

SM 210

Assessment of Injury and Illness

COMPETENCIES

RISK MANAGEMENT AND INJURY PREVENTION

Cognitive Domain

- 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 the precautions and risks associated with exercise in individuals who have systemic medical conditions.
- Describes the components of an educational program for self-identification of the warning signs of cancer, including self-examination of the breasts and testicles.

Psychomotor Domain

- Performs appropriate tests and examinations for pre-participation physical exam as required by the appropriate governing agency and/or physician.
- Implements appropriate screening procedures to identify common acquired or congenital risk factors that would predispose athletes and others engaged in physical activity to certain types of injuries.

Affective Domain

- Acknowledges the importance of developing and implementing a thorough, comprehensive injury and illness prevention program.
- Accepts moral, professional, and legal responsibility of conducting appropriate pre-participation examinations.

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).
- Predicts the body's adaptation to exercise during and following illness and injury.
- Describes the integration and coordination of cell function in response to injury (e.g., sources of cell injury, inflammation, healing, and repair).
- Describes cellular homeostasis and the integration and coordination of cell function in response to disease.
- Defines the inflammatory response to acute and chronic injury and illness.
- Defines tissue lesions by body system in terms of etiology, pathogenesis, pathomechanics, treatment options, and expected outcomes.
- Outlines the autoimmune and immunodeficiency responses and their associated diseases (e.g., lupus, HIV/AIDS).
- Analyzes the physiologic responses of diseases to physical activity and inactivity.

- Describes the pathology of diseases of the blood (e.g., anemia, iron deficiency, hemolysis that would impair strenuous physical activity).
- Recognizes the common warning signs and symptoms of cancer.
- Describes the signs and symptoms of deep and superficial vein thromboses, pulmonary embolism and other emboli, and myocardial infarction.

Affective Domain

- Appreciates that an understanding of pathology is essential to care for athletes and others involved in physical activity.
- Recognizes that physician consultation is a moral and ethical necessity in the diagnosis and treatment of pathologic conditions.
- Accepts the moral and ethical responsibility of maintaining current knowledge of the pathologic conditions of athletes and others involved in physical activity.
- 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.
- Distinguishes the anatomical and physiological growth and development characteristics of athletic and physically active males and females in the following stages: pre-adolescent; adolescent; adult; and senior.
- 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)
- Explains the relationship of injury assessment to the systematic observation of the person as a whole.
- Demonstrates knowledge of a systematic process that uses the medical or nursing model to obtain a history of an injury or illness that includes, but is not limited to, the mechanism of injury, chief complaint, and previous relevant injuries or illnesses.
- Explains how to take measurements of the neurological function of cranial nerves, spinal nerves, and peripheral nerves, and describes their relationships in a neurological examination.
- Describes the use of myotomes, dermatomes, and reflexes (deep tendon, superficial) including manual muscle-testing, range-of-motion testing, and distinguishes between primary, cortical, and discriminatory forms of sensation.
- 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 identify and evaluate various postural deformities.
- Describes the location and function of the urinary, digestive, reproductive, and lymphatic systems.
- Describes the signs and symptoms of injuries to the abdominal viscera.
- Demonstrates familiarity with the function of an ophthalmoscope in the examination of the eye.
- Demonstrates familiarity with the function of a stethoscope in the examination of the heart, lungs, and bowel.
- Uses the terminology necessary to communicate the results of an athletic training assessment to physicians and other health professionals.
- Describes components of medical documentation (e.g., subjective, objective, assessment, plan [SOAP] and history, inspection, palpation, special tests [HIPS])

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.
- Visually identifies clinical signs associated with common injuries and illnesses, such as the integrity of the skin and mucous membranes, structural deformities, edema, and discoloration.
- 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.
- Performs appropriate manual muscle-testing techniques and/or break tests, including application of the principles of muscle/muscle group isolation, segmental stabilization resistance/pressure, and grading, to evaluate injuries incurred by athletes and others engaged in physical activity.
- Administers static and dynamic postural evaluation and screening procedures, including functional tests for postural deformities and muscle length assessment.
- 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.
- Demonstrates the proper use of the otoscope for ear and nasal examination, including the proper positioning of the patient and examiner and proper technique of use.
- Conducts auscultation of normal heart, breath, and bowel sounds, demonstrating proper position and location of stethoscope.
- 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 a systematic assessment process in the management of injuries and illness.
- 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.
- 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

- 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.
- Interprets vital signs as normal or abnormal including, but not limited to, blood pressure, pulse, respiration, and body temperature.
- Assesses pathological signs of injury including, but not limited to, skin temperature, skin color, skin moisture, pupil reaction, and neurovascular function.
- 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.
- Recognizes signs and symptoms associated with internal hemorrhaging.
- 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 and interprets the signs and symptoms associated with increasing intracranial pressure.
- 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.
- Describes the proper techniques for removing the helmet and shoulder pads from an athlete with a suspected cervical spine injury.
- Recognizes the signs and symptoms of shock.
- Identifies the different types of shock type (traumatic, hypovolemic, anaphylactic, septic) and the proper management of each.
- Differentiates the signs and symptoms of diabetic coma and insulin shock.
- Describes the proper treatments of diabetic coma and insulin shock.
- Describes the appropriate treatment of a seizure.
- Recognizes the signs and symptoms of toxic drug overdose.
- Describes the signs, symptoms, and causes of allergic, thermal, and chemical reactions of the skin.
- Recognizes the differences between infestations, insect bites, and other skin conditions.
- Recognizes the signs and symptoms of common infectious diseases, and takes appropriate steps to prevent disease transmission through appropriate medical referral (see General Medical Clinical Proficiencies for a list of common infectious diseases).

- Recognizes the signs, symptoms, and treatment of individuals suffering from adverse reactions to environmental conditions.
- Uses the information obtained during the examination to determine when to refer an injury or illness for further or immediate medical attention (e.g., a life- or limb-threatening situation).
- 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.
- Palpates a variety of anatomic locations to assess the pulse in resting (non-emergency) and trauma situations.
- Assesses a patient for possible closed-head trauma using standard neurological tests and tests for cranial nerve function.
- Palpates for the rigidity, guarding, and rebound tenderness of the abdomen associated with internal injury or illness.
- Performs proper care and positioning of an individual suffering from shock.

Affective Domain

- Appreciates the systematic approach to acute injury or illness of the secondary survey components of obtaining a history, inspection/observation, palpation, and using special tests.
- Realizes the importance of identifying signs and symptoms in cases of possible shock, internal bleeding, and closed-head trauma.

GENERAL MEDICAL CONDITIONS AND DISABILITIES

Cognitive Domain

- Describes congenital or acquired abnormalities, physical disabilities, and diseases.
- Identifies common illnesses and diseases of the body's systems based on contemporary epidemiological studies of the injuries of athletes and others involved in physical activity.
- Describes the general principles of health maintenance and personal hygiene, including skin care, dental hygiene, sanitation, immunizations, avoidance of infectious and contagious diseases, diet, rest, exercise, and weight control.
- Recognizes common eye pathologies (e.g., conjunctivitis, hyphema, corneal injury, and scleral trauma).
- Recognizes common ear pathologies (e.g., otitis, ruptured tympanic membrane, and impacted cerumen).
- Recognizes common pathologies of the mouth, sinus, oropharynx, and nasopharynx.
- Lists the common causes, signs, and symptoms of respiratory infections (e.g., pneumonia, bronchitis, sinusitis, URI, and asthma).
- Describes the use of a peak-flow meter in the evaluation and management of respiratory conditions.
- Describes strategies for reducing the frequency and severity of asthma attacks.
- Compares and contrasts the signs and symptoms of respiratory tract conditions (e.g., common cold, influenza, allergic rhinitis, sinusitis, bronchitis, asthma, pneumonia, and pleurisy).
- Identifies the possible causes of sudden death syndrome among athletes and others involved in physical activity.
- Recognizes the relationship between changes in blood pressure and changes in activity level.
- Recognizes the relationship between changes of respiration rate and changes in activity level.
- Explains the typical history, signs, and symptoms associated with cardiopulmonary conditions.

- Describes common heart conditions, such as coronary artery disease, hypertrophic cardiomyopathy, heart murmurs, and mitral valve prolapse.
- Identifies the typical symptoms and clinical signs of an injury or illness, including those associated with local tissue inflammation (cellulitis) and systemic infection (lymphangitis, lymphadenitis, bacteremia).
- Describes the common conditions that affect the liver, gall bladder, and pancreas (e.g., jaundice, hepatitis, diabetes mellitus, and pancreatitis).
- Explains and recognizes the etiology, signs, symptoms, and management of diabetes mellitus.
- Describes the signs and symptoms of the common disorders of the gastrointestinal tract.
- Lists examples of the common conditions of the urinary tract, kidneys, and bladder (e.g., urinary tract infection (UTI) and kidney stones)
- Lists the common infections and conditions of the male reproductive organs (e.g., epididymitis, varicocele, hydrocele, undescended testicle, and testicular cancer).
- Lists the common infections and conditions of the female reproductive organs (e.g., pelvic inflammatory disease (PID), ectopic pregnancy, and pregnancy).
- Describes the common conditions of the breast (e.g., gynecomastia, cancer, and fibrous cysts).
- Describes the various menstrual irregularities, the relationship that physical activity plays in their development, their resolutions, and their implications on performance, as well as detrimental systemic effects (e.g., oligomenorrhea, amenorrhea, and dysmenorrhea).
- Identifies the physiological effects and the changes to woman's body caused by pregnancy, and describes the body's response to exercise during pregnancy. Also identifies the indications and contraindications for exercise throughout pregnancy.
- Describes the signs, symptoms, and management of common sexually transmitted diseases (STD).
- Recognizes skin lesions (e.g., wounds and thermal, electrical, and radiation injury), infections (e.g., bacterial, fungal, and viral), and disorders (e.g., bites, acne, dermatitis, folliculitis, and eczema)
- Identifies skin infections that are potentially contagious (e.g., impetigo, staph infection).
- Recognizes conditions that affect bones and joints (e.g., epiphysitis, apophysitis, aseptic necrosis, arthritis, gout, and felon).
- Describes common conditions that affect muscles (e.g., myositis, rhabdomyolysis).
- Recognizes the main cerebral lesions caused by trauma (e.g., subdural, epidural hematoma,aneurysm).
- Describes the etiology, signs, symptoms, and management of convulsive disorders
- Recognizes postconcussional syndrome
- Identifies the common signs and symptoms of contagious viral diseases.
- Lists the advantages and disadvantages of sports participation by individuals with hepatitis B virus or human immunodeficiency virus (HIV).
- Describes the etiology, signs, symptoms, and management of common viruses (e.g., human papillomavirus, Epstein-Barr virus, and hepatitis B virus).
- Describes where and how to seek appropriate medical assistance on disease control, notification, and epidemic prevention.

Psychomotor Domain

- Assesses the patient for congenital or acquired abnormalities, physical disabilities, and diseases that would predispose him or her to other injury or illness, or would exacerbate the existing condition(s).
- Manages acute asthma attacks and takes appropriate steps to reduce the frequency and severity of asthma attacks.
- Recognizes and refers individuals exhibiting a history, signs, and symptoms of cardiopulmonary conditions to the appropriate medical authority.
- Recognizes and manages the common disorders of the gastrointestinal tract.
- Recognizes and applies the appropriate treatments for diabetic coma and insulin shock.

- Acts quickly to contain skin infections that are potentially contagious, and refers the patient when appropriate.
- Takes the appropriate steps to treat a seizure.
- Recognizes and takes the appropriate steps to manage and control common contagious viral and infectious diseases.
- Uses an otoscope correctly to examine the ear and nasal passages.
- Use and interprets urine diagnostic Chemstrips (dipsticks).
- Uses a penlight to examine pupil responsiveness, equality, and ocular motor function.
- Palpates the abdominal quadrants for tenderness and rigidity.
- Uses the stethoscope correctly to auscultate the heart, lungs, and bowel.
- Assesses body temperature.
- Assesses vital signs.
- Refers an individual who presents with complaints, signs, and/or symptoms of genitourinary or reproductive disorders to a physician.
- Demonstrates the proper use and interpretation of a peak-flow meter (hand-held spirometer) in the assessment of asthmatic athletes and other asthmatics involved in physical activity.

Affective Domain

- Supports the moral and ethical behavior of athletic trainers in issues dealing with diseases of athletics and physical activity.
- Recognizes the moral and ethical responsibility of taking situational control in the containment of common contagious viral and infectious diseases.
- Accepts the roles of medical and allied health personnel in the referral, management, and treatment of athletes and others involved in physical activity suffering from general medical conditions.

NUTRITIONAL ASPECTS

Cognitive Domain

- Describes personal health habits (hygiene, diet, nutrition, weight control, proper amount of sleep, effects of alcohol, tobacco, and drugs) and their role in preventing injury or illness and in maintaining a healthy lifestyle.
- Describes the common illnesses and injuries that are attributed to poor nutrition.
- Delineates the effects of poor dietary habits on bone loss, injury, and long term health.
- Describes the signs, symptoms, and physical consequences of disordered eating.
- Explains the referral system for individuals with disordered eating.
- Describes the signs, symptoms, and physiological effects of iron deficiency and anemia and identifies foods that enhance iron absorption and are high in iron.

Affective Domain

- Appreciates the long-term effects of disordered eating, bone density loss, and secondary amenorrhea on the skeletal health of the physically active.
- 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.

- Understands the psychological and emotional responses (motivation, anxiety, apprehension) to trauma and forced physical inactivity as they relate to the rehabilitation and reconditioning process.
- 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
- 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 medical and community-based resources that disseminate information regarding safe sexual activity and the health risk factors associated with sexually transmitted diseases.
- Describes the basic signs and symptoms of mental disorders (psychoses), emotional disorders (neuroses, depression), or personal/social conflict (family problems, academic or emotional stress, personal assault or abuse, sexual assault, sexual harassment) and the appropriate referral.
- Identifies contemporary personal, school, and community health service agencies, such as community-based psychological and social support services.
- Defines seasonal affective disorder (SAD).
- 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.

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.
- 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.
- Recognizes athletes and other physically individuals as deserving of quality professional health care.
- Accepts the individual's physical complaint(s) without personal bias or prejudice.
- Respects the various social and cultural attitudes, beliefs, and values regarding health care practices when caring for patients.

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).
- Summarizes the function of accrediting agencies for health care facilities.
- Describes federal and state infection control regulations and guidelines as they pertain to the prevention, exposure, and control of infectious disease.
- Describes the necessary communication skills for interaction with physicians, allied health care providers, caretakers, and others who work closely with the certified athletic trainer.
- Explains the protocol that governs the referral of patients to medical or paramedical specialists and other health care providers.
- Describes the basic components of organizing and coordinating a drug testing and screening program.

Psychomotor Domain

- Demonstrates the ability to access medical and health care information through electronic media.

PROFESSIONAL DEVELOPMENT AND RESPONSIBILITIES

Cognitive Domain

- 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]).
- Able to access the professional objectives, scope of practice, and services of other health care providers.
- 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).

Affective Domain

- 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.

PROFICIENCIES

INSTRUCTED & EVALUATED

Risk Management and Injury Prevention

The student will assess the following:

- Height
- Weight
- blood pressure
- pulse
- vision using a Snellen eye chart

Assessment and Evaluation

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

- kyphosis
- lordosis
- scoliosis
- pelvic obliquity
- hip anteversion and retroversion

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 identify and classify body types as

- endomorph
- ectomorph
- mesomorph

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 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 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 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.

General Medical Conditions and Disabilities

The student will obtain a basic medical history that includes the following components:

- previous medical history
- current medication history
- previous surgical history
- relevant social history
- pertinent family medical history
- chief medical complaint

The student will ascertain body temperature via the following:

- oral temperature
- axillary temperature
- tympanic temperature

The student will ascertain the following vital signs:

- blood pressure
- pulse (rate and quality)
- respirations (rate and quality)

The student will palpate the four abdominal quadrants to assess for the following:

- guarding and rigidity
- pain

The student will use a stethoscope to identify the following:

- normal breath sounds
- normal heart sounds
- normal bowel sounds

The student will identify pathological breathing patterns to make a differential assessment for the following respiratory conditions:

- apnea
- bradypnea
- tachypnea
- dyspnea
- hyperventilation
- obstructed airway

The student will demonstrate proficiency in the use of an otoscope to examine the nose and the outer and middle ear.

The student will measure urine values with Chemstrips (dipsticks)

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

- The Skin
 - Abscesses
 - Acne vulgaris
 - Carbuncle
 - Cellulites
 - Molluscum contagiosum
 - Dermatitis
 - Eczema

- Folliculitis
- Frostbite
- Furnunculosis
- Herpes simplex
- Tinea versicolor
- Pediculosis
- Herpes zoster
- Hives
- Impetigo
- Psoriasis
- Ringworm
- Scabies
- Sebaceous cysts
- Tinea cruris
- Tinea pedis
- Verruca plantaris
- Cerruca vulgaris
- Tinea capitis
- The Eyes, Ears, Nose, and Throat
 - common cold
 - rhinitis
 - conjunctivitis
 - sinusitis
 - laryngitis
 - tetanus
 - pharyngitis
 - tonsillitis
- Respiratory System
 - asthma
 - influenza
 - bronchitis
 - pneumonia
 - hyperventilation
 - upper respiratory infection (URI)
 - hay fever
- Cardiovascular System
 - hypertension
 - migraine headache
 - hypertrophic cardiomyopathy
 - shock
 - hypotension
 - syncope
- Endocrine System
 - diabetes
 - hypothyroidism
 - hyperthyroidism
 - pancreatitis
- Gastrointestinal Tract
 - appendicitis
 - gastritis
 - colitis
 - gastroenteritis
 - constipation
 - indigestion
 - diarrhea

- ulcer
- esophageal reflux
- irritable bowel syndrome
- Eating Disorders
 - Anorexia
 - Bulimia
 - Obesity
- Sexually Transmitted Diseases/Diseases Transmitted by Body Fluid
 - HIV/AIDS
 - genital warts
 - hepatitis
 - gonorrhea
 - chlamydia
 - syphilis
- Genitourinary Tract and Organs
 - kidney stones
 - urinary tract infection
 - spermatic cord torsion
 - hydrocele
 - candidiasis
 - varicocele
 - urethritis
- Gynecological Disorders
 - amenorrhea
 - pelvic inflammatory disease
 - dysmenorrhea
 - vaginitis
 - oligomenorrhea
- Viral Syndromes
- infectious mononucleosis
 - measles
- mumps
- Neurological Disorders
 - epilepsy
 - reflex sympathetic dystrophy
 - syncope
 - meningitis
- Systemic Diseases
 - iron-deficiency anemia
 - sickle cell anemia
 - Lyme disease

Nutritional Aspects

The student will simulate intervention with an individual who has the signs and symptoms of disordered eating.

The student will identify proper referral sources for disordered eating.

Psychosocial Intervention And Referral

The student will locate the available community-based resources for psychosocial intervention.

Health Care Administration

The student will demonstrate appropriate communication skills.

- calm, reassure, and explain a potentially catastrophic injury to an injured adult or child, athletic personnel, and/or family member.
- use ethnic and cultural sensitivity in all aspects of communication
- communicate with diverse community populations