

Athletic Training Competencies

EXSS 158: Care and Prevention of Athletic Injuries

Risk Management

RM-C1 Explain the risk factors associated with physical activity.

RM-C7 Explain the importance for all personnel to maintain current certification in CPR, automated external defibrillator (AED), and first aid.

RM-C8 Explain the principles of effective heat loss and heat illness prevention programs. Principles include, but are not limited to, knowledge of the body's thermoregulatory mechanisms, acclimation and conditioning, fluid and electrolyte replacement requirements, proper practice and competition attire, and weight loss.

RM-C9 Explain the accepted guidelines, recommendations, and policy and position statements of applicable governing agencies related to activity during extreme weather conditions.

RM-C17 Explain the principles and concepts related to prophylactic taping, wrapping, bracing, and protective pad fabrication.

RM-C20 Recognize the clinical signs and symptoms of environmental stress.

RM-P6.2 Formulate and implement a comprehensive, proactive emergency action plan specific to lightning safety.

Diagnosis

DI-C6 Describe common techniques and procedures for evaluating common injuries including taking a history, inspection/observation, palpation, functional testing, special evaluation techniques, and neurological and circulatory tests.

DI-C14 Describe the clinical signs and symptoms of environmental stress.

DI-C16 Explain medical terminology and abbreviations necessary to communicate with physicians and other health professionals.

DI-C17 Describe the components of medical documentation (e.g. SOAP, HIPS and HOPS).

DI-P1 Obtain a medical history of the patient that includes a previous history and a history of the present injury.

DI-P2 Perform inspection/observation of the clinical signs associated with common injuries including deformity, posturing and guarding, edema/swelling, hemarthrosis, and discoloration.

Medical Conditions

MC-C1 Describe and know when to refer common congenital or acquired abnormalities, physical disabilities, and diseases affecting people who engage in physical activity throughout their life span (e.g., arthritis, diabetes).

MC-C2 Understand the effects of common illnesses and diseases in physical activity.

MC-C3 Describe common techniques and procedures for evaluating common medical conditions and disabilities including taking a history, inspection/observation, palpation, functional testing, special evaluation techniques (e.g., assessing heart, lung and bowel sounds), and neurological and circulatory tests.

MC-C4 Describe and know when to refer common eye pathologies from trauma and/or localized infection (e.g., conjunctivitis, hyphema, corneal injury, stye, scleral trauma).

MC-C5 Describe and know when refer common ear pathologies from trauma and/or localized infection (e.g., otitis, ruptured tympanic membrane, impacted cerumen).

MC-C6 Describe and know when to refer common pathologies of the mouth, sinus, oropharynx, and nasopharynx from trauma and/or localized infection (e.g., gingivitis, sinusitis, laryngitis, tonsillitis, pharyngitis).

MC-C15 Describe and know when to refer common and/or contagious skin lesions from trauma, infection, stress, drug reaction, and immune responses (e.g., wounds, bacteria lesions, fungal lesions, viral lesions, bites, acne, eczema dermatitis, ringworm).

MC-C16 Describe and know when to refer common medical conditions of the immune system from infection, congenital and acquired disease, and unhealthy lifestyle. (e.g., arthritis, gout, upper respiratory tract infection [URTI], influenza, pneumonia, myocarditis, gastrointestinal infection, urinary tract infection [UTI], sexually transmitted diseases [STDs], pelvic inflammatory disease, meningitis, osteomyelitis, septic arthrosis, chronic fatigue and overtraining, infectious mononucleosis, human immunodeficiency virus (HIV) infection and AIDS, hepatitis B virus infection, allergic reaction and anaphylaxis, childhood infectious diseases [measles, mumps, chickenpox]).

MC-C17 Describe and know when to refer common neurological medical disorders from trauma, anoxia, drug toxicity, infection, and congenital malformation (e.g., concussion, post-concussion syndrome, second-impact syndrome, subdural and epidural hematoma, epilepsy, seizure, convulsion disorder, meningitis, spina bifida, cerebral palsy, chronic regional pain syndrome [CRPS], cerebral aneurysm).

MC-P1 Obtain a medical history of the patient that includes a previous history and a history of the present condition.

MC-C21 Describe and know when to refer common injuries or conditions of the teeth (e.g., fractures, dislocations, caries).

MC-C22 Explain the importance and proper procedures for measuring body temperature (e.g., oral, axillary, rectal).

MC-P1 Obtain a medical history of the patient that includes a previous history and a history of the present condition.

MC-P2 Perform a visual observation of the clinical signs associated with common injuries and/or illnesses including deformity, edema/swelling, discoloration, and skin abnormalities.

MC-P4 Apply commonly used special tests and instruments (e.g., otoscope, stethoscope, ophthalmoscope, peak flow meter, chemical “dipsticks” [or similar devices]) and document the results for the assessment of:

MC-P4e Ear, nose, throat and teeth

Acute Care

AC-C1 Explain the legal, moral, and ethical parameters that define the scope of first aid and AC-emergency care and identify the proper roles and responsibilities of the certified athletic trainer.

AC-C2 Describe the availability, content, purpose, and maintenance of contemporary first aid and emergency care equipment.

AC-C3 Determine what emergency care supplies and equipment are necessary for circumstances in which the athletic trainer is the responsible first responder.

AC-C4 Know and be able to use appropriately standard nomenclature of injuries and illnesses.

AC-C5 Describe the principles and rationale of the initial assessment including the determination of whether the accident scene is safe, what may have happened, and the assessment of airway, breathing, circulation, level of consciousness and other life-threatening conditions.

AC-C6 Differentiate the components of a secondary assessment to determine the type and severity of the injury or illness sustained.

AC-C9 Describe the current standards of first aid, emergency care, rescue breathing, and cardiopulmonary resuscitation for the professional rescuer.

AC-C10 Describe the role and function of an automated external defibrillator in the emergency management of acute heart failure and abnormal heart rhythms.

AC-C12 Describe 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 identify the management of these conditions.

AC-C13 Describe the proper management of external hemorrhage, including the location of pressure points, use of universal precautions, and proper disposal of biohazardous materials.

AC-C14 Identify the signs and symptoms associated with internal hemorrhaging.

AC-C16 Describe the injuries and illnesses that require medical referral.

AC-C17 Explain the application principles of rest, cold application, elevation, and compression in the treatment of acute injuries.

AC-C18 Describe the signs, symptoms, and pathology of acute inflammation.

AC-C19 Identify the signs and symptoms of head trauma, including loss of consciousness, changes in standardized neurological function, cranial nerve assessment, and other symptoms that indicate underlying trauma.

AC-C20 Explain the importance of monitoring a patient following a head injury, including obtaining clearance from a physician before further patient participation.

AC-C21 Define cerebral concussion, list the signs and symptoms of concussions, identify the methods for determining the neurocognitive status of a patient who sustains a concussion and describe contemporary concepts for the management and return-to-participation of a patient who sustains a concussion.

AC-C24 Describe the indications, guidelines, proper techniques and necessary supplies for removing equipment and clothing in order to evaluate and/or stabilize the involved area.

AC-C27 Identify the signs, symptoms, possible causes, and proper management of the following:

AC-C27a Different types of shock

AC-C27e Allergic, thermal, and chemical reactions of the skin (including infestations and insect bites)

AC-C28 Identify the signs and symptoms of serious communicable diseases and describe the appropriate steps to prevent disease transmission.

AC-C29 Identify the signs, symptoms, and treatment of patients suffering from adverse reactions to environmental conditions.

AC-C30 Identify information obtained during the examination to determine when to refer an injury or illness for further or immediate medical attention.

AC-C31 Describe the proper immobilization techniques and select appropriate splinting material to stabilize the injured joint or limb and maintain distal circulation.

AC-C33 Describe home care and self-treatment plans of acute injuries and illnesses.

AC-P1 Survey the scene to determine whether the area is safe and determine what may have happened.

AC-P2 Perform an initial assessment to assess the following, but not limited to:

AC-P2a Airway

AC-P2b Breathing

AC-P2c Circulation

AC-P2d Level of consciousness

AC-P2e Other life-threatening conditions

AC-P3 Implement appropriate emergency treatment strategies, including but not limited to:

AC-P3a Activate an emergency action plan

AC-P3b Establish and maintain an airway in an infant, child, and adult

AC-P3c Establish and maintain an airway in a patient wearing shoulder pads, headgear or other protective equipment and/or with a suspected spine injury

AC-P3d Perform one- and two-person CPR on an infant, child, and adult

AC-P3e Utilize a bag-valve mask on an infant, child, and adult

AC-P3f Utilize an automated external defibrillator (AED) according to current accepted practice protocols

AC-P3g Normalize body temperature in situations of severe/life-threatening heat or cold stress

AC-P3h Control bleeding using universal precautions

AC-P4 Perform a secondary assessment and employ the appropriate management techniques for non-life-threatening situations, including but not limited to:

AC-P4a Open and closed wounds (using universal precautions)

AC-P4c Environmental illness

AC-P4h Acute musculoskeletal injuries (i.e. sprains, strains, fractures, dislocations)

AC-P4l Allergic, thermal, and chemical reactions of the skin (including infestations and insect bites)

Therapeutic Modalities

TM-C9 Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies to determine appropriate treatment and rehabilitation and to evaluate readiness to return to the appropriate level of activity. This includes the ability to:

Nutritional Aspects

NU-C1 Describe personal health habits and their role in enhancing performance, preventing injury or illness, and maintaining a healthy lifestyle.

Administration

AD-C17 Explain basic legal concepts as they apply to a medical or allied health care practitioner's responsibilities (e.g., standard of care, scope of practice, liability, negligence, informed consent and confidentiality, and others).

AD-P5 Use appropriate terminology and medical documentation to record injuries and illnesses (e.g., history and examination findings, progress notes, and others).

EXSS 159: Directed Observation in Athletic Training

Risk Management

RM-C3 Identify and explain the epidemiology data related to the risk of injury and illness related to participation in physical activity.

RM-C4 Identify and explain the recommended or required components of a pre-participation examination based on appropriate authorities' rules, guidelines, and/or recommendations.

Medical Conditions

MC-P4a Vital signs including respiration (including asthma), pulse and circulation, and blood pressure.

MC-P4c Pupil response, size and shape, and ocular motor function.

Acute Care

AC-C8 Describe pathological signs of acute/traumatic injury and illness including, but not limited to, skin temperature, skin color, skin moisture, pupil reaction, and neurovascular function.

AC-C15 Describe the appropriate use of aseptic or sterile techniques, approved sanitation methods, and universal precautions for the cleansing and dressing of wounds.

Therapeutic Modalities

TM-C3 Explain the terminology, principles, basic concepts, and properties of electric currents as they relate to therapeutic modalities.

TM-C4 Describe contemporary pain-control theories.

TM-C6 Explain the body's physiological responses during and following the application of therapeutic modalities.

TM-C7 Describe the electrophysics, physical properties, biophysics, patient preparation and modality set-up (parameters), indications, contraindications, and specific physiological effects associated with commonly used therapeutic modalities.

TM-C8 Identify appropriate therapeutic modalities for the treatment and rehabilitation of injuries and illness.

TM-C9 Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies to determine appropriate treatment and rehabilitation and to evaluate readiness to return to the appropriate level of activity. This includes the ability to:

TM-C10 Identify manufacturers, institutional, state, and federal standards for the operation and safe application of therapeutic modalities.

TM-P1 Assess patient to identify indications, contraindications, and precautions applicable to the application of therapeutic modalities.

TM-P4 Position and prepare the patient for the application of therapeutic modalities.

TM-P5 Select and apply appropriate therapeutic modalities according to evidence-based guidelines.

Exercise

EX-C8 Explain the effectiveness of taping, wrapping, bracing, and other supportive/protective methods for facilitation of safe progression to advanced therapeutic exercises and functional activities.

Administration

AD-C1 Describe organization and administration of pre-participation physical examinations and screening including, but not limited to, developing assessment and record-keeping forms that include the minimum recommendations from recognized health and medical organizations, scheduling of appropriate health and medical personnel, and efficient site use.

AD-C2 Identify components of a medical record (e.g., emergency information, treatment documentation, epidemiology, release of medical information, etc.), common medical record-keeping techniques and strategies, and strengths and weaknesses of each approach and the associated implications of privacy statutes (Health Insurance Portability and Accountability Act [HIPAA] and Federal Educational Rights Privacy Act [FERPA]).

AD-C3 Identify current injury/illness surveillance and reporting systems.

AD-C9 Identify and describe technological needs of an effective athletic training service and the commercial software and hardware that are available to meet these needs.

AD-C16 Identify and describe basic components of a comprehensive emergency plan for the care of acutely injured or ill patients, which include (1) emergency action plans for each setting or venue; (2) personnel education and rehearsal; (2) emergency care supplies and equipment appropriate for each venue; (3) availability of emergency care facilities; (4) communication with onsite personnel and notification of EMS; (5) the availability, capabilities, and policies of community-based emergency care facilities and community-based managed care systems; (6) transportation; (7) location of exit and evacuation routes; (8) activity or event coverage; and (9) record keeping.

AD-C20 Differentiate the roles and responsibilities of the athletic trainer from those of other medical and allied health personnel who provide care to patients involved in physical activity and describe the necessary communication skills for effectively interacting with these professionals.

AD-P5 Use appropriate terminology and medical documentation to record injuries and illnesses (e.g., history and examination findings, progress notes, and others).

Professional Development

PD-C1 Explain the role and function of state athletic training practice acts and registration, licensure, and certification agencies including (1) basic legislative processes for the implementation of practice acts, (2) rationale for state regulations that govern the practice of athletic training, and (3) consequences of violating federal and state regulatory acts.

PD-C2 Describe the process of attaining and maintaining national and state athletic training professional credentials.

PD-C3 Describe the current professional development requirements for the continuing education of athletic trainers and how to locate available, approved continuing education opportunities.

PD-C4 Describe the role and function of the governing structures of the National Athletic Trainers' Association.

PD-C5 Differentiate the essential documents of the national governing, certifying, and accrediting bodies, including, but not limited to, the Athletic Training Educational Competencies, Standards of Practice, Code of Ethics, Role Delineation Study, and the Standards for the Accreditation of Entry-Level Athletic Training Education Programs.

PD-C7 Describe the role and function of the professional organizations and credentialing agencies that impact the athletic training profession.

PD-C8 Summarize the current requirements for the professional preparation of the athletic trainer.

PD-C9 Identify the objectives, scope of practice and professional activities of other health and medical organizations and professions and the roles and responsibilities of these professionals in providing services to patients.

PD-C16 Summarize the history and development of the athletic training profession.

PD-P2 Access by various methods the public information policy-making and governing bodies used in the guidance and regulation of the profession of athletic training (including but not limited to state regulatory boards, NATA, BOC).

EXSS 259: Athletic Training Practicum

Risk Management

RM-C16 Explain the basic principles associated with the use of protective equipment, including standards for the design, construction, fit, maintenance and reconditioning of protective equipment; and rules and regulations established by the associations that govern the use of protective equipment; and material composition.

RM-C17 Explain the principles and concepts related to prophylactic taping, wrapping, bracing, and protective pad fabrication.

RM-C18 Explain the principles and concepts related to the fabrication, modification, and appropriate application or use of orthotics and other dynamic and static splints. This includes, but is not limited to, evaluating or identifying the need, selecting the appropriate manufacturing material, manufacturing the orthosis or splint, and fitting the orthosis or splint.

RM-P4 Select and fit appropriate standard protective equipment on the patient for safe participation in sport and/or physical activity. This includes but is not limited to:

RM-P4.1 Shoulder Pads

RM-P4.2 Helmet/Headgear

RM-P4.3 Footwear

RM-P4.4 Mouth guard

RM-P4.5 Prophylactic Knee Brace

RM-P4.6 Prophylactic Ankle Brace

RM-P4.7 Other Equipment (as appropriate)

RM-P5 Select, fabricate, and apply appropriate preventive taping and wrapping procedures, splints, braces, and other special protective devices. Procedures and devices should be consistent with sound anatomical and biomechanical principles.

RM-CP2 Select, apply, evaluate, and modify appropriate standard protective equipment and other custom devices for the patient in order to prevent and/or minimize the risk of injury to the head, torso, spine and extremities for safe participation in sport and/or physical activity. Effective lines of communication shall be established to elicit and convey information about the patient's situation and the importance of protective devices to prevent and/or minimize injury.

Acute Care

AC-C24 Describe the indications, guidelines, proper techniques and necessary supplies for removing equipment and clothing in order to evaluate and/or stabilize the involved area.

Exercise

EX-C8 Explain the effectiveness of taping, wrapping, bracing, and other supportive/protective methods for facilitation of safe progression to advanced therapeutic exercises and functional activities.

EXSS 265: Emergency Managements of Sports Trauma

Risk Management

RM-C7 Explain the importance for all personnel to maintain current certification in CPR, automated external defibrillator (AED), and first aid.

RM-C8 Explain the principles of effective heat loss and heat illness prevention programs. Principles include, but are not limited to, knowledge of the body's thermoregulatory mechanisms, acclimation and conditioning, fluid and electrolyte replacement requirements, proper practice and competition attire, and weight loss.

RM-C10 Interpret data obtained from a wet bulb globe temperature (WGBT) or other similar device that measures heat and humidity to determine the scheduling, type, and duration of activity.

RM-C16 Explain the basic principles associated with the use of protective equipment, including standards for the design, construction, fit, maintenance and reconditioning of protective equipment; and rules and regulations established by the associations that govern the use of protective equipment; and material composition.

RM-C20 Recognize the clinical signs and symptoms of environmental stress.

RM-P6 Obtain, interprets, and makes decisions regarding environmental data. This includes, but is not limited to the ability to:

RM-P6.1 Operate a sling psychrometer and/or wet bulb globe index

RM-P6.3 Access local weather/environmental information

RM-P6.4 Assess hydration status using weight charts, urine color charts, or specific gravity measurements

RM-CP3 Demonstrate the ability to develop, implement, and communicate effective policies and procedures to allow safe and efficient physical activity in a variety of environmental conditions. This will include obtaining, interpreting, and recognizing potentially hazardous environmental conditions and making the appropriate recommendations for the patient and/or activity. Effective lines of communication shall be established with the patient, coaches and/or appropriate officials to elicit and convey information about the potential hazard of the environmental condition and the importance of implementing appropriate strategies to prevent injury.

Diagnosis

DI-C14 Describe the clinical signs and symptoms of environmental stress.

DI-C16 Explain medical terminology and abbreviations necessary to communicate with physicians and other health professionals.

Medical Conditions

MC-C7 Describe and know when to refer common and significant respiratory infections, thoracic trauma, and lung disorders. (e.g., influenza, pneumonia, bronchitis, rhinitis, sinusitis, upper-respiratory

infection (URI), pneumothorax, hemothorax, pneumomediastinum, exercise-induced bronchospasm, exercise-induced anaphylaxis, asthma).

MC-C8 Explain the importance and proper use of a peak flow meter or similar device in the evaluation and management of respiratory conditions.

MC-C9 Describe strategies for reducing the frequency and severity of asthma attacks.

MC-C10 Explain the possible causes of sudden death syndrome.

MC-C11 Describe and know when to refer common cardiovascular and hematological medical conditions from trauma, deformity, acquired disease, conduction disorder, and drug abuse (e.g., coronary artery disease, hypertrophic cardiomyopathy, heart murmur, mitral valve prolapse, commotion cordis, Marfan's syndrome, peripheral embolism, hypertension, arrhythmogenic right ventricular dysplasia, Wolf-Parkinson-White syndrome, anemia's, sickle cell anemia and sickle cell trait [including rhabdomyolysis], hemophilia, deep vein thrombosis, migraine headache, syncope).

MC-C13 Describe and know when to refer common medical conditions of the endocrine and metabolic systems from acquired disease and acute and chronic nutritional disorders (e.g., diabetes mellitus and insipidus, hypothyroidism, Cushing's syndrome, thermoregulatory disorders, gout, osteoporosis).

MC-C14 Describe and know when to refer common medical conditions of the renal and urogenital systems from trauma, local infection, congenital and acquired disease, nutritional imbalance, and hormone disorder (e.g., kidney stones, genital trauma, gynecomastia, monorchidism, scrotum and testicular trauma, ovarian and testicular cancer, breast cancer, testicular torsion, varicoceles, endometriosis, pregnancy and ectopic pregnancy, female athlete triad, primary amenorrhea, oligomenorrhea, dysmenorrhea, kidney laceration or contusion, cryptorchidism).

MC-C21 Describe and know when to refer common injuries or conditions of the teeth (e.g., fractures, dislocations, caries).

MC-C22 Explain the importance and proper procedures for measuring body temperature (e.g., oral, axillary, rectal).

MC-P2 Perform a visual observation of the clinical signs associated with common injuries and/or illnesses including deformity, edema/swelling, discoloration, and skin abnormalities.

MC-P3 Palpate the bones and soft tissues, including the abdomen, to determine normal or pathological characteristics.

MC-P4 Apply commonly used special tests and instruments (e.g., otoscope, stethoscope, ophthalmoscope, peak flow meter, chemical "dipsticks" [or similar devices]) and document the results for the assessment of:

MC-P4a Vital signs including respiration (including asthma), pulse and circulation, and blood pressure

MC-P4b Heart, lung, and bowel sounds

MC-P4c Pupil response, size and shape, and ocular motor function

MC-P4d Body temperature

Acute Care

AC-C1 Explain the legal, moral, and ethical parameters that define the scope of first aid and emergency care and identify the proper roles and responsibilities of the certified athletic trainer.

AC-C2 Describe the availability, content, purpose, and maintenance of contemporary first aid and emergency care equipment.

AC-C3 Determine what emergency care supplies and equipment are necessary for circumstances in which the athletic trainer is the responsible first responder.

AC-C5 Describe the principles and rationale of the initial assessment including the determination of whether the accident scene is safe, what may have happened, and the assessment of airway, breathing, circulation, level of consciousness and other life-threatening conditions.

AC-C6 Differentiate the components of a secondary assessment to determine the type and severity of the injury or illness sustained.

AC-C7 Identify the normal ranges for vital signs.

AC-C8 Describe pathological signs of acute/traumatic injury and illness including, but not limited to, skin temperature, skin color, skin moisture, pupil reaction, and neurovascular function.

AC-C9 Describe the current standards of first aid, emergency care, rescue breathing, and cardiopulmonary resuscitation for the professional rescuer.

AC-C10 Describe the role and function of an automated external defibrillator in the emergency management of acute heart failure and abnormal heart rhythms.

AC-C11 Describe the role and function of supplemental oxygen administration as an adjunct to cardiopulmonary resuscitation techniques.

AC-C12 Describe 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 identify the management of these conditions.

AC-C13 Describe the proper management of external hemorrhage, including the location of pressure points, use of universal precautions, and proper disposal of biohazardous materials.

AC-C14 Identify the signs and symptoms associated with internal hemorrhaging.

AC-C15 Describe the appropriate use of aseptic or sterile techniques, approved sanitation methods, and universal precautions for the cleansing and dressing of wounds.

AC-C16 Describe the injuries and illnesses that require medical referral.

AC-C19 Identify the signs and symptoms of head trauma, including loss of consciousness, changes in standardized neurological function, cranial nerve assessment, and other symptoms that indicate underlying trauma.

AC-21 Define cerebral concussion, list the signs and symptoms of concussions, identify the methods for determining the neurocognitive status of a patient who sustains a concussion and describe contemporary concepts for the management and return-to-participation of a patient who sustains a concussion.

AC-C23 Describe cervical stabilization devices that are appropriate to the circumstances of an injury.

AC-C24 Describe the indications, guidelines, proper techniques and necessary supplies for removing equipment and clothing in order to evaluate and/or stabilize the involved area.

AC-C25 Describe the effective management, positioning, and immobilization of a patient with a suspected spinal cord injury.

AC-C26 Identify the appropriate short-distance transportation method, including immobilization, for an injured patient.

AC-C27 Identify the signs, symptoms, possible causes and proper management of the following:

AC-C27a Different types of shock

AC-C27b Diabetic coma

AC-C27c Seizures

AC-C29 Identify the signs, symptoms, and treatment of patients suffering from adverse reactions to environmental conditions.

AC-C31 Describe the proper immobilization techniques and select appropriate splinting material to stabilize the injured joint or limb and maintain distal circulation.

AC-C32 Describe the proper ambulatory aid and technique for the injury and patient.

AC-P1 Survey the scene to determine whether the area is safe and determine what may have happened.

AC-P2 Perform an initial assessment to assess the following, but not limited to:

AC-P2a Airway

AC-P2b Breathing

AC-P2c Circulation

AC-P2d Level of consciousness

AC-P2e Other life-threatening conditions

AC-P3 Implement appropriate emergency treatment strategies, including but not limited to:

AC-P3a Activate an emergency action plan

AC-P3b Establish and maintain an airway in an infant, child, and adult

AC-P3c Establish and maintain an airway in a patient wearing shoulder pads, headgear or other protective equipment and/or with a suspected spine injury

AC-P3d Perform one- and two-person CPR on an infant, child, and adult

AC-P3e Utilize a bag-valve mask on an infant, child, and adult

AC-P3f Utilize an automated external defibrillator (AED) according to current accepted practice protocols

AC-P3g Normalize body temperature in situations of severe/life-threatening heat or cold stress

AC-P3h Control bleeding using universal precautions

AC-P3i Administer an EpiPen for anaphylactic shock

AC-P4 Perform a secondary assessment and employ the appropriate management techniques for non-life-threatening situations, including but not limited to:

AC-P4a Open and closed wounds (using universal precautions)

AC-P4b Closed-head trauma (using standard neurological tests and tests for cranial nerve function)

AC-P4c Environmental illness

AC-P4d Seizures

AC-P4e Acute asthma attack

AC-P4f Different types of shock

AC-P4g Thoracic, respiratory, and internal abdominal injury or illness

AC-P4i Spinal cord and peripheral nerve injuries

AC-P4j Diabetic coma

AC-P4l Allergic, thermal, and chemical reactions of the skin (including infestations and insect bites)

AC-CP1 Demonstrate the ability to manage acute injuries and illnesses. This will include surveying the scene, conducting an initial assessment, utilizing universal precautions, activating the emergency action plan, implementing appropriate emergency techniques and procedures, conducting a secondary assessment and implementing appropriate first aid techniques and procedures for non-life-threatening situations. Effective lines of communication should be established and the results of the assessment, management and treatment should be documented.

Exercise

EX-C4a The physiological responses of the human body to trauma

Administration

AD-C15 Explain typical administrative policies and procedures that govern first aid and emergency care (e.g., informed consent and incident reports).

EXSS 322: Anatomical Kinesiology

Diagnosis

DI-C4 Explain directional terms and cardinal planes used to describe the body and the relationship of its parts.

DI-C5 Describe the principles and concepts of body movement including functional classification of joints, arthrokinematics, normal ranges of joint motion, joint action terminology, and muscle groups responsible for joint actions (prime movers, synergists), skeletal muscle contraction, and kinesthesia/proprioception.

Exercise

EX-C2 Describe the mechanical principles applied to the design and use of therapeutic exercise equipment and techniques (leverage, force, kinesiology and biomechanics).

EXSS 323: Biomechanics of Sports and Exercise

Diagnosis

DI-C4 Explain directional terms and cardinal planes used to describe the body and the relationship of its parts.

DI-C5 Describe the principles and concepts of body movement including functional classification of joints, arthrokinematics, normal ranges of joint motion, joint action terminology, and muscle groups responsible for joint actions (prime movers, synergists), skeletal muscle contraction, and kinesthesia/proprioception.

DI-C15 Describe and identify postural deformities.

DI-P3 Perform inspection/observation of postural, structural, and biomechanical abnormalities.

Exercise

EX-C4c The anatomical and/or biomechanical alterations resulting from acute and chronic injury and improper mechanics.

EXSS 324: Exercise Physiology

Pathology

PA-C3 Explain normal and abnormal circulation and the physiology of fluid homeostasis.

PA-C6 Describe the body's responses to physical exercise during common diseases, illnesses, and the injury.

Diagnosis

DI-C1 Demonstrate knowledge of the systems of the human body.

DI-C3 Describe the physiological and psychological effects of physical activity and their impact on performance.

Exercise

EX-C4b The physiological effects of inactivity and immobilization on the musculoskeletal, cardiovascular, nervous, and respiratory systems of the human body.

EX-C4d The physiological adaptations induced by the various forms of therapeutic exercise, such as fast-versus slow-twitch muscle fibers.

EXSS 325: Fitness Assessment and Exercise Prescription

Risk Management

RM-C11 Explain the importance and use of standard tests, test equipment, and testing protocol for the measurement of cardiovascular and respiratory fitness, body composition, posture, flexibility, muscular strength, power, and endurance

RM-C12 Explain the components and purpose of periodization within a physical conditioning program

RM-C13 Identify and explain the various types of flexibility, strength training, and cardiovascular conditioning programs. This should include the expected effects (the body's anatomical and physiological adaptation), safety precautions, hazards, and contraindications of each.

RM-C19 Explain the basic principles and concepts of home, school, and workplace ergonomics and their relationship to the prevention of illness and injury.

RM-P1 Instruct the patient how to properly perform fitness tests to assess his or her physical status and readiness for physical activity. Interpret the results of these tests according to requirements established by appropriate governing agencies and/or a physician. These tests should assess:

RM-P1.1 Flexibility

RM-P1.2 Strength

RM-P1.3 Power

RM-P1.4 Muscular Endurance

RM-P1.5 Agility

RM-P1.6 Cardiovascular Endurance

RM-P1.7 Speed

RM-P2 Develop a fitness program appropriate to the patient's needs and selected activity or activities that meet the requirements established by the appropriate governing agency and/or physician for enhancing:

RM-P2.1 Flexibility

RM-P2.6 Agility

RM-P2.7 Cardiovascular Endurance

RM-P2.8 Speed

RM-CP1 Plan, implement, evaluate, and modify a fitness program specific to the physical status of the patient. This will include instructing the patient in proper performance of the activities and the warning signs and symptoms of potential injury that may be sustained. Effective lines of communication shall be established to elicit and convey information about the patient's status and the prescribed program.

While maintaining patient confidentiality, all aspects of the fitness program shall be documented using standardized record-keeping methods.

Nutritional Aspects

NU-C18 Describe the principles and methods of body composition assessment (e.g., skin fold calipers, bioelectric impedance, body mass index [BMI]) to assess a patient's health status and to monitor progress in a weight loss or weight gain program for patients of all ages and in a variety of settings.

NU-P1 Assess body composition by validated technique (e.g., skin fold calipers, bioelectric impedance, BMI, etc.) to assess a patient's health status and to monitor progress during a weight loss or weight gain program.

NU-P2 Calculate energy expenditure, caloric intake, and BMR.

NU-CP1 Demonstrate the ability to counsel a patient in proper nutrition. This may include providing basic nutritional information and/or an exercise and nutrition program for weight gain or weight loss.

The student will demonstrate the ability to take measurements and figure calculations for a weight control plan (e.g., measurement of body composition and BMI, calculation of energy expenditure, caloric intake, and BMR). Armed with basic nutritional data, the student will demonstrate the ability to develop and implement a pre-participation meal and an appropriate exercise and nutritional plan for an active individual. The student will develop an active listening relationship to effectively communicate with the patient and, as appropriate, refer the patient to other medical professionals (physician, nutritionist, counselor or psychologist) as needed.

EXSS 350: Orthopedic Assessment of Upper Extremity Injuries

Risk Management

RM-C1 Explain the risk factors associated with physical activity.

RM-C2 Identify and explain the risk factors associated with common congenital and acquired abnormalities, disabilities, and diseases.

RM-C3 Identify and explain the epidemiology data related to the risk of injury and illness related to participation in physical activity.

RM-C5 Describe the basic concepts and practice of wellness screening.

Pathology

PA-C5 Describe the etiology, pathogenesis, pathomechanics, signs, symptoms, and epidemiology of common orthopedic injuries, illnesses and diseases to the body's systems.

Diagnosis

DI-C6 Describe common techniques and procedures for evaluating common injuries including taking a history, inspection/observation, palpation, functional testing, special evaluation techniques, and neurological and circulatory tests.

DI-C7 Explain the relationship of injury assessment to the systematic observation of the person as a whole.

DI-C8 Describe the nature of diagnostic tests of the neurological function of cranial nerves, spinal nerves, and peripheral nerves using myotomes, dermatomes, and reflexes.

DI-C9 Assess neurological status, including cranial nerve function, myotomes, dermatomes and reflexes, and circulatory status.

DI-C10 Explain the roles of special tests in injury assessment.

DI-C11 Explain the role of postural examination in injury assessment including gait analysis.

DI-C12 Describe strength assessment using resistive range of motion, break tests, and manual muscle testing.

DI-C13 Describe the use of diagnostic tests and imaging techniques based on their applicability in the assessment of an injury when prescribed by a physician.

DI-C15 Describe and identify postural deformities.

DI-C16 Explain medical terminology and abbreviations necessary to communicate with physicians and other health professionals

DI-C17 Describe the components of medical documentation (e.g. SOAP, HIPS and HOPS).

DI-P1 Obtain a medical history of the patient that includes a previous history and a history of the present injury.

DI-P2 Perform inspection/observation of the clinical signs associated with common injuries including deformity, posturing and guarding, edema/swelling, hemarthrosis, and discoloration.

DI-P3 Perform inspection/observation of postural, structural, and biomechanical abnormalities.

DI-P4 Palpate the bones and soft tissues to determine normal or pathological characteristics.

DI-P5 Measure the active and passive joint range of motion using commonly accepted techniques, including the use of a goniometer and inclinometer.

DI-P6 Grade the resisted joint range of motion/manual muscle testing and break tests.

DI-P7 Apply appropriate stress tests for ligamentous or capsular stability, soft tissue and muscle, and fractures.

DI-P8 Apply appropriate special tests for injuries to the specific areas of the body as listed above.

DI-P9 Assess neurological status, including cranial nerve function, myotomes, dermatomes and reflexes, and circulatory status.

DI-P10 Document the results of the assessment including the diagnosis.

DI-CP1.9 Ribs

DI-CP1.10 Cervical Spine

DI-CP1.11 Shoulder Girdle

DI-CP1.12 Upper Arm

DI-CP1.13 Elbow

DI-CP1.14 Forearm

DI-CP1.15 Wrist

DI-CP1.16 Hand, Fingers & Thumb

DI-CP1.18 Temporomandibular Joint

Medical Conditions

MC-P1 Obtain a medical history of the patient that includes a previous history and a history of the present condition.

MC-P2 Perform a visual observation of the clinical signs associated with common injuries and/or illnesses including deformity, edema/swelling, discoloration, and skin abnormalities.

Acute Care

AC-C19 Identify the signs and symptoms of head trauma, including loss of consciousness, changes in standardized neurological function, cranial nerve assessment, and other symptoms that indicate underlying trauma.

AC-C20 Explain the importance of monitoring a patient following a head injury, including obtaining clearance from a physician before further patient participation.

AC-C21 Define cerebral concussion, list the signs and symptoms of concussions, identify the methods for determining the neurocognitive status of a patient who sustains a concussion and describe contemporary concepts for the management and return-to-participation of a patient who sustains a concussion.

AC-C22 Identify 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 and pathology.

AC-C23 Describe cervical stabilization devices that are appropriate to the circumstances of an injury.

AC-C30 Identify information obtained during the examination to determine when to refer an injury or illness for further or immediate medical attention.

AC-P4h Acute musculoskeletal injuries (i.e. sprains, strains, fractures, dislocations)

AC-P4i Spinal cord and peripheral nerve injuries

AC-CP1 Demonstrate the ability to manage acute injuries and illnesses. This will include surveying the scene, conducting an initial assessment, utilizing universal precautions, activating the emergency action plan, implementing appropriate emergency techniques and procedures, conducting a secondary assessment and implementing appropriate first aid techniques and procedures for non-life-threatening situations. Effective lines of communication should be established and the results of the assessment, management and treatment should be documented.

Therapeutic Modalities

TM-C9 Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies to determine appropriate treatment and rehabilitation and to evaluate readiness to return to the appropriate level of activity. This includes the ability to:

TM-C9a Describe and interpret appropriate measurement and assessment procedures as they relate to the selection and application of therapeutic modalities.

TM-C9b Interpret objective measurement results as a basis for developing individualized therapeutic modality application and set-up (parameters).

TM-C9c Interpret the results of injury assessment and determine an appropriate therapeutic modality program to return the patient to physical activity.

TM-C9d Determine the appropriate therapeutic modality program and appropriate therapeutic goals and objectives based on the initial assessment and frequent reassessments.

TM-C9e Determine the criteria for progression and return to activity based on the level of functional outcomes.

TM-C9f Describe appropriate methods of assessing progress when using therapeutic modalities and interpret the results.

Exercise

EX-C3 Describe common surgical techniques, pathology, and any subsequent anatomical alterations that may affect the implementation of a therapeutic exercise program.

EX-C7a Describe and interpret appropriate measurement and functional testing procedures as they relate to the selection and application of therapeutic exercise.

EX-P7 Perform a functional assessment for safe return to physical activity.

Nutritional Aspects

NU-CP1 Demonstrate the ability to counsel a patient in proper nutrition. This may include providing basic nutritional information and/or an exercise and nutrition program for weight gain or weight loss. The student will demonstrate the ability to take measurements and figure calculations for a weight control plan (e.g., measurement of body composition and BMI, calculation of energy expenditure, caloric intake, and BMR). Armed with basic nutritional data, the student will demonstrate the ability to develop and implement a pre-participation meal and an appropriate exercise and nutritional plan for an active individual. The student will develop an active listening relationship to effectively communicate with the patient and, as appropriate, refer the patient to other medical professionals (physician, nutritionist, counselor or psychologist) as needed.

Administration

AD-P5 Use appropriate terminology and medical documentation to record injuries and illnesses (e.g., history and examination findings, progress notes, and others).

AD-P6 Use appropriate terminology to effectively communicate both verbally and in writing with patients, physicians, colleagues, administrators, and parents or family members.

EXSS 351: Orthopedic Assessment of Lower Extremity Injuries

Pathology

PA-C5 Describe the etiology, pathogenesis, pathomechanics, signs, symptoms, and epidemiology of common orthopedic injuries, illnesses and diseases to the body's systems.

Diagnosis

DI-C7 Explain the relationship of injury assessment to the systematic observation of the person as a whole.

DI-C8 Describe the nature of diagnostic tests of the neurological function of cranial nerves, spinal nerves, and peripheral nerves using myotomes, dermatomes, and reflexes.

DI-C9 Assess neurological status, including cranial nerve function, myotomes, dermatomes and reflexes, and circulatory status.

DI-C10 Explain the roles of special tests in injury assessment.

DI-C11 Explain the role of postural examination in injury assessment including gait analysis.

DI-C12 Describe strength assessment using resistive range of motion, break tests, and manual muscle testing.

DI-C13 Describe the use of diagnostic tests and imaging techniques based on their applicability in the assessment of an injury when prescribed by a physician.

DI-C16 Explain medical terminology and abbreviations necessary to communicate with physicians and other health professionals

DI-P1 Obtain a medical history of the patient that includes a previous history and a history of the present injury.

DI-P4 Palpate the bones and soft tissues to determine normal or pathological characteristics.

DI-P5 Measure the active and passive joint range of motion using commonly accepted techniques, including the use of a goniometer and inclinometer.

DI-P6 Grade the resisted joint range of motion/manual muscle testing and break tests.

DI-P7 Apply appropriate stress tests for ligamentous or capsular stability, soft tissue and muscle, and fractures.

DI-P8 Apply appropriate special tests for injuries to the specific areas of the body as listed above.

DI-P9 Assess neurological status, including cranial nerve function, myotomes, dermatomes and reflexes, and circulatory status.

DI-P10 Document the results of the assessment including the diagnosis.

DI-CP1 Demonstrate a musculoskeletal assessment of upper extremity, lower extremity, head/face, and spine (including the ribs) for the purpose of identifying (a) common acquired or congenital risk factors that would predispose the patient to injury and (b) a musculoskeletal injury. This will include identification and recommendations for the correction of acquired or congenital risk factors for injury. At the conclusion of the assessment, the student will diagnose the patient's condition and determine and apply immediate treatment and/or referral in the management of the condition. Effective lines of communication should be established to elicit and convey information about the patient's status. While maintaining patient confidentiality, all aspects of the assessment should be documented using standardized record-keeping methods.

DI-CP1.1 Foot and Toes

DI-CP1.2 Ankle

DI-CP1.3 Lower Leg

DI-CP1.4 Knee (tibiofemoral and patellofemoral)

DI-CP1.5 Thigh

DI-CP1.6 Hip/Pelvis/Sacroiliac Joint

DI-CP1.7 Lumbar Spine

DI-CP1.8 Thoracic Spine

Medical Conditions

MC-P1 Obtain a medical history of the patient that includes a previous history and a history of the present condition.

MC-P2 Perform a visual observation of the clinical signs associated with common injuries and/or illnesses including deformity, edema/swelling, discoloration, and skin abnormalities.

Acute Care

AC-C22 Identify 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 and pathology.

AC-C25 Describe the effective management, positioning, and immobilization of a patient with a suspected spinal cord injury.

AC-P4h Acute musculoskeletal injuries (i.e. sprains, strains, fractures, dislocations)

AC-P4i Spinal cord and peripheral nerve injuries

AC-Cp1 Demonstrate the ability to manage acute injuries and illnesses. This will include surveying the scene, conducting an initial assessment, utilizing universal precautions, activating the emergency action plan, implementing appropriate emergency techniques and procedures, conducting a secondary assessment and implementing appropriate first aid techniques and procedures for non-life-threatening situations. Effective lines of communication should be established and the results of the assessment, management and treatment should be documented.

Therapeutic Modalities

TM-C9 Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies to determine appropriate treatment and rehabilitation and to evaluate readiness to return to the appropriate level of activity. This includes the ability to:

TM-C9a Describe and interpret appropriate measurement and assessment procedures as they relate to the selection and application of therapeutic modalities.

TM-C9b Interpret objective measurement results as a basis for developing individualized therapeutic modality application and set-up (parameters).

TM-C9c Interpret the results of injury assessment and determine an appropriate therapeutic modality program to return the patient to physical activity.

TM-C9d Determine the appropriate therapeutic modality program and appropriate therapeutic goals and objectives based on the initial assessment and frequent reassessments.

TM-C9e Determine the criteria for progression and return to activity based on the level of functional outcomes.

TM-C9f Describe appropriate methods of assessing progress when using therapeutic modalities and interpret the results.

TM-P2 Obtain and interpret baseline and post treatment objective physical measurements to evaluate and interpret results.

Exercise

EX-C3 Describe common surgical techniques, pathology, and any subsequent anatomical alterations that may affect the implementation of a therapeutic exercise program.

EX-C7 Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies in order to determine appropriate treatment and rehabilitation plans and to evaluate the readiness to return to the appropriate level of activity. This includes the ability to:

Administration

AD-P5 Use appropriate terminology and medical documentation to record injuries and illnesses (e.g., history and examination findings, progress notes, and others).

EXSS 358: Athletic Training Practicum

Exercise

EX-C5 Describe the indications, contraindications, theory, and principles for the incorporation and application of various contemporary therapeutic exercise equipment and techniques, including aquatic therapy, manual therapy and mobilization.

EX-C7d Determine the appropriate therapeutic exercise program and appropriate therapeutic goals and objectives based on the initial assessment and frequent reassessments.

EX-P4 Demonstrate the appropriate application of contemporary therapeutic exercises and techniques according to evidence-based guidelines.

EX-CP1.1 Exercises and Techniques to Improve Joint Range of Motion

EX-CP1.6 Exercises to Improve Balance, Neuromuscular Control, and Coordination

EX-CP1.7 Exercises to Improve Agility

EX-CP2.1 Exercises and Techniques to Improve Joint Range of Motion

EX-CP2.6 Exercises to Improve Balance, Neuromuscular Control, and Coordination

EX-CP2.7 Exercises to Improve Agility

EX-CP3.1 Exercises and Techniques to Improve Joint Range of Motion

EX-CP3.6 Exercises to Improve Balance, Neuromuscular Control, and Coordination

EX-CP3.7 Exercises to Improve Agility

EX-CP4.1 Exercises and Techniques to Improve Joint Range of Motion

EX-CP4.6 Exercises to Improve Balance, Neuromuscular Control, and Coordination

EX-CP4.7 Exercises to Improve Agility

Professional Development

PD-C13 Describe and differentiate the types of quantitative and qualitative research and describe the components and process of scientific research (including statistical decision-making) as it relates to athletic training research.

PD-C14 Interpret the current research in athletic training and other related medical and health areas and apply the results to the daily practice of athletic training.

EXSS 359: Athletic Training Practicum

Risk Management

RM-C6 Describe 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.

RM-C15 Describe the components for self-identification of the warning signs of cancer.

Pathology

PA-C5 Describe the etiology, pathogenesis, pathomechanics, signs, symptoms, and epidemiology of common orthopedic injuries, illnesses and diseases to the body's systems.

PA-C6 Describe the body's responses to physical exercise during common diseases, illnesses, and the injury.

Diagnosis

DI-C13 Describe the use of diagnostic tests and imaging techniques based on their applicability in the assessment of an injury when prescribed by a physician.

DI-C16 Explain medical terminology and abbreviations necessary to communicate with physicians and other health professionals

DI-C17 Describe the components of medical documentation (e.g. SOAP, HIPS and HOPS).

DI-P1 Obtain a medical history of the patient that includes a previous history and a history of the present injury.

Medical Conditions

MC-C1 Describe and know when to refer common congenital or acquired abnormalities, physical disabilities, and diseases affecting people who engage in physical activity throughout their life span (e.g., arthritis, diabetes).

MC-C2 Understand the effects of common illnesses and diseases in physical activity.

MC-C3 Describe common techniques and procedures for evaluating common medical conditions and disabilities including taking a history, inspection/observation, palpation, functional testing, special evaluation techniques (e.g., assessing heart, lung and bowel sounds), and neurological and circulatory tests.

MC-C4 Describe and know when to refer common eye pathologies from trauma and/or localized infection (e.g., conjunctivitis, hyphema, corneal injury, stye, scleral trauma).

MC-C5 Describe and know when refer common ear pathologies from trauma and/or localized infection (e.g., otitis, ruptured tympanic membrane, impacted cerumen).

MC-C6 Describe and know when to refer common pathologies of the mouth, sinus, oropharynx, and nasopharynx from trauma and/or localized infection (e.g., gingivitis, sinusitis, laryngitis, tonsillitis, pharyngitis).

MC-C7 Describe and know when to refer common and significant respiratory infections, thoracic trauma, and lung disorders. (e.g., influenza, pneumonia, bronchitis, rhinitis, sinusitis, upper-respiratory infection (URI), pneumothorax, hemothorax, pneumomediastinum, exercise-induced bronchospasm, exercise-induced anaphylaxis, asthma).

MC-C8 Explain the importance and proper use of a peak flow meter or similar device in the evaluation and management of respiratory conditions.

MC-C9 Describe strategies for reducing the frequency and severity of asthma attacks.

MC-C10 Explain the possible causes of sudden death syndrome.

MC-C11 Describe and know when to refer common cardiovascular and hematological medical conditions from trauma, deformity, acquired disease, conduction disorder, and drug abuse (e.g., coronary artery disease, hypertrophic cardiomyopathy, heart murmur, mitral valve prolapse, commotion cordis, Marfan's syndrome, peripheral embolism, hypertension, arrhythmogenic right ventricular dysplasia, Wolf-Parkinson-White syndrome, anemia's, sickle cell anemia and sickle cell trait [including rhabdomyolysis], hemophilia, deep vein thrombosis, migraine headache, syncope).

MC-C12 Describe and know when to refer common medical conditions that affect the gastrointestinal and hepatic-biliary systems from trauma, chemical and drug irritation, local and systemic infections, psychological stress, and anatomic defects (e.g., hepatitis, pancreatitis, dyspepsia, gastroesophageal reflux, peptic ulcer, gastritis and gastroenteritis, inflammatory bowel disease, irritable bowel syndrome, appendicitis, sports hernia, hemorrhoids, splenomegaly, liver trauma).

MC-C13 Describe and know when to refer common medical conditions of the endocrine and metabolic systems from acquired disease and acute and chronic nutritional disorders (e.g., diabetes mellitus and insipidus, hypothyroidism, Cushing's syndrome, thermoregulatory disorders, gout, osteoporosis).

MC-C14 Describe and know when to refer common medical conditions of the renal and urogenital systems from trauma, local infection, congenital and acquired disease, nutritional imbalance, and hormone disorder (e.g., kidney stones, genital trauma, gynecomastia, monorchidism, scrotum and testicular trauma, ovarian and testicular cancer, breast cancer, testicular torsion, varicoceles, endometriosis, pregnancy and ectopic pregnancy, female athlete triad, primary amenorrhea, oligomenorrhea, dysmenorrhea, kidney laceration or contusion, cryptorchidism).

MC-C15 Describe and know when to refer common and/or contagious skin lesions from trauma, infection, stress, drug reaction, and immune responses (e.g., wounds, bacteria lesions, fungal lesions, viral lesions, bites, acne, eczema dermatitis, ringworm).

MC-C16 Describe and know when to refer common medical conditions of the immune system from infection, congenital and acquired disease, and unhealthy lifestyle. (e.g., arthritis, gout, upper respiratory tract infection [URTI], influenza, pneumonia, myocarditis, gastrointestinal infection, urinary tract infection [UTI], sexually transmitted diseases [STDs], pelvic inflammatory disease, meningitis, osteomyelitis, septic arthrosis, chronic fatigue and overtraining, infectious mononucleosis, human immunodeficiency virus (HIV) infection and AIDS, hepatitis B virus infection, allergic reaction and anaphylaxis, childhood infectious diseases [measles, mumps, chickenpox]).

MC-C18 Describe and know when to refer common psychological medical disorders from drug toxicity, physical and emotional stress, and acquired disorders (e.g., substance abuse, eating disorders/disordered eating, depression, bipolar disorder, seasonal affective disorder, anxiety disorders, somatoform disorders, personality disorders, abusive disorders, and addiction).

MC-C19 Describe a plan to access appropriate medical assistance on disease control, notify medical authorities, and prevent disease epidemics.

MC-C20 Describe and know when to refer common cancers (e.g., testicular, breast).

MC-P1 Obtain a medical history of the patient that includes a previous history and a history of the present condition.

MC-P2 Perform a visual observation of the clinical signs associated with common injuries and/or illnesses including deformity, edema/swelling, discoloration, and skin abnormalities.

MC-P3 Palpate the bones and soft tissues, including the abdomen, to determine normal or pathological characteristics.

MC-P4 Apply commonly used special tests and instruments (e.g., otoscope, stethoscope, ophthalmoscope, peak flow meter, chemical “dipsticks” [or similar devices]) and document the results for the assessment of:

MC-P4a Vital signs including respiration (including asthma), pulse and circulation, and blood pressure

MC-P4b Heart, lung, and bowel sounds

MC-P4c Pupil response, size and shape, and ocular motor function

MC-P4d Body temperature

MC-P4e Ear, nose, throat and teeth

MC-P4f Urinalysis

MC-CP1 Demonstrate a general and specific (e.g., head, torso and abdomen) assessment for the purpose of (a) screening and referral of common medical conditions, (b) treating those conditions as appropriate, and (c) when appropriate, determining a patient’s readiness for physical activity. Effective lines of communication should be established to elicit and convey information about the patient’s status and the treatment program. While maintaining confidentiality, all aspects of the assessment, treatment, and determination for activity should be documented using standardized record-keeping methods.

MC-CP1.1 Derma

MC-CP1.2 Head, including the Brain

MC-CP1.3 Face, including the Maxillofacial Region

MC-CP1.4 Thorax, including the heart and lungs

MC-CP1.5 Abdomen, including the abdominal organs, the renal and urogenital systems

MC-CP1.6 Eyes

MC-CP1.7 Ear, Nose, and Throat

Acute Care

AC-C4 Know and be able to use appropriately standard nomenclature of injuries and illnesses.

Ac-C15 Describe the appropriate use of aseptic or sterile techniques, approved sanitation methods, and universal precautions for the cleansing and dressing of wounds.

AC-C27b Diabetic coma

AC-C27c Seizures

AC-C27d Toxic drug overdose

AC-C27e Allergic, thermal, and chemical reactions of the skin (including infestations and insect bites)

AC-C28 Identify the signs and symptoms of serious communicable diseases and describe the appropriate steps to prevent disease transmission.

AC-P3i Administer an EpiPen for anaphylactic shock

AC-P4d Seizures

AC-P4e Acute asthma attack

AC-P4f Different types of shock

AC-P4g Thoracic, respiratory, and internal abdominal injury or illness

AC-P4j Diabetic coma

AC-P4k Toxic drug overdose

AC-P4l Allergic, thermal, and chemical reactions of the skin (including infestations and insect bites)

Therapeutic Modalities

TM-C9g Interpret physician notes, postoperative notes, and physician prescriptions as they pertain to a treatment plan.

Exercise

EX-C4e The physiological responses of additional factors, such as age and disease.

EX-C7g Interpret physician notes, postoperative notes, and physician prescriptions as they pertain to a therapeutic exercise program.

Psychosocial

PS-C14 Explain the potential need for psychosocial intervention and referral when dealing with populations requiring special consideration (to include but not limited to those with exercise-induced asthma, diabetes, seizure disorders, drug allergies and interactions, unilateral organs, physical and/or mental disability).

Administration

AD-P5 Use appropriate terminology and medical documentation to record injuries and illnesses (e.g., history and examination findings, progress notes, and others).

Professional Development

PD-P4 Develop a research project (to include but not limited to case study, clinical research project, literature review) for an athletic training-related topic.

EXSS 370: Psychology of Sport and Physical Activity

Diagnosis

DI-C3 Describe the physiological and psychological effects of physical activity and their impact on performance.

Psychosocial

PS-C1 Explain the psychosocial requirements (i.e., motivation and self-confidence) of various activities that relate to the readiness of the injured or ill individual to resume participation.

PS-C2 Explain the stress-response model and the psychological and emotional responses to trauma and forced inactivity.

PS-C3 Describe the motivational techniques that the athletic trainer must use during injury rehabilitation and reconditioning.

PS-C5 Describe the basic principles of general personality traits, associated trait anxiety, locus of control, and patient and social environment interactions.

PS-C6 Explain the importance of providing health care information to patients, parents/guardians, and others regarding the psychological and emotional well being of the patient.

EXSS 375: Pharmacology in Athletic Training

Medical Conditions

MC-C17 Describe and know when to refer common neurological medical disorders from trauma, anoxia, drug toxicity, infection, and congenital malformation (e.g., concussion, post-concussion syndrome, second-impact syndrome, subdural and epidural hematoma, epilepsy, seizure, convulsion disorder, meningitis, spina bifida, cerebral palsy, chronic regional pain syndrome [CRPS], cerebral aneurysm).

Acute Care

AC-P4k Toxic drug overdose

Pharmacology

PH-C1 Explain the laws, regulations, and procedures that govern storing, transporting, dispensing, and recording prescription and nonprescription medications (Controlled Substance Act, scheduled drug classification, and state statutes).

PH-C2 Identify appropriate pharmaceutical terminology and abbreviations used in the prescription, administration, and dispensing of medications.

PH-C3 Identify information about the indications, contraindications, precautions, and adverse reactions for common prescription and nonprescription medications (including herbal medications) using current pharmacy resources.

PH-C4 Explain the concepts of pharmacokinetics (absorption, distribution, metabolism, and elimination) and the suspected influence that exercise might have on these processes.

PH-C5 Explain the concepts related to bioavailability, half-life, and bioequivalence.

PH-C6 Explain the general pharmacodynamic principles as they relate to the mechanism of drug action and therapeutic effectiveness (e.g. receptor theory, dose-response relationship, potency, and drug interactions).

PH-C7 Describe the common routes used to administer medications (e.g., oral, inhalation, and injection) and their advantages and disadvantages.

PH-C8 Explain the relationship between generic or brand name pharmaceuticals.

PH-C9 Identify medications that might cause possible poisoning, and describe how to activate and follow the locally established poison control protocols.

PH-C10 Explain the known usage patterns, general effects, and short- and long-term adverse effects for the commonly used performance-enhancing substances.

PH-C11 Identify which therapeutic drugs and non-therapeutic substances are banned by sport and/or workplace organizations in order to properly advise patients about possible disqualification and other consequences.

PH-P1 Obtain and communicate patient education materials regarding physician-prescribed medications, over-the-counter drugs, and performance-enhancing substances using appropriate references.

PH-P2 Abide by federal, state, and local regulations for the proper storage, transportation, dispensing (administering where appropriate), and documentation of commonly used medications.

PH-P3 Activate and effectively follow locally established poison control protocols.

Psychosocial

PS-C15 Describe the psychosocial factors that affect persistent pain perception (i.e., emotional state, locus of control, psychodynamic issues, sociocultural factors, and personal values and beliefs) and identify multidisciplinary approaches for managing patients with persistent pain.

EXSS 380: Therapeutic Modalities

Pathology

PA-C1 Describe the essential components of a typical human cell. Include the normal structure and the function of each component and explain the abnormal symptoms associated with injury, illness, and disease.

PA-C2 Explain gross cellular adaptations in response to stress, injury, or disease (e.g., atrophy, hypertrophy, differentiation, hyperplasia, metaplasia, and tumors).

PA-C3 Explain normal and abnormal circulation and the physiology of fluid homeostasis.

PA-C4 Identify the normal acute and chronic physiological and pathological responses (e.g., inflammation, immune response, and healing process) of the human body to trauma, hypoxia, microbiologic agents, genetic derangements, nutritional deficiencies, chemicals, drugs, and aging affecting the musculoskeletal and other organ systems, and musculoskeletal system adaptations to disuse.

Therapeutic Modalities

TM-C1 Describe the physiological and pathological processes of trauma, wound healing and tissue repair and their implications on the selection and application of therapeutic modalities used in a treatment and/or rehabilitation program.

TM-C2 Explain the principles of physics, including basic concepts associated with the electromagnetic and acoustic spectra (e.g., frequency, wavelength) associated with therapeutic modalities.

TM-C3 Explain the terminology, principles, basic concepts, and properties of electric currents as they relate to therapeutic modalities.

TM-C4 Describe contemporary pain-control theories.

TM-C5 Describe the role and function of the common pharmacological agents that are used in conjunction with therapeutic modalities

TM-C6 Explain the body's physiological responses during and following the application of therapeutic modalities.

TM-C7 Describe the electrophysics, physical properties, biophysics, patient preparation and modality set-up (parameters), indications, contraindications, and specific physiological effects associated with commonly used therapeutic modalities.

TM-C8 Identify appropriate therapeutic modalities for the treatment and rehabilitation of injuries and illness.

TM-C9 Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies to determine appropriate treatment and rehabilitation and to evaluate readiness to return to the appropriate level of activity. This includes the ability to:

TM-C9a Describe and interpret appropriate measurement and assessment procedures as they relate to the selection and application of therapeutic modalities.

TM-C9b Interpret objective measurement results as a basis for developing individualized therapeutic modality application and set-up (parameters).

TM-C9c Interpret the results of injury assessment and determine an appropriate therapeutic modality program to return the patient to physical activity.

TM-C9d Determine the appropriate therapeutic modality program and appropriate therapeutic goals and objectives based on the initial assessment and frequent reassessments.

TM-C9e Determine the criteria for progression and return to activity based on the level of functional outcomes.

TM-C9f Describe appropriate methods of assessing progress when using therapeutic modalities and interpret the results.

TM-C9g Interpret physician notes, postoperative notes, and physician prescriptions as they pertain to a treatment plan.

TM-C9h Describe appropriate medical documentation for recording progress in a therapeutic modality program.

TM-C10 Identify manufacturers, institutional, state, and federal standards for the operation and safe application of therapeutic modalities.

TM-C11 Identify manufacturers, institutional, state and federal guidelines for the inspection and maintenance of therapeutic modalities.

TM-P1 Assess patient to identify indications, contraindications, and precautions applicable to the application of therapeutic modalities.

TM-P2 Obtain and interpret baseline and post treatment objective physical measurements to evaluate and interpret results.

TM-P3 Inspect the therapeutic modalities and treatment environment for potential safety hazards.

TM-P4 Position and prepare the patient for the application of therapeutic modalities.

TM-P5 Select and apply appropriate therapeutic modalities according to evidence-based guidelines.

TM-P6 Document treatment goals, expectations, and treatment outcomes.

TM-CP1 Synthesize information obtained in a patient interview and physical examination to determine the indications, contraindications and precautions for the selection, patient set-up, and evidence-based application of therapeutic modalities for acute and chronic injuries. The student will formulate a progressive treatment and rehabilitation plan and appropriately apply the modalities. Effective lines of communication should be established to elicit and convey information about the patient's status and the prescribed modality(s). While maintaining patient confidentiality, all aspects of the treatment plan should be documented using standardized record-keeping methods.

TM-CP1.1 Infrared Modalities

TM-CP1.2 Electrical Stimulation Modalities

TM-CP1.3 Therapeutic Ultrasound

TM-CP1.4 Mechanical Modalities

Exercise

EX-C1 Describe the physiological and pathological processes of trauma, wound healing and tissue repair and their implications on the development, progression and implementation of a therapeutic exercise program.

Psychosocial

PS-C15 Describe the psychosocial factors that affect persistent pain perception (i.e., emotional state, locus of control, psychodynamic issues, sociocultural factors, and personal values and beliefs) and identify multidisciplinary approaches for managing patients with persistent pain.

Professional Development

PD-C13 Describe and differentiate the types of quantitative and qualitative research and describe the components and process of scientific research (including statistical decision-making) as it relates to athletic training research.

PD-C14 Interpret the current research in athletic training and other related medical and health areas and apply the results to the daily practice of athletic training.

PD-P4 Develop a research project (to include but not limited to case study, clinical research project, literature review) for an athletic training-related topic.

EXSS 385: Therapeutic Exercise

Risk Management

RM-C12 Explain the components and purpose of periodization within a physical conditioning program.

RM-C14 Explain the precautions and risks associated with exercise in special populations.

RM-C19 Explain the basic principles and concepts of home, school, and workplace ergonomics and their relationship to the prevention of illness and injury.

RM-P2 Develop a fitness program appropriate to the patient's needs and selected activity or activities that meet the requirements established by the appropriate governing agency and/or physician for enhancing:

RM-P2.1 Flexibility

RM-P2.2 Strength

RM-P2.3 Power

RM-P2.4 Muscular Endurance

RM-P2.6 Agility

RM-P2.7 Cardiovascular Endurance

RM-P2.8 Speed

RM-P3 Instruct a patient regarding fitness exercises and the use of weight training equipment to include correction or modification of inappropriate, unsafe, or dangerous lifting techniques.

Pathology

PA-C2 Explain gross cellular adaptations in response to stress, injury, or disease (e.g., atrophy, hypertrophy, differentiation, hyperplasia, metaplasia, and tumors).

PA-C4 Identify the normal acute and chronic physiological and pathological responses (e.g., inflammation, immune response, and healing process) of the human body to trauma, hypoxia, microbiologic agents, genetic derangements, nutritional deficiencies, chemicals, drugs, and aging affecting the musculoskeletal and other organ systems, and musculoskeletal system adaptations to disuse.

Acute Care

AC-C33 Describe home care and self-treatment plans of acute injuries and illnesses.

Therapeutic Modalities

TM-C1 Describe the physiological and pathological processes of trauma, wound healing and tissue repair and their implications on the selection and application of therapeutic modalities used in a treatment and/or rehabilitation program.

TM-C9 Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies to determine appropriate treatment and rehabilitation and to evaluate readiness to return to the appropriate level of activity. This includes the ability to:

TM-C9e Determine the criteria for progression and return to activity based on the level of functional outcomes.

TM-C9h Describe appropriate medical documentation for recording progress in a therapeutic modality program.

TM-P6 Document treatment goals, expectations, and treatment outcomes.

TM-CP1 Synthesize information obtained in a patient interview and physical examination to determine the indications, contraindications and precautions for the selection, patient set-up, and evidence-based application of therapeutic modalities for acute and chronic injuries. The student will formulate a progressive treatment and rehabilitation plan and appropriately apply the modalities. Effective lines of communication should be established to elicit and convey information about the patient's status and the prescribed modality(s). While maintaining patient confidentiality, all aspects of the treatment plan should be documented using standardized record-keeping methods.

TM-CP1.5 Massage and other Manual Techniques

Exercise

EX-C1 Describe the physiological and pathological processes of trauma, wound healing and tissue repair and their implications on the development, progression and implementation of a therapeutic exercise program.

EX-C2 Describe the mechanical principles applied to the design and use of therapeutic exercise equipment and techniques (leverage, force, kinesiology and biomechanics).

EX-C4 Describe the appropriate selection and application of therapeutic exercises taking the following into consideration:

EX-C4a The physiological responses of the human body to trauma.

EX-C4b The physiological effects of inactivity and immobilization on the musculoskeletal, cardiovascular, nervous, and respiratory systems of the human body.

EX-C4c The anatomical and/or biomechanical alterations resulting from acute and chronic injury and improper mechanics.

EX-C4d The physiological adaptations induced by the various forms of therapeutic exercise, such as fast-versus slow-twitch muscle fibers

EX-C4e The physiological responses of additional factors, such as age and disease

EX-C5 Describe the indications, contraindications, theory, and principles for the incorporation and application of various contemporary therapeutic exercise equipment and techniques, including aquatic therapy, manual therapy and mobilization.

EX-C6 Define the basic components of activity-specific rehabilitation goals, functional progressions, and functional outcomes in a therapeutic exercise program.

EX-C7 Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies in order to determine appropriate treatment and rehabilitation plans and to evaluate the readiness to return to the appropriate level of activity. This includes the ability to:

EX-C7a Describe and interpret appropriate measurement and functional testing procedures as they relate to the selection and application of therapeutic exercise.

EX-C7b Interpret objective measurement results (muscular strength/endurance, range of motion) as a basis for developing an individualized therapeutic exercise program.

EX-C7c Interpret the results of a physical assessment and determine an appropriate therapeutic exercise program to return the patient to physical activity.

EX-C7d Determine the appropriate therapeutic exercise program and appropriate therapeutic goals and objectives based on the initial assessment and frequent reassessments.

EX-C7e Determine the criteria for progression and return to activity based on the level of functional outcomes.

EX-C7f Describe appropriate methods of assessing progress in a therapeutic exercise program and interpret the results.

EX-C7g Interpret physician notes, postoperative notes, and physician prescriptions as they pertain to a therapeutic exercise program.

EX-C7h Describe appropriate medical documentation for recording progress in a therapeutic exercise program.

EX-C9 Describe manufacturers, institutional, state and federal guidelines for the inspection and maintenance of therapeutic exercise equipment.

EX-P1 Assess a patient to determine specific therapeutic exercise indications, contraindications, and precautions.

EX-P2 Obtain and interpret baseline and post-exercise objective physical measurements to evaluate therapeutic exercise progression and interpret results.

EX-P3 Inspect therapeutic exercise equipment to ensure safe operating condition.

EX-P4 Demonstrate the appropriate application of contemporary therapeutic exercises and techniques according to evidence-based guidelines.

EX-P5 Instruct the patient in proper techniques of commonly prescribed therapeutic exercises.

EX-P6 Document rehabilitation goals, progression and functional outcomes.

EX-P7 Perform a functional assessment for safe return to physical activity.

Professional Development

PD-P4 Develop a research project (to include but not limited to case study, clinical research project, literature review) for an athletic training-related topic.

EXSS 394: Professional Activities – Resistance Training Program Design

Risk Management

RM-C11 Explain the importance and use of standard tests, test equipment, and testing protocol for the measurement of cardiovascular and respiratory fitness, body composition, posture, flexibility, muscular strength, power, and endurance.

RM-C13 Identify and explain the various types of flexibility, strength training, and cardiovascular conditioning programs. This should include the expected effects (the body's anatomical and physiological adaptation), safety precautions, hazards, and contraindications of each.

RM-P1 Instruct the patient how to properly perform fitness tests to assess his or her physical status and readiness for physical activity. Interpret the results of these tests according to requirements established by appropriate governing agencies and/or a physician. These tests should assess:

RM-P1.1 Flexibility

RM-P1.2 Strength

RM-P1.3 Power

RM-P1.4 Muscular Endurance

RM-P1.5 Agility

RM-P1.6 Cardiovascular Endurance

RM-P1.7 Speed

RM-P2.2 Strength

RM-P2.3 Power

RM-P2.4 Muscular Endurance

RM-P2.6 Agility

RM-P2.7 Cardiovascular Endurance

RM-P2.8 Speed

RM-P3 Instruct a patient regarding fitness exercises and the use of weight training equipment to include correction or modification of inappropriate, unsafe, or dangerous lifting techniques.

Exercise

EX-C7b Interpret objective measurement results (muscular strength/endurance, range of motion) as a basis for developing an individualized therapeutic exercise program.

EX-C7c Interpret the results of a physical assessment and determine an appropriate therapeutic exercise program to return the patient to physical activity.

EX-C7e Determine the criteria for progression and return to activity based on the level of functional outcomes.

EX-C7f Describe appropriate methods of assessing progress in a therapeutic exercise program and interpret the results.

EX-P1 Assess a patient to determine specific therapeutic exercise indications, contraindications, and precautions.

EX-P2 Obtain and interpret baseline and post-exercise objective physical measurements to evaluate therapeutic exercise progression and interpret results.

EX-P5 Instruct the patient in proper techniques of commonly prescribed therapeutic exercises.

EX-P6 Document rehabilitation goals, progression and functional outcomes

EX-CP Synthesize information obtained in a patient interview and physical examination to determine the indications, contraindications and precautions for the selection, application, and evidence-based design of a therapeutic exercise program for injuries to the upper extremity, lower extremity, trunk, and spine. The student will formulate a progressive rehabilitation plan and appropriately demonstrate and/or instruct the exercises and/or techniques to the patient. Effective lines of communication should be

established to elicit and convey information about the patient's status and the prescribed exercise(s). While maintaining patient confidentiality, all aspects of the exercise plan should be documented using standardized record-keeping methods.

EX-CP1 Program for injuries to the upper extremity

EX-CP1.1 Exercises and Techniques to Improve Joint Range of Motion

EX-CP1.2 Exercises to Improve Muscular Strength

EX-CP1.3 Exercises to Improve Muscular Endurance

EX-CP1.4 Exercises to Improve Muscular Speed

EX-CP1.5 Exercises to Improve Muscular Power

EX-CP1.6 Exercises to Improve Balance, Neuromuscular Control, and Coordination

EX-CP1.7 Exercises to Improve Agility

EX-CP1.8 Exercises to Improve Cardiorespiratory Endurance

EX-CP1.9 Exercises to Improve Activity-Specific Skills, including Ergonomics and Work Hardening

EX-CP2 Program for injuries to the lower extremity

EX-CP2.1 Exercises and Techniques to Improve Joint Range of Motion

EX-CP2.2 Exercises to Improve Muscular Strength

EX-CP2.3 Exercises to Improve Muscular Endurance

EX-CP2.4 Exercises to Improve Muscular Speed

EX-CP2.5 Exercises to Improve Muscular Power

EX-CP2.6 Exercises to Improve Balance, Neuromuscular Control, and Coordination

EX-CP2.7 Exercises to Improve Agility

EX-CP2.8 Exercises to Improve Cardiorespiratory Endurance

EX-CP2.9 Exercises to Improve Activity-Specific Skills, including Ergonomics and Work Hardening

EX-CP3 Program for injuries to the trunk

EX-CP3.1 Exercises and Techniques to Improve Joint Range of Motion

EX-CP3.2 Exercises to Improve Muscular Strength

EX-CP3.3 Exercises to Improve Muscular Endurance

EX-CP3.4 Exercises to Improve Muscular Speed

EX-CP3.5 Exercises to Improve Muscular Power

EX-CP3.6 Exercises to Improve Balance, Neuromuscular Control, and Coordination

EX-CP3.7 Exercises to Improve Agility

EX-CP3.8 Exercises to Improve Cardiorespiratory Endurance

EX-CP3.9 Exercises to Improve Activity-Specific Skills, including Ergonomics and Work Hardening

EX-CP4 Program for injuries to the spine

EX-CP4.1 Exercises and Techniques to Improve Joint Range of Motion

EX-CP4.2 Exercises to Improve Muscular Strength

EX-CP4.3 Exercises to Improve Muscular Endurance

EX-CP4.4 Exercises to Improve Muscular Speed

EX-CP4.5 Exercises to Improve Muscular Power

EX-CP4.6 Exercises to Improve Balance, Neuromuscular Control, and Coordination

EX-CP4.7 Exercises to Improve Agility

EX-CP4.8 Exercises to Improve Cardiorespiratory Endurance

EX-CP4.9 Exercises to Improve Activity-Specific Skills, including Ergonomics and Work Hardening

EXSS 410: Internship

Risk Management

RM-CP2 Select, apply, evaluate, and modify appropriate standard protective equipment and other custom devices for the patient in order to prevent and/or minimize the risk of injury to the head, torso, spine and extremities for safe participation in sport and/or physical activity. Effective lines of communication shall be established to elicit and convey information about the patient's situation and the importance of protective devices to prevent and/or minimize injury.

Psychosocial

PS-CP1 Demonstrate the ability to conduct an intervention and make the appropriate referral of an individual with a suspected substance abuse or other mental health problem. Effective lines of communication should be established to elicit and convey information about the patient's status. While maintaining patient confidentiality, all aspects of the intervention and referral should be documented using standardized record-keeping methods.

Nutritional Aspects

NU-C14 Describe disordered eating and eating disorders (i.e., signs, symptoms, physical and psychological consequences, referral systems).

Administration

AD-C19 Describe strategic processes and effective methods for promoting the profession of athletic training and those services those athletic trainers perform in a variety of practice settings (e.g., high schools and colleges, professional and industrial settings, hospitals and community-based health care facilities, etc.).

Professional Development

PD-C10 Identify the issues and concerns regarding the health care of patients (e.g., public relations, third-party payment, and managed care).

PD-C1 Identify and access available educational materials and programs in health-related subject matter areas (audiovisual aids, pamphlets, newsletters, computers, software, workshops, and seminars).

PD-C12 Summarize the principles of planning and organizing workshops, seminars, and clinics in athletic training and sports medicine for health care personnel, administrators, other appropriate personnel, and the general public.

PD-P1 Collect and disseminate injury prevention and health care information to health care professionals, patients, parents/guardians, other appropriate personnel and the general public (e.g., team meetings, parents' nights, parent/teacher organization [PTO] meetings, booster club meetings, workshops, and seminars).

PD-P3 Develop and present material (oral, pamphlet/handout, written article, or other media type) for an athletic training-related topic.

PD-P4 Develop a research project (to include but not limited to case study, clinical research project, literature review) for an athletic training-related topic.

EXSS 411: Movement Skill Learning and Control

Diagnosis

DI-C2 Describe the anatomical and physiological growth and development characteristics as well as gender differences across the lifespan.

EXSS 444: Adapted Physical Activity

Risk Management

RM-C2 Identify and explain the risk factors associated with common congenital and acquired abnormalities, disabilities, and diseases.

RM-C14 Explain the precautions and risks associated with exercise in special populations.

EXSS 452: Athletic Training Program Management

Risk Management

RM-C4 Identify and explain the recommended or required components of a pre-participation examination based on appropriate authorities' rules, guidelines, and/or recommendations.

RM-C5 Describe the basic concepts and practice of wellness screening.

RM-C9 Explain the accepted guidelines, recommendations, and policy and position statements of applicable governing agencies related to activity during extreme weather conditions.

RM-CP3 Demonstrate the ability to develop, implement, and communicate effective policies and procedures to allow safe and efficient physical activity in a variety of environmental conditions. This will include obtaining, interpreting, and recognizing potentially hazardous environmental conditions and making the appropriate recommendations for the patient and/or activity. Effective lines of communication shall be established with the patient, coaches and/or appropriate officials to elicit and convey information about the potential hazard of the environmental condition and the importance of implementing appropriate strategies to prevent injury.

Therapeutic Modalities

TM-C11 Identify manufacturers, institutional, state and federal guidelines for the inspection and maintenance of therapeutic modalities.

TM-P3 Inspect the therapeutic modalities and treatment environment for potential safety hazards.

Exercise

EX-C9 Describe manufacturers, institutional, state and federal guidelines for the inspection and maintenance of therapeutic exercise equipment.

Pharmacology

PH-C11 Identify which therapeutic drugs and non-therapeutic substances are banned by sport and/or workplace organizations in order to properly advise patients about possible disqualification and other consequences.

PH-P1 Obtain and communicate patient education materials regarding physician-prescribed medications, over-the-counter drugs, and performance-enhancing substances using appropriate references.

PH-P2 Abide by federal, state, and local regulations for the proper storage, transportation, dispensing (administering where appropriate), and documentation of commonly used medications.

PH-P3 Activate and effectively follow locally established poison control protocols.

Psychosocial

PS-C7 Describe the roles and function of various community-based health care providers (to include, but not limited, to: psychologists, counselors, social workers, human resources personnel) and the accepted protocols that govern the referral of patients to these professionals.

PS-C8 Describe the theories and techniques of interpersonal and cross-cultural communication among athletic trainers, their patients, and others involved in the health care of the patient.

PS-C9 Explain the basic principles of counseling (discussion, active listening, and resolution) and the various strategies that certified athletic trainers may employ to avoid and resolve conflicts among superiors, peers, and subordinates.

PS-C10 Identify the symptoms and clinical signs of common eating disorders and the psychological and sociocultural factors associated with these disorders.

PS-C11 Identify and describe the sociological, biological and psychological influences toward substance abuse, addictive personality traits, the commonly abused substances, the signs and symptoms associated with the abuse of these substances, and their impact on an individual's health and physical performance

Administration

AD-C1 Describe organization and administration of pre-participation physical examinations and screening including, but not limited to, developing assessment and record-keeping forms that include the minimum recommendations from recognized health and medical organizations, scheduling of appropriate health and medical personnel, and efficient site use.

AD-C2 Identify components of a medical record (e.g., emergency information, treatment documentation, epidemiology, release of medical information, etc.), common medical record-keeping techniques and strategies, and strengths and weaknesses of each approach and the associated implications of privacy statutes (Health Insurance Portability and Accountability Act [HIPAA] and Federal Educational Rights Privacy Act [FERPA]).

AD-C3 Identify current injury/illness surveillance and reporting systems.

AD-C4 Identify common human resource policy and federal legislation regarding employment (e.g., The Americans with Disabilities Act, Family Medical Leave Act, FERPA, Fair Labor Standards Act, Affirmative Action, Equal Employment Opportunity Commission).

AD-C5 Describe duties of personnel management, including (1) recruitment and selection of employees, (2) retention of employees, (3) development of policies-and-procedures manual, (4) employment performance evaluation, 5) compliance with nondiscriminatory and unbiased employment practices.

AD-C6 Identify principles of recruiting, selecting, and employing physicians and other medical and allied health care personnel in the deployment of health care services.

AD-C7 Describe federal and state infection control regulations and guidelines, including universal precautions as mandated by the Occupational Safety and Health Administration (OSHA), for the prevention, exposure, and control of infectious diseases and discuss how they apply to the athletic trainer.

AD-C8 Identify key accrediting agencies for health care facilities (e.g., Joint Commission on Accreditation of Healthcare Organizations [JCAHO], Commission on Accreditation of Rehabilitation Facilities [CARF] and allied health education programs (e.g., Commission on Accreditation of Athletic Training Education [CAATE]) and describe their function in the preparation of health care professionals and the overall delivery of health care.

AD-C9 Identify and describe technological needs of an effective athletic training service and the commercial software and hardware that are available to meet these needs.

AD-C10 Describe the various types of health insurance models (e.g., health maintenance organization [HMO], preferred provider organization [PPO], fee-for-service, cash, and Medicare) and the common benefits and exclusions identified within these models.

AD-C11 Describe the concepts and procedures for third-party insurance reimbursement including the use of diagnostic (ICD-9-CM) and procedural (CPT) coding.

AD-C13 Describe basic architectural considerations that relate to the design of safe and efficient clinical practice settings and environments.

AD-C14 Describe vision and mission statements to focus service or program aspirations and strategic planning (e.g., "weaknesses, opportunities, threats and strengths underlying planning" [WOTS UP],

“strengths, weaknesses, opportunities and threats” [SWOT]) to critically bring out organizational improvement.

AD-C15 Explain typical administrative policies and procedures that govern first aid and emergency care (e.g., informed consent and incident reports).

AD-C16 Identify and describe basic components of a comprehensive emergency plan for the care of acutely injured or ill patients, which include (1) emergency action plans for each setting or venue; (2) personnel education and rehearsal; (2) emergency care supplies and equipment appropriate for each venue; (3) availability of emergency care facilities; (4) communication with onsite personnel and notification of EMS; (5) the availability, capabilities, and policies of community-based emergency care facilities and community-based managed care systems; (6) transportation; (7) location of exit and evacuation routes; (8) activity or event coverage; and (9) record keeping.

AD-C17 Explain basic legal concepts as they apply to a medical or allied health care practitioner’s responsibilities (e.g., standard of care, scope of practice, liability, negligence, informed consent and confidentiality, and others).

AD-C18 Identify components of a comprehensive risk management plan that addresses the issues of security, fire, electrical and equipment safety, emergency preparedness, and hazardous chemicals.

AD-C19 Describe strategic processes and effective methods for promoting the profession of athletic training and those services that athletic trainers perform in a variety of practice settings (e.g., high schools and colleges, professional and industrial settings, hospitals and community-based health care facilities, etc.).

AD-C20 Differentiate the roles and responsibilities of the athletic trainer from those of other medical and allied health personnel who provide care to patients involved in physical activity and describe the necessary communication skills for effectively interacting with these professionals.

AD-C21 Describe role and functions of various community-based medical, paramedical, and other health care providers and protocols that govern the referral of patients to these professionals.

AD-C22 Describe basic components of organizing and coordinating a drug testing and screening program, and identify the sources of current banned-drug lists published by various associations.

AD-P1 Develop risk management plans, including facility design, for safe and efficient health care facilities.

AD-P2 Develop a risk management plan that addresses issues of liability reduction; security, fire, and facility hazards; electrical and equipment safety; and emergency preparedness.

AD-P3 Develop policy and write procedures to guide the intended operation of athletic training services within a health care facility.

AD-P4 Demonstrate the ability to access medical and health care information through electronic media.

AD-P5 Use appropriate terminology and medical documentation to record injuries and illnesses (e.g., history and examination findings, progress notes, and others).

AD-P6 Use appropriate terminology to effectively communicate both verbally and in writing with patients, physicians, colleagues, administrators, and parents or family members.

AD-P7 Use a comprehensive patient-file management system that incorporates both paper and electronic media for purposes of insurance records, billing, and risk management.

AD-P8 Develop operational and capital budgets based on a supply inventory and needs assessment.

Professional Development

PD-C1 Explain the role and function of state athletic training practice acts and registration, licensure, and certification agencies including (1) basic legislative processes for the implementation of practice acts, (2) rationale for state regulations that govern the practice of athletic training, and (3) consequences of violating federal and state regulatory acts.

PD-C2 Describe the process of attaining and maintaining national and state athletic training professional credentials.

PD-C3 Describe the current professional development requirements for the continuing education of athletic trainers and how to locate available, approved continuing education opportunities.

PD-C4 Describe the role and function of the governing structures of the National Athletic Trainers' Association.

PD-C5 Differentiate the essential documents of the national governing, certifying, and accrediting bodies, including, but not limited to, the Athletic Training Educational Competencies, Standards of Practice, Code of Ethics, Role Delineation Study, and the Standards for the Accreditation of Entry-Level Athletic Training Education Programs.

PD-C6 Summarize the position statements regarding the practice of athletic training.

PD-C7 Describe the role and function of the professional organizations and credentialing agencies that impact the athletic training profession.

PD-C8 Summarize the current requirements for the professional preparation of the athletic trainer.

PD-C10 Identify the issues and concerns regarding the health care of patients (e.g., public relations, third-party payment, and managed care).

PD-C11 Identify and access available educational materials and programs in health-related subject matter areas (audiovisual aids, pamphlets, newsletters, computers, software, workshops, and seminars).

PD-C12 Summarize the principles of planning and organizing workshops, seminars, and clinics in athletic training and sports medicine for health care personnel, administrators, other appropriate personnel, and the general public.

PD-C15 Identify the components of, and the techniques for constructing, a professional resume.

PD-C17 Describe the theories and techniques of interpersonal and cross-cultural communication among athletic trainers, patients, administrators, health care professionals, parents/guardians, and other appropriate personnel.

PD-P1 Collect and disseminate injury prevention and health care information to health care professionals, patients, parents/guardians, other appropriate personnel and the general public (e.g., team meetings, parents' nights, parent/teacher organization [PTO] meetings, booster club meetings, workshops, and seminars).

PD-P2 Access by various methods the public information policy-making and governing bodies used in the guidance and regulation of the profession of athletic training (including but not limited to state regulatory boards, NATA, BOC).

PD-P3 Develop and present material (oral, pamphlet/handout, written article, or other media type) for an athletic training-related topic.

NUTR 240: Human Nutrition

Nutritional Aspects

NU-C2 Describe the USDA's "My Pyramid" and explain how this can be used in performing a basic dietary analysis and creating a dietary plan for a patient.

NU-C3 Identify and describe primary national organizations responsible for public and professional nutritional information.

NU-C5 Describe common illnesses and injuries that are attributed to poor nutrition (e.g., effects of poor dietary habits on bone loss, on injury, on long-term health, and on other factors).

NU-C7 Explain principles of nutrition as they relate to the dietary and nutritional needs of the patient (e.g., role of fluids, electrolytes, vitamins, minerals, carbohydrates, protein, fat, and others).

NU-C8 Explain the physiological processes and time factors involved in the digestion, absorption, and assimilation of food, fluids, and nutritional supplements. Further, relate these processes and time factors to the design and planning of pre-activity and post-activity meals, menu content, scheduling, and the effect of other non-exercise stresses before activity.

NU-C10 Explain implications of FDA regulation of nutritional products.
NU-C15 Identify effects of macronutrients (e.g., saturated fats, incomplete proteins, and complex carbohydrates) on performance, health, and disease.
NU-C16 Describe signs, symptoms, and physiological effects of mineral deficiency (e.g., iron, and calcium), and identify foods high in specific mineral content.
NU-C17 Identify and explain food label Daily Value recommendations and common food sources of essential vitamins and minerals in using current USDA Dietary Guidelines.
NU-P3 Provide educational information about basic nutritional concepts, facts, needs, and food labels for settings associated with physically active individuals of a wide range of ages and needs.

NUTR 341: Nutrition for Exercise

Nutritional Aspects

NU-C2 Describe the USDA's "My Pyramid" and explain how this can be used in performing a basic dietary analysis and creating a dietary plan for a patient.
NU-C3 Identify and describe primary national organizations responsible for public and professional nutritional information.
NU-C4 Identify nutritional considerations in rehabilitation, including nutrients involved in healing and nutritional risk factors (e.g., reduced activity with the same dietary regimen and others).
NU-C5 Describe common illnesses and injuries that are attributed to poor nutrition (e.g., effects of poor dietary habits on bone loss, on injury, on long-term health, and on other factors).
NU-C6 Explain energy and nutritional demands of specific activities and the nutritional demands placed on the patient.
NU-C7 Explain principles of nutrition as they relate to the dietary and nutritional needs of the patient (e.g., role of fluids, electrolytes, vitamins, minerals, carbohydrates, protein, fat, and others).
NU-C8 Explain the physiological processes and time factors involved in the digestion, absorption, and assimilation of food, fluids, and nutritional supplements. Further, relate these processes and time factors to the design and planning of pre-activity and post-activity meals, menu content, scheduling, and the effect of other non-exercise stresses before activity.
NU-C9 Describe the principles, advantages, and disadvantages of ergogenic aids and dietary supplements used in an effort to improve physical performance.
NU-C10 Explain implications of FDA regulation of nutritional products.
NU-C11 Identify and interpret pertinent scientific nutritional comments or position papers (e.g., healthy weight loss, fluid replacement, pre-event meals, and others).
NU-C12 Explain principles of weight control for safe weight loss and weight gain, and explain common misconceptions regarding the use of food, fluids, and nutritional supplements in weight control.
NU-C13 Explain consequences of improper fluid replacement.
NU-C14 Describe disordered eating and eating disorders (i.e., signs, symptoms, physical and psychological consequences, referral systems).
NU-C18 Describe the principles and methods of body composition assessment (e.g., skin fold calipers, bioelectric impedance, body mass index [BMI]) to assess a patient's health status and to monitor progress in a weight loss or weight gain program for patients of all ages and in a variety of settings.
NU-C19 Explain the relationship between basal metabolic rate, caloric intake, and energy expenditure in the use of the Food Pyramid Guidelines.
NU-C20 Identify the nutritional benefits and costs of popular dietary regimen for weight gain, weight loss, and performance enhancement.
NU-P2 Calculate energy expenditure, caloric intake, and BMR.

NU-P3 Provide educational information about basic nutritional concepts, facts, needs, and food labels for settings associated with physically active individuals of a wide range of ages and needs.

NU-CP2 Demonstrate the ability to recognize disordered eating and eating disorders, establish a professional helping relationship with the patient, interact through support and education, and encourage vocal discussion and other support through referral to the appropriate medical professionals.

Z 341: Human Anatomy and Physiology Laboratory

Pathology

PA-C1 Describe the essential components of a typical human cell. Include the normal structure and the function of each component and explain the abnormal symptoms associated with injury, illness, and disease.

PA-C3 Explain normal and abnormal circulation and the physiology of fluid homeostasis.

Diagnosis

DI-C1 Demonstrate knowledge of the systems of the human body.

HHS 231: Lifetime Fitness for Health

Risk Management

RM-C6 Describe 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.

RM-C15 Describe the components for self-identification of the warning signs of cancer.

Diagnosis

DI-C2 Describe the anatomical and physiological growth and development characteristics as well as gender differences across the lifespan.

Psychosocial

PS-C4 Describe the basic principles of mental preparation, relaxation, visualization, and desensitization techniques.

Nutritional Aspects

NU-C12 Explain principles of weight control for safe weight loss and weight gain, and explain common misconceptions regarding the use of food, fluids, and nutritional supplements in weight control.

NU-C15 Identify effects of macronutrients (e.g., saturated fats, incomplete proteins, and complex carbohydrates) on performance, health, and disease.

NU-C17 Identify and explain food label Daily Value recommendations and common food sources of essential vitamins and minerals in using current USDA Dietary Guidelines.

NU-C19 Explain the relationship between basal metabolic rate, caloric intake, and energy expenditure in the use of the Food Pyramid Guidelines.

NU-C20 Identify the nutritional benefits and costs of popular dietary regimens for weight gain, weight loss, and performance enhancement.

PSY 201: General Psychology

Psychosocial

PS-C11 Identify and describe the sociological, biological and psychological influences toward substance abuse, addictive personality traits, the commonly abused substances, the signs and symptoms associated with the abuse of these substances, and their impact on an individual's health and physical performance

PS-C12 Describe 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), the contemporary personal, school, and community health service agencies, such as community-based psychological and social support services that treat these conditions and the appropriate referral procedures for accessing these health service agencies.

PS-C13 Describe the acceptance and grieving processes that follow a catastrophic event and the need for a psychological intervention and referral plan for all parties affected by the event.