of bone.

Affective Domain

- Promotes accountability for moral and ethical decision-making in the treatment of pathologic conditions.

ASSESSMENT AND EVALUATION

Cognitive Domain

- Demonstrates knowledge of the normal anatomical structures of the human body systems and their physiological functions, including the musculoskeletal (including articulations), nervous (central and peripheral), cardiovascular, respiratory, digestive, urogenital, endocrine, dermatological, reproductive, and special sensory systems.
- Describes the physiological and psychological effects of physical activity and their impact on the performance of athletes and individuals involved in other forms of physical activity.
- Defines the principles and concepts of body movement including functional classification of joints, joint biomechanics, normal ranges of joint motion, joint action terminology, muscular structures responsible for joint actions (prime movers, synergists), skeletal muscle contraction, and kinesthesia/proprioception.
- Differentiates injury recognition, assessment, and diagnosis.
- Describes commonly accepted techniques and procedures for evaluation of the common injuries and illnesses that are incurred by athletes and others involved in physical activity. These techniques and procedures include the following: (a) taking a history, (b) inspection or

- observation,(c) palpation, (d) functional testing (range of motion, ligamentous or capsular stress, manual muscle, sensory, motor, reflex neurological), (e) special evaluation techniques (e.g., orthopedic tests, auscultation, percussion)
- Defines the measurement and grading of dermatomes, myotomes, and reflexes and their relationships in a neurological examination.
 - Describes active, passive, and resisted range-of-motion testing and differentiates the significance of the findings of each test.
 - Explains the role of special tests, testing joint play, and postural examination in injury assessment.
 - Explains how to measure resistive range of motion (or strength) of major muscles using manual muscle testing or break tests.
 - Differentiates the use of diagnostic tests (x-rays, arthrograms, MRI, CAT scan, bone scan, ultrasound, myelogram) based on their applicability in the assessment of an injury or illness when prescribed by a physician.
 - Describes the use of basic somatotyping to quantify objective physical characteristics.
 - Explains how to recognize and evaluate athletes and others involved in physical activity who demonstrate clinical signs and symptoms of environmental stress.
 - Describes the etiological factors, signs, symptoms, and management procedures for injuries of the toes, foot, ankle, lower leg, knee, thigh, hip, pelvis, shoulder, upper arm, elbow, forearm, wrist, hand, thumb, fingers, spine, thorax, abdomen, head, and face.
 - Explains how to identify and evaluate various postural deformities.
 - Uses the terminology necessary to communicate the results of an athletic training assessment to physicians and other health professionals.

Psychomotor Domain

- Constructs and phrases appropriate questions to obtain a medical history of an injured or ill individual that includes a previous history and a history of the present injury or illness.
- Demonstrates active, passive, and resisted range-of-motion testing of the toes, foot, ankle, knee, hip, shoulder, elbow, wrist, hand, thumb, fingers, and spine.
- Measures active and passive joint range of motion with a goniometer.
- Administers static and dynamic postural evaluation and screening procedures, including functional tests for postural deformities and muscle length assessment.
- Applies appropriate stress tests for ligamentous or capsular instability based on the principles of joint positioning, segmental stabilization, and force.
- Measures the grade of ligamentous laxity during a joint stress test and notes the quality and quantity of the end point.
- Applies appropriate and commonly used special tests to evaluate athletic injuries to various anatomical areas.
- Palpates bony and soft tissue structures to determine normal or pathological tissue(s).
- Performs and interprets appropriate palpation techniques and special tests of the abdomen, chest, cranium, and musculoskeletal system.
- Assesses the neurological function of cranial nerves, spinal nerves, and peripheral nerves and assesses the level of spinal cord involvement following injury, including the function of dermatomes, myotomes, and reflexes (e.g., deep tendon, superficial).
- Performs appropriate examination of injuries to the trunk and upper and lower extremities prior to an individual's return to activity.
- Performs an appropriate examination to evaluate the return to activity of an individual who has sustained a head injury.
- Uses appropriate terminology in the communication and documentation of injuries and illnesses.

Affective Domain

- Appreciates the importance of documentation of assessment findings and results.
- Accepts the role of the certified athletic trainer as a primary provider of assessment to the injuries and illnesses of athletes and others involved in physical activity.

- Recognizes the initial clinical evaluation by the certified athletic trainer as an assessment and screening procedure, rather than as a diagnostic procedure.
- Appreciates the practical importance of thoroughness in a clinical evaluation
- Accepts the professional, ethical, and legal parameters that define the proper role of the certified athletic trainer in the evaluation and appropriate medical referral of injuries and illnesses of athletes and others involved in physical activity.
- Values the skills and knowledge necessary to competently assess the injuries and illnesses of athletes and others involved in physical activity

ACUTE CARE OF INJURIES AND ILLNESSES

Cognitive Domain

- Determines what emergency care supplies and equipment are necessary for event coverage, such as biohazardous waste disposal containers, splints, short-distance transportation equipment, emergency access tools, primary survey instruments (CPR mask, bag-valve-mask), and ice.
- Interprets standard nomenclature of athletic injuries and illnesses.
- Differentiates the components of a secondary survey, including obtaining a history, inspection and observation, palpation, and the use of special tests to determine the type and severity of the injury or illness sustained.
- Recognizes the characteristics of common life-threatening conditions that can occur either spontaneously or as the result of direct trauma to the throat, thorax and viscera, and identifies the management of these conditions.
- Describes the management of external hemorrhage, including the location of pressure points, use of universal precautions, and proper disposal of biohazardous materials.
- Recommends the appropriate use of aseptic or sterile techniques, approved sanitation methods, and universal precautions for the cleansing and dressing of wounds.
- Discriminates those wounds that require medical referral.
- Explains the application principles of cold application, elevation, and compression in treatment of acute non-limb-threatening pathologies.
- Cites the signs, symptoms, and pathology of acute inflammation.
- Recognizes signs and symptoms of head trauma, including loss of consciousness, changes in standardized neurological, cranial nerve assessment, and other symptoms that indicate underlying trauma.
- Explains the importance of monitoring a patient following a head injury, including obtaining clearance from a physician before further patient participation.
- Defines cerebral concussion and lists the signs and symptoms used to classify cerebral concussions according to accepted grading scales (e.g., Cantu, Colorado, Torg, American Neurology Association standards).
- Recognizes the signs and symptoms of trauma to the cervical, thoracic and lumbar spines, the spinal cord, and spinal nerve roots, including neurological signs, referred symptoms, and other symptoms that indicate underlying trauma.
- Recites the indications and guidelines for removing the helmet and shoulder pads from an athlete with a suspected cervical spine injury.
- Describes the proper techniques for removing the helmet and shoulder pads from an athlete with a suspected cervical spine injury.
- Describes the proper techniques and necessary supplies for removing equipment and clothing in order to evaluate and/or stabilize the involved area.
- Recognizes proper positioning and immobilization of a person with a suspected spinal cord injury when using a spine board or body splint, including preparatory positioning prior to placement of the spine board or body splint.
- Explains the need for leadership and teamwork when using a spine board or body splint.
- Constructs and educates the patient regarding home care and self-treatment plans.

Psychomotor Domain

- Performs a secondary survey/assessment, including obtaining a history, inspection/observation, palpation, and using special tests.
- Demonstrates the proper technique for removing the helmet, shoulder pads, and other protective equipment from an athlete with a possible cervical injury.
- Demonstrates the proper technique for removing the helmet, shoulder pads, and other protective equipment from an athlete with an injury to the trunk or extremities.
- Applies various cervical stabilization devices correctly, with the victim in various positions.
- Applies various types of splints to different body parts, employing different constructions of splinting materials and allowing for distal pulse palpation.

GENERAL MEDICAL CONDITIONS AND DISABILITIES

Cognitive Domain

- Recognizes postconcussional syndrome.

NUTRITIONAL ASPECTS

Cognitive Domain

- Describes the advantages or disadvantages of supplementing nutrients in the athlete's diet.
- Describes the principles, advantages, and disadvantages of the ergogenic aids and dietary supplements used by athletes and others involved in physical activity, in an effort to improve performance.
- Recognizes the implications of FDA endorsement of nutritional products.
- Locates, obtains, and interprets scientific position papers describing healthy weight loss, fluid maintenance, disordered eating, nutritional ergogenic aids, diet supplements, and assessment of body composition in athletes and others involved in physical activity.
- Identifies the consequences of improper fluid replacement.
- Summarizes the proper use of food, fluids, and exercise in weight control to dispel the prevailing misconceptions regarding weight control diet fads and fallacies.
- Describes the signs, symptoms, and physical consequences of disordered eating
- Explains the referral system for individuals with disordered eating.

Psychomotor Domain

- Accesses and uses information regarding the principles of fluid and electrolyte replacement.
- Designs a pre-participation meal.
- Includes the proper percentages of carbohydrates, protein, and fat in a diet based on age, gender, and type and level of physical activity.

Affective Domain

- Appreciates the role of proper nutrition in the health care of athletes and others involved in physical activity.
- Respects the various recognized position papers that discuss nutrition wellness.
- Recognizes the need for and implements proper referral for eating disorders.

PSYCHOSOCIAL INTERVENTION AND REFERRAL

Cognitive Domain

- Describes the current psychosocial and sociocultural issues and problems confronting athletic training and sports medicine and identifies their effects on athletes and others involved in physical activity.
- Compares the psychosocial requirements of various sports activities to the readiness of the injured or ill individual to resume physical participation.

- Understands the psychological and emotional responses (motivation, anxiety, apprehension) to trauma and forced physical inactivity as they relate to the rehabilitation and reconditioning process.
- Describes the basic principles of mental preparation, relaxation and visualization techniques, general personality traits, associated trait anxiety, locus of control, and athlete and social environment interactions.
- Provides health care information to patients, parents/guardians, athletic personnel, and others regarding the psychological and emotional well being of athletes and others involved in physical activity.
- Disseminates information regarding the roles and functions of various community-based health care providers (sport psychologists, counselors, social workers).
- Describes the accepted protocols that govern the referral of athletes and other physically active individuals to psychological, community health, or social services.
- Describes the theories and techniques of interpersonal and cross-cultural communication among certified athletic trainers, athletes, athletic personnel, patients, administrators, health care professionals, parents/guardians, and others.
- Employs the basic principles of counseling, including discussion, active listening, and resolution.
- Describes the various strategies that certified athletic trainers may employ to avoid and resolve conflicts among superiors, peers, and subordinates.
- Identifies the symptoms and clinical signs of common disordered eating (anorexia nervosa, bulimia) and the psychological and sociocultural factors associated with these disorders.
- Identifies the psychological issues that relate to physically active women of childbearing years.
- Recognizes the signs and symptoms of drug abuse and the use of ergogenic aids and other substances.
- Identifies the societal influences toward substance abuse in the athletic and physically active population.
- Formulates a plan for appropriate psychological intervention and referral with all involved parties when confronted with a catastrophic event.
- Describes the acceptance and grieving processes that follow a catastrophic event.
- Identifies the stress-response model and how it may parallel an injury.
- Cites the potential need for psychosocial intervention and referral when dealing with populations requiring special consideration (e.g., those with exercise-induced asthma, diabetes, seizure disorders, drug allergies and interactions, or unilateral organs).

Psychomotor Domain

- Intervenes, when appropriate, with an individual with a suspected substance abuse problem.
- Communicates with appropriate health care professionals in a confidential manner.
- Uses appropriate community-based resources for psychosocial intervention.
- Develops and implements stress reduction techniques for athletes and others involved in physical activity.
- Develops and implements mental imagery techniques for athletes and others involved in physical activity.

Affective Domain

- Accepts the professional, ethical, and legal parameters that define the proper role of the certified athletic trainer in providing health care information, intervention, and referral.
- Accepts the responsibility to provide health care information, intervention, and referral consistent with the certified athletic trainer's professional training.
- Recognizes the certified athletic trainer's role as a liaison between the physically active, athletic personnel, health care professionals, parents/guardians, and the public.
- Accepts the need for appropriate interpersonal relationships between all of the parties involved with athletes and other involved in physical activity.

- Accepts the moral and ethical responsibility to intervene in situations of suspected or known use and/or abuse of legal and illegal drugs and chemicals.
- Accepts the moral and ethical responsibility to intervene in situations of mental, emotional, and/or personal/social conflict.

HEALTH CARE ADMINISTRATION

Cognitive Domain

- Describes the organization and administration of pre-participation examination and screening including, but not limited to, maintaining medical records, developing record keeping forms, scheduling personnel, and site utilization.
- Lists the current injury/illness surveillance and reporting systems such as, but not limited to, National Electronic Injury Surveillance System (NEISS), National Athletic Head and Neck Injury Registry, and the National Collegiate Athletic Association (NCAA).
- Identifies common human-resource policy and federal legislation regarding employment regarding, but not limited to, The Americans with Disabilities Act, Wage and Hour, Family Medical Leave Act, Family Educational Rights Privacy Act, Fair Labor Standards Act, Sexual Harassment, and the Equal Opportunity Employment Commission.
- Summarizes the function of accrediting agencies for health care facilities.
- Identifies the process of obtaining state regulatory acts for athletic trainers, and becomes familiar with locally relevant statutes, rules, and regulations.
- Describes the various types of insurance policies (health maintenance organization [HMO], personal provider organization [PPO], fee-for-service) and the procedures for filing health care insurance claims.
- Identifies the common insurance benefits and exclusions identified within health care insurance policies
- Explains the components of the budgeting process, including purchasing, requisition, and bidding.
- Illustrates the basic architectural considerations that relate to the design of a safe and efficient clinical practice setting.
- Describes the duties of personnel management, including (1) recruitment and selection of employees, (2) retention of employees, (3) development of policies-and-procedures manual, and (4) employment performance evaluation.
- Lists the components of a strategic plan that uses a model that helps in the development of a vision and mission statement and in the analysis of strengths, weaknesses, opportunities, and threats (SWOT).
- Identifies the principles of recruiting, selecting, and employing physicians and other medical and allied health care personnel in the deployment of athletic health care services.
- Interprets the role and function of nondiscriminatory and unbiased employment practices, which do not base decisions on race, gender, sexual orientation, disability, religion, national origin, or age.
- Describes typical community-based emergency health care delivery plans, including communication and transportation systems.
- Recognizes and appraises emergency action plans, which include on-site care, notification of emergency medical services (EMS), location of exits, and other relevant information, for the care of acutely injured or ill individuals.
- Identifies the typical availability, capabilities, and policies of community-based emergency care facilities and community-based managed care systems.
- Interprets the typical administrative policies and procedures that govern first aid and emergency care, such as those pertaining to parents/guardians, informed consent, media relations, incident reports, and appropriate record keeping.
- Identifies the basic components of a comprehensive athletic injury emergency care plan, which include (1) personnel training, (2) equipment needs, (3) availability of emergency care facilities, (4) communication, (5) transportation, (6) activity or event coverage, and (7) record keeping.

- Assembles an emergency action plan for all settings that includes on-site care, notification of EMS or appropriate personnel, and location of exit and evacuation routes.
- Selects sideline emergency care supplies and equipment that are necessary and appropriate for the setting.
- Summarizes basic legal concepts, such as, but not limited to, standard of care, scope of practice, liability, negligence, informed consent, and confidentiality, as they apply to a medical or allied health care practitioner's performance of his or her responsibilities .
- Lists the components of a comprehensive risk management plan that addresses the issues of security, fire, electrical and equipment safety, emergency preparedness, and hazardous chemicals.
- Describes the necessary communication skills for interaction with physicians, allied health care providers, caretakers, and others who work closely with the certified athletic trainer.
- Formulates a plan to promote the profession of athletic training and those services that certified athletic trainers perform in a variety of employment settings, such as high schools and colleges, professional and industrial settings, and community-based health care facilities.
- Differentiates the roles and responsibilities of the certified athletic trainer and other medical and allied health personnel to provide care to athletes and others involved in physical activity
- Identifies contemporary personal and community health issues and the commonly available school health services, community health agencies, and community-based psychological and social support services.
- Describes the role and function of various community-based medical, paramedical, and other health care providers.
- Describes the roles of various personnel in the organization of activity sessions and methods of instruction for athletes and others involved in physical activity.
- Describes the basic components of organizing and coordinating a drug testing and screening program.
- Locates and interprets current banned-drug lists that are published by various governing athletic associations (National Collegiate Athletic Association [NCAA], United States Olympic Committee [USOC], International Olympic Committee [IOC], etc).
- Describes the continuing education process for certified athletic trainers as outlined by the NATABOC and the relationship between continuing education and state athletic training practice acts.
- Identifies the current developments, missions, objectives, and professional activities of other allied health and medical organizations and professions.
- Understands the NATA Code of Professional Practice and the NATABOC Standards of Professional Practice.
- Understands how to locate Commission on the Accreditation of Allied Health Education Programs (CAAHEP) accreditation standards and recognizes their impact on the educational system.
- Describes the relationship between the National Athletic Trainers' Association, Inc. (NATA), NATA Board of Certification, Inc./ National Organization for Competency Assurance (NATABOC/NOCA), National Commission for Certifying Agencies (NCCA), and Joint Review Committee-Athletic Training/Commission on the Accreditation of Allied Health Education Programs (JRC-AT/CAAHEP).
- Identifies the roles and responsibilities of allied health care personnel in providing services to athletes and others involved in physical activity.

Psychomotor Domain

- Develops a plan/drawing of a safe and efficient health care facility.
- Develops a risk management plan that addresses issues of liability reduction, security, fire, facility hazards, electrical and equipment safety, emergency preparedness, and hazardous chemicals (manufacturer safety data sheets [MSDS]).
- Develops a policies-and-procedures manual for a health care facility that meets the guidelines set forth by the accrediting agencies.
- Demonstrates the ability to access medical and health care information through electronic media.

- Develops an operational and capital budget based on a supply inventory and needs assessment.

PROFESSIONAL DEVELOPMENT AND RESPONSIBILITIES

Cognitive Domain

- Compares and contrasts the role and function of state athletic training practice acts and registration, licensure, and certification agencies
- Explains the basic legislative processes for the implementation of practice acts for athletic trainers.
- Defines the rationale for state regulations that govern the practice of athletic training.
- Describes the consequences of violating federal and state regulatory acts.
- Outlines the process of attaining and maintaining an athletic training professional credential.
- Describes the current professional development requirements for the continuing education of certified athletic trainers.
- Locates available, approved continuing education opportunities for certified athletic trainers.
- Describes the role and function of the governing structures of the National Athletic Trainers' Association.
- Differentiates the essential documents of the NATA, including, but not limited to, the Role Delineation Study, the Code of Ethics, JRC-AT Standards and Guidelines, Athletic Training Educational Competencies, and the Standards of Practice of the Profession.
- Summarizes the position statements regarding the practice of athletic training (NATA, NCAA, National Association of Intercollegiate Athletics [NAIA], National Federation of State High School Associations, American College of Sports Medicine [ACSM], American Academy of Pediatrics [AAP], American Academy of Family Physicians [AAFP], American Orthopedic Society for Sports Medicine [AOSSM]).
- Locates and accesses the current activities and requirements for the professional preparation of the certified athletic trainer (NATA Education Council, JRC-AT, CAAHEP, NATABOC).
- Able to access the professional objectives, scope of practice, and services of other health care providers.
- Distinguishes that issues and concerns regarding the health care of athletes and other involved in physical activity (e.g., public relations, third-party payment, and managed care).
- Properly interprets the role of the certified athletic trainer as a health care provider, and provides information regarding the role of the certified athletic trainer to athletes, the physically active, parents/guardians, athletic department personnel, and others.
- Describes the availability of educational materials and programs in health-related subject matter areas (audiovisual aids, pamphlets, newsletters, computers, software, workshops, and seminars).
- States the principles of planning and organizing workshops, seminars, and clinics in athletic training and sports medicine for health care personnel, administrators, coaches, and the general public.

Psychomotor Domain

- Demonstrates the techniques and methods for disseminating injury prevention and health care information to health care professionals, athletes, athletic personnel, parents/guardians, and the general public (e.g., via team meetings, parents' nights, parent/teacher organizations [PTO] meetings, booster clubs, workshops, and seminars).
- Demonstrates the ability to construct a resume.
- Demonstrates the ability to access the policy-making and governing bodies that regulate the certified athletic trainer (state regulatory boards, NATA, NATABOC).

Affective Domain

- Accepts the professional responsibility to satisfy certified athletic trainers' continuing education requirements.
- Appreciates the need for and the process and benefits of athletic training regulatory acts (registration, licensure, certification)

- Realizes that the state regulatory acts regarding the practice of athletic training vary from state to state.
- Understands the consequences of noncompliance with regulatory athletic training practice acts.
- Accepts the professional, historical, ethical, and organizational structures that define the proper roles and responsibilities of the certified athletic trainer in providing health care to athletes and others involved in physical activity.
- Defends the moral and ethical responsibility to intervene in situations that conflict with NATA standards.
- Accepts the function of professional organization position statements that relate to athletic training practice.
- Advocates the NATA as an allied health professional organization dedicated to the care of athletes and others involved in physical activity.
- Respects the role and responsibilities of the other health care professions.
- Appreciates the dynamic nature of issues and concerns as they relate to the health care of athletes and others involved in physical activity.
- Defends the responsibility to interpret and promote athletic training as a professional discipline among allied-health professional groups and the general public.
- Accepts the responsibility to enhance the professional growth of athletic training students, colleagues, and peers through a continual sharing of knowledge skills, values, and professional recognition.

PROFICIENCIES

INSTRUCTED & EVALUATED

Assessment and Evaluation

The student will recognize the following postural deviations and predisposing conditions:

- tibial torsion
- genu valgum, varum, and recurvatum
- rearfoot valgus and varus
- forefoot valgus and varus
- pes cavus and planus
- foot and toe posture

The student will perform a postural assessment of the following:

- cervical spine and head
- lumbo-thoracic region

The student will identify and assess the following:

- cranial nerves
- deep tendon reflexes
- dermatomes
- pathological reflexes
- myotomes

The student will identify and assess the following:

- dermatomes
- deep tendon reflexes
- myotomes
- pathological reflexes

The student will obtain the medical history of an ill or injured athlete or other physically active individual suffering from a head injury.

The student will observe and identify the clinical signs and symptoms associated with head injury:

- amnesia (retrograde or post-traumatic)
- pupil and eye movements
- levels of consciousness
- pulse
- orientation (person, time, place orientation)
- blood pressure
- intracranial hematoma
- facial postures
- balance and coordination

The student will observe and identify the clinical signs and symptoms associated with eye injuries and illnesses:

- orbital blowout fracture
- detached retina

- conjunctivitis
- hyphema
- corneal abrasion
- sty
- corneal laceration

The student will observe and identify the clinical signs and symptoms associated with an ear injury or illness:

- pinna hematoma ("cauliflower ear")
- otitis externa
- impacted cerumen
- otitis media

The student will observe and identify the clinical signs and symptoms associated with nose injury:

- deviated septum
- epistaxis
- nasal fracture

The student will observe and identify the clinical signs and symptoms associated with jaw, mouth, or tooth injury or illness:

- gingivitis
- tooth abscess
- mandibular fracture
- tooth extrusion
- maxilla fracture
- tooth fracture
- periodontitis
- tooth intrusion
- temporomandibular joint dislocation
- tooth luxation
- temporomandibular joint dysfunction

The student will administer appropriate sensory, neurological, and circulatory tests for the head and face

The student will administer functional tests and activity-specific tests for head and face injuries.

The student will administer commonly used special tests to make a differential assessment of the following:

- cranial nerves (e.g., eye motion, facial muscles)
- cognitive tests (e.g., recall, serial 7s, digit span)
- cerebellar function (e.g., Romberg's test, finger-to-nose test, heel-toe walking, heel-to-knee standing)
- spinal nerve roots (e.g., upper quarter screen)

The student will obtain the medical history of an ill or injured athlete or other physically active individual suffering from a cervical spine injury.

The student will observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:

- atrophy
- intervertebral disc herniation
- dislocation or subluxation
- nerve root compression or stretch

- vertebral fracture
- ischemia
- head and neck posture
- torticollis

The student will administer active and passive range-of-motion tests using quantifiable techniques (e.g., tape measure, goniometer, and inclinometer) for the cervical spine

The student will use manual muscle-testing techniques for the cervical spine.

The student will administer appropriate sensory, circulatory, and neurological tests for the cervical spine.

The student will administer functional tests and activity-specific tests for the cervical spine.

The student will identify, palpate, and assess the integrity of bony landmark of the cervical spine.

The student will identify, palpate, and assess the integrity of soft tissue of the cervical spine.

The student will administer commonly used special tests to make a differential assessment of the cervical spine:

- nerve root compression (e.g., distraction/compression test, Spurling's test, shoulder depression test)
- brachial plexus neuropathy (e.g., brachial tension test, Tinel's sign)
- cervical disc herniation (e.g., Valsalva's maneuver)
- neurovascular dysfunction (e.g., vertebral artery test)

The student will obtain the medical history of an ill or injured athlete or other physically active individual suffering from a shoulder injury.

The student will observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:

- atrophy
- positioning (Sprengel's deformity)
- bursitis
- strain
- dislocation or subluxation
- scapulohumeral rhythm
- efficiency of movement
- scapular winging
- fracture
- step deformity
- sprain
- symmetry
- nerve injury
- tenosynovitis and tendonitis

The student will administer active and passive range-of-motion tests using standard goniometric techniques for the shoulder.

The student will use manual muscle-testing techniques for the shoulder

The student will administer appropriate sensory, neurological, and circulatory tests for the shoulder

The student will administer functional tests and activity-specific tests for the shoulder

The student will identify and palpate bony landmarks of the shoulder

The student will identify and palpate soft tissue landmarks of the shoulder.

The student will administer commonly used special tests to make a differential assessment of the following:

- glenohumeral instability (e.g., anterior drawer test, posterior drawer test, relocation test, apprehension test, clunk test, sulcus sign)
- acromioclavicular instability (e.g., shear test, compression test)
- rotator cuff impingement/inflammation (e.g., Speed's test, drop arm test, empty can test, impingement test, Hawkins-Kennedy impingement test, Neer impingement test, pectoralis major contracture test)
- biceps and biceps tendon pathology (e.g., Yergason's test, Ludington's test)
- thoracic outlet syndrome (e.g., Adson's maneuver, Allen test, military brace position)

The student will obtain the medical history of an ill or injured athlete or other physically active individual suffering from elbow pathology.

The student will observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:

- symmetry
- epicondylitis
- carrying angle (cubital valgus and varus)
- tenosynovitis and tendonitis
- dislocation or subluxation
- osteochondritis dissecans
- fracture
- sprain
- atrophy
- strain
- efficiency of movement
- nerve injury
- bursitis

The student will administer active and passive range-of-motion tests using standard goniometric techniques of the elbow.

The student will use manual muscle-testing techniques of the elbow

The student will administer appropriate sensory, neurological, and circulatory tests for the elbow.

The student will administer functional tests and activity-specific tests for the elbow.

The student will identify, palpate, and interpret the integrity of bony landmarks of the elbow

The student will identify, palpate, and interpret the integrity of the soft tissue of the elbow.

The student will administer commonly used special tests to make a differential assessment of the following

- joint instability (e.g., valgus stress test, varus stress test)
- inflammatory conditions (e.g., tests for lateral epicondylitis, tests for medial epicondylitis)
- neuropathy (e.g., Tinel's sign, pronator teres syndrome, pinch grip test)

The student will obtain the medical history of an ill or injured athlete or other physically active individual suffering a forearm, wrist, or hand pathology.

The student will observe and identify the clinical signs and symptoms associated with the following

- fracture (Colles' fracture, Bennett's fracture, carpal fracture ["boxer's fracture"], metacarpal fracture, phalanges fracture)
- dislocation or subluxation
- disease states (e.g., clubbed nails, spoon-shaped nails)
- soft tissue pathology (e.g., sprain, flexor tendon avulsion [jersey finger sign], extensor tendon avulsion [mallet finger], extensor tendon rupture [boutonniere deformity], volar plate rupture [pseudo-boutonniere deformity], Dupuytren's contracture, ganglion, swan neck deformity, trigger finger)
- neurovascular involvement (e.g., carpal tunnel syndrome, bishop's or benediction deformity, ape hand, claw fingers, drop-wrist deformity, Volkmann's contracture)

The student will administer active and passive range-of-motion tests using standard goniometric techniques for the forearm, wrist, and hand

The student will use manual muscle-testing techniques for the forearm, wrist, and hand.

The student will administer appropriate sensory, neurological, and circulatory tests for the forearm, wrist, and hand.

The student will administer functional tests and activity-specific tests for the forearm, wrist, and hand.

The student will identify, palpate, and interpret the integrity of bony landmarks for the forearm, wrist, and hand.

The student will identify, palpate, and interpret the integrity of soft tissue for the forearm, wrist, and hand.

The student will administer commonly used special tests to make a differential assessment of the following

- joint instability (e.g., valgus stress test, varus stress test)
- inflammatory conditions (e.g., tests for lateral epicondylitis, tests for medial epicondylitis)
- neuropathy (e.g., Tinel's sign, pronator teres syndrome, pinch grip test)

The student will obtain the medical history of an ill or injured athlete or other physically active individual of the thorax and lumbar spine.

- The student will observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:
- café au lait macules (spots)
- nerve root compression
- dislocation or subluxation
- sacroiliac dysfunction
- spina bifida occulta
- scoliosis
- facet syndrome
- sprain
- intervertebral disc pathology
- stenosis
- spinal posture (kyphosis/ lordosis)
- step deformity
- leg length discrepancies

- strain
- vertebral pathology (e.g., spondylitis, spondylolysis, spondylolisthesis)

The student will administer active and passive range-of-motion tests using standard qualitative and quantitative techniques for the thoracic and lumbar spine.

The student will use manual muscle-testing techniques for the thoracic and lumbar spine.

The student will administer appropriate sensory and neurological tests for the thoracic and lumbar spine.

The student will administer functional tests and activity-specific tests for the thoracic and lumbar spine.

The student will identify, palpate, and interpret the integrity of bony landmarks of the thoracic and lumbar spine.

The student will identify, palpate, and interpret the integrity of soft tissue of the thoracic and lumbar spine.

The student will administer commonly used special tests to make a differential assessment of the following:

- intervertebral disc herniation (e.g., Valsalva's maneuver)
- neuropathy (e.g., straight leg raise test, well straight leg test, Babinski's reflex test, Oppenheim's gait test, Kernig's sign, Brudzinski sign test, bowstring test, Hoover sign test)
- vertebral defects (e.g., stork standing test/spondylolisthesis test)
- joint instability (e.g., spring test)

The student will obtain the medical history of an ill or injured athlete or other physically active individual for hip/pelvis pathology.

The student will observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:

- leg length discrepancies
- osteitis pubis
- hip retroversion
- athletic pubalgia
- hip anteversion
- bursitis
- Legg-Calve-Perthes disease
- piriformis syndrome
- apophysitis
- iliotibial band syndrome
- slipped capital femoral epiphysis
- contusion
- dislocation or subluxation
- sprain
- fracture
- strain
- stress fracture
- tendonitis

The student will administer active and passive range-of-motion tests using standard goniometric techniques and/or a tape measure for the hip/pelvis.

The student will use manual muscle-testing techniques for the hip and pelvis.

The student will administer appropriate sensory, neurological, and circulatory tests for the hip and pelvis.

The student will administer functional tests and activity-specific tests for the hip/pelvis.

The student will identify, palpate, and interpret the integrity of bony landmarks of the hip/pelvis.

The student will identify, palpate, and interpret the integrity of soft tissue of the hip and pelvis.

The student will administer commonly used special tests to make a differential assessment of the following:

- sacroiliac dysfunction (e.g., Patrick's/FABER, Gaenslen's test, pelvic compression/distraction test)
- neuropathy (e.g., femoral nerve traction test)
- neuromuscular pathology (e.g., Trendelenburg test, Thomas test, rectus femoris contracture test, Ober test, Noble's test, piriformis test)

The student will obtain the medical history of an ill or injured athlete or other physically active individual suffering from knee pathology.

The student will observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:

- bursitis
- patellar tendon rupture
- chondromalacia patella
- peroneal nerve contusion or palsy
- dislocation and subluxation
- popliteal cyst
- fat pad contusion
- sprain
- fracture
- strain
- leg length
- tendonitis
- meniscal tear
- tibial torsion
- Osgood-Schlatter disease
- tibiofemoral alignment
- osteochondritis dissecans
- patellar alignment (e.g., patella alta, patella baja, squinting patella, Q angle)

The student will administer active and passive range-of-motion tests using standard goniometric techniques for the knee

The student will use manual muscle-testing techniques for the knee.

The student will administer appropriate sensory, neurological, and circulatory tests for the knee.

The student will administer functional tests and activity-specific tests for the knee

The student will identify, palpate, and interpret the integrity of bony landmarks of the knee

The student will identify, palpate, and interpret the integrity of soft tissue of the knee.

The student administer commonly used special tests to make a differential assessment of the following:

uniplanar stress tests (e.g., valgus stress test, varus stress test, Lachman test, anterior drawer test, posterior drawer test, posterior sag sign)

multiplanar (rotational) stress tests (e.g., Slocum test, Hughston's test, lateral pivot shift maneuver)

meniscal tears (e.g., McMurray's test, Apley's test)

patellofemoral dysfunction (e.g., grind test, apprehension test)

intra-extracapsular swelling (e.g., sweep test, ballottable patella)

The student will obtain the medical history of an ill or injured athlete or other physically active individual suffering from foot, ankle, or leg pathology.

The student will observe and identify the clinical signs and symptoms associated with the following common injuries, illnesses, and predisposing conditions:

- overuse injures
- Achilles tendon rupture
- compartment syndromes
- apophysitis
- dislocation or subluxation
- foot type/structure
- fracture
- deep vein thrombosis
- neuroma
- osteochondritis dissecans
- sprain
- strain
- toe structure/alignment
- weight-bearing versus non-weight-bearing alignment
- gait

The student will administer active and passive range-of-motion tests using standard goniometric techniques for the foot, ankle, and lower leg.

The student will use manual muscle-testing techniques for the foot, ankle, and lower leg.

The student will administer appropriate sensory, neurological, and circulatory tests for the foot, ankle, and lower leg.

The student will administer functional tests and activity-specific tests for the foot, ankle, and lower leg.

The student will identify, palpate, and interpret the integrity of bony landmarks for the foot, ankle, and lower leg.

The student will identify, palpate, and interpret the integrity of soft tissue of the foot, ankle, and lower leg.

The student will administer the following commonly used special tests to make a differential assessment:

- compression test
- talar tilt test
- percussion test
- Thompson test
- anterior drawer test
- Tinel's sign
- Kleiger's test
- Homans' sign

Acute Care of Injuries and Illnesses

The student will demonstrate the ability to implement an EAP for an activity, setting, or event.

The student will correctly triage emergency situations.

General Medical Conditions and Disabilities

The student will recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

- Eating Disorders
 - Anorexia
 - Bulimia
 - obesity

Nutritional Aspects

The student will demonstrate the ability to access and recommend nutritional guidelines for the following:

- pre-participation meal

Psychosocial Intervention And Referral

Simulate intervention with an individual who has a substance abuse problem and recommend appropriate referral.

Simulate a confidential conversation with a health care professional concerning suspected substance abuse by an athlete or other physically active individual.

Simulate the following motivational techniques used during rehabilitation:

- verbal motivation
- imagery
- visualization
- desensitization

Health Care Administration

The student will demonstrate the ability to develop facility design plans that include, but are not limited to, the following components:

- basic floor plan design
- facility evacuation
- basic rehabilitation and treatment area plans

The student will demonstrate the ability to develop administrative plans that include but are not limited to, the following components:

- risk management
- developing policies and procedures
- addressing facility hazards

Professional Development and Responsibilities

The student will demonstrate the ability to disseminate injury prevention and health care information.

The student will develop a presentation outline for an athletic training topic. The outline may include, but is not limited to, the following audiences:

- peer athletic trainers

- physicians
- parents
- athletic personnel
- general public
- athletes and others involved in physical activity

The student will develop a professional resume.