

## General Medical /Pathology Clinical

### PROFICIENCIES TAUGHT

#### Acute Care of Injuries and Illnesses

- 4 - 1: The student will evaluate and manage the following:
- a. heat exhaustion
  - b. heat syncope
  - c. heat stroke
  - d. hypothermia

#### Pharmacology

- 3 - 1: Replicate the following procedures for using an emergency epinephrine injection to prevent anaphylaxis:
- a. identify indications for an epinephrine injection
  - b. demonstrate proper use through verbal and nonverbal instruction
  - c. identify signs and symptoms that might indicate an allergic reaction to or overdose of epinephrine
  - d. demonstrate proper storage of epinephrine injectable
  - e. demonstrate proper disposal of used injection system
- 3 - 2: Replicate the following procedures for using an emergency bronchodilator (inhaler) to prevent asthma attacks:
- a. identify indications for use of a bronchodilator
  - b. demonstrate proper use through verbal and nonverbal instruction
  - c. identify signs and symptoms that might indicate an allergic reaction to or overdose of a bronchodilator
  - d. demonstrate proper storage of a bronchodilator

#### General Medical Conditions and Disabilities

- 1 - 1: Obtain a basic medical history that includes the following components:
- a. previous medical history
  - b. previous surgical history
  - c. pertinent family medical history
  - d. current medication history
  - e. relevant social history
  - f. chief medical complaint
- 1 - 2: Ascertain body temperature via the following:
- a. oral temperature
  - b. axillary temperature
  - c. tympanic temperature
- 1 - 3: Ascertain the following vital signs:
- a. blood pressure
  - b. pulse (rate and quality)
  - c. respirations (rate and quality)
- 1 - 5A: Use a stethoscope to identify the following:
- a. normal breath sounds
- 1 - 5C: Use a stethoscope to identify the following:
- c. normal bowel sounds
- 1 - 6: Identify pathological breathing patterns to make a differential assessment for the following respiratory conditions:
- a. apnea
  - b. tachypnea
  - c. hyperventilation
  - d. bradypnea
  - e. dyspnea
  - f. obstructed airway
- 1 - 7: Demonstrate proficiency in the use of an otoscope to examine the nose and the outer and middle ear.
- 1 - 8: Measure urine values with Chemstrips (dipsticks)
- 1 - 91: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

The Skin

[See List]

1 - 92: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

The Eyes, Ears, Nose, and Throat

- a. common cold
- b. conjunctivitis
- c. laryngitis
- d. pharyngitis
- e. rhinitis
- f. sinusitis
- g. tetanus
- h. tonsillitis

1 - 93: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Respiratory System

- a. asthma
- b. bronchitis
- c. hyperventilation
- d. hay fever
- e. influenza
- f. pneumonia
- g. upper respiratory infection (URI)

1 - 94: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Cardiovascular System

- a. hypertension
- b. hypertrophic cardiomyopathy
- c. hypotension
- d. migraine headache
- e. shock
- f. syncope

1 - 95: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Endocrine System

- a. diabetes
- b. hyperthyroidism
- c. hypothyroidism
- d. pancreatitis

1 - 96: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Gastrointestinal Tract

- a. appendicitis
- b. colitis
- c. constipation
- d. diarrhea
- e. esophageal reflux
- f. gastritis
- g. gastroenteritis
- h. indigestion
- i. ulcer
- j. irritable bowel syndrome

1 - 97: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Eating Disorders

- a. anorexia
- b. bulimia
- c. obesity

1 - 98: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Sexually Transmitted Diseases/Diseases Transmitted by Body Fluid

- a. HIV/AIDS
- d. genital warts

- b. hepatitis
- c. chlamydia
- e. gonorrhea
- f. syphilis

1 - 99: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Genitourinary Tract and Organs

- a. kidney stones
- b. spermatic cord torsion
- c. candidiasis
- d. urethritis
- e. urinary tract infection
- f. hydrocele
- g. varicocele

1 - 910: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Gynecological Disorders

- a. amenorrhea
- b. dysmenorrhea
- c. oligomenorrhea
- d. pelvic inflammatory disease
- e. vaginitis

1 - 911: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Viral Syndromes

- a. infectious mononucleosis
- b. measles
- c. mumps

1 - 912: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Neurological Disorders

- a. epilepsy
- b. syncope
- c. reflex sympathetic dystrophy
- d. meningitis

1 - 913: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

Systemic Diseases

- a. iron-deficiency anemia
- b. sickle cell anemia
- c. Lyme disease

**Nutritional Aspects**

1 - 6: Simulate intervention with an individual who has the signs and symptoms of disordered eating.

1 - 7: Identify proper referral sources for disordered eating.

**PROFICIENCIES EVALUATED**

**Risk Management and Injury Prevention**

1 - 1C :The student will assess the following:

- c. blood pressure

1 - 1D :The student will assess the following:

- d. pulse

1 - 1G :The student will assess the following:

g. vision using a Snellen eye chart

### **Acute Care of Injuries and Illnesses**

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### **Pharmacology**

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- a. blood pressure                                  b. pulse (rate and quality)
  - c. respirations (rate and quality)
- 1 - 4 :Palpate the four abdominal quadrants to assess for the following:
- a. guarding and rigidity
  - b. pain
- 1 - 5A :Use a stethoscope to identify the following:
- a. normal breath sounds
- 1 - 5B :Use a stethoscope to identify the following:
- b. normal heart sounds
- 1 - 5C :Use a stethoscope to identify the following:
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| c. hyperventilation | g. upper respiratory infection (URI) |
| d. hay fever        |                                      |

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| b. hypertrophic cardiomyopathy | e. shock             |
| c. hypotension                 | f. syncope           |

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| b. hyperthyroidism | d. pancreatitis   |

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|----------------------|-----------------------------|
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| b. colitis           | g. gastroenteritis          |
| c. constipation      | h. indigestion              |
| d. diarrhea          | i. ulcer                    |
| e. esophageal reflux | j. irritable bowel syndrome |

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# Physiology of Exercise

## PROFICIENCIES TAUGHT

### Therapeutic Exercise

- 1 - 8L: Exercise to improve cardiorespiratory endurance.  
The student will demonstrate the ability to instruct the following activities:  
Lower Body
  - a. bicycle ergometer
  - b. treadmill
  - c. stair climber
  - d. aquatic

### General Medical Conditions and Disabilities

- 1 - 97: Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:  
  
Eating Disorders
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  - c. obesity

### Nutritional Aspects

- 1 - 1: The student will demonstrate the ability to access and recommend nutritional guidelines for the following:
  - a. pre-participation meal
  
- 1 - 1B: The student will demonstrate the ability to access and recommend nutritional guidelines for the following:
  - b. weight loss
  - c. weight gain
  
- 1 - 1D: The student will demonstrate the ability to access and recommend nutritional guidelines for the following:
  - d. fluid replacement
  
- 1 - 2: The student will demonstrate the ability to use the nutritional food pyramid.

### Psychosocial Intervention And Referral

- 1 - 4: The student will demonstrate the ability to determine energy expenditure and caloric intake.

### Nutritional Aspects

- 1 - 5: The student will demonstrate the ability to calculate the basal metabolic rate of energy expenditure.

## PROFICIENCIES EVALUATED

### Risk Management and Injury Prevention

- 1 - 1H : The student will assess the following:
  - h. body composition, using a manual skinfold caliper and appropriate formulas
  
- 2 - 1B : The student will demonstrate the ability to perform and evaluate the results of the following tests:
  - b. strength (repetition) testing
  
- 3 - 1 :
  - a. use a sling psychrometer
  - b. use a wet bulb globe index
  - c. interpret and present environmental data for the following conditions: heat; wind; humidity; potential for lightning strike; cold; poor air quality
  - d. check an activity setting for physical and/or environmental hazards
  - e. use and interpret weight charts

### Assessment and Evaluation

- 1 - 3 :The student will identify and classify body types as
- endomorph
  - ectomorph
  - mesomorph

#### **Therapeutic Exercise**

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Lower Body
- bicycle ergometer
  - treadmill
  - stair climber
  - aquatic

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- pre-participation meal
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- weight loss
  - weight gain
- 1 - 1D :The student will demonstrate the ability to access and recommend nutritional guidelines for the following:
- fluid replacement
- 1 - 2 :The student will demonstrate the ability to use the nutritional food pyramid.
- 1 - 3 :The student will demonstrate the ability to access and assess the following nutritional intake values:
- |                        |                   |
|------------------------|-------------------|
| a. RDA or equivalency  | e. vitamin intake |
| b. protein intake      | f. mineral intake |
| c. fat intake          | g. fluid intake   |
| d. carbohydrate intake |                   |

#### **Psychosocial Intervention And Referral**

- 1 - 4 :The student will demonstrate the ability to determine energy expenditure and caloric intake.

#### **Nutritional Aspects**

- 1 - 5 :The student will demonstrate the ability to calculate the basal metabolic rate of energy expenditure.

# Pharmacology for Athletic Trainers

## PROFICIENCIES TAUGHT

### Pharmacology

- 1 - 1: Use the PDR or another drug reference to search for information on the medications commonly prescribed to athletes and others involved in physical activity and to identify the following facts:
  - a. generic and brand names
  - b. indications for use
  - c. contraindications
  - d. warnings
  - e. dosing
  - f. other notes (e.g., banned substance)
  - g. side (adverse) effects
  
- 1 - 2: Document, or simulate the documentation of, the tracking of medications by recording the following information about the medication:
  - a. name
  - b. manufacturer
  - c. amount
  - d. dosage
  - e. lot number
  - f. expiration date
  
- 1 - 3: Locate the policies-and-procedures manual, identify the section on medications, and replicate the procedures for administering medications to athletes and others involved in physical activity, which include the following:
  - a. determine type of over-the-counter (OTC) medication to be used according to the physical ailment and established protocols
  - b. identify the precautions, expiration date, lot number, and dosage for the medication as provided on the package and individual dose packets
  - c. administer OTC medication by providing verbal and written instruction for its use to the patient and then recording and documenting the administration
  
- 2 - 1: Locate the phone number and address of the nearest poison control center and replicate the reporting of a drug overdose or poisoning situation. The report should state the following information:
  - a. name and location of person making the call
  - b. name and age of person who has taken the medication
  - c. name and dosage of the drug taken
  - d. time the drug was taken
  - e. signs and symptoms associated with overdose or poison situation, including vital signs
  
- 3 - 1: Replicate the following procedures for using an emergency epinephrine injection to prevent anaphylaxis:
  - a. identify indications for an epinephrine injection
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  - d. demonstrate proper storage of a bronchodilator

### Psychosocial Intervention And Referral

- 1 - 1: Simulate intervention with an individual who has a substance abuse problem and recommend appropriate referral.
  
- 1 - 2: Simulate a confidential conversation with a health care professional concerning suspected substance abuse by an athlete or other physically active individual.

## PROFICIENCIES EVALUATED

### Pharmacology

1 - 1 :Use the PDR or another drug reference to search for information on the medications commonly prescribed to athletes and others involved in physical activity and to identify the following facts:

- a. generic and brand names
- b. indications for use
- c. contraindications
- d. warnings
- e. dosing
- f. other notes (e.g., banned substance)
- g. side (adverse) effects

1 - 3 :Locate the policies-and-procedures manual, identify the section on medications, and replicate the procedures for administering medications to athletes and others involved in physical activity, which include the following:

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## Administration and Development

### PROFICIENCIES TAUGHT

#### Health Care Administration

- 2 - 1: The student will use contemporary multimedia, computer hardware, and software as related to the practice of athletic training.
- 3 - 1: The student will demonstrate the ability to perform record keeping skills with sensitivity to patient confidentiality.
- 4 - 1: The student will demonstrate the ability to develop facility design plans that include, but are not limited to, the following components:
  - a. basic floor plan design
  - b. facility evacuation
  - c. basic rehabilitation and treatment area plans
- 4 - 2A: The student will demonstrate the ability to develop administrative plans that include but are not limited to, the following components:
  - a. risk management
  - b. developing policies and procedures
  - d. addressing facility hazards

#### Professional Development and Responsibilities

- 1 - 2: The student will develop a professional resume.

### PROFICIENCIES EVALUATED

#### Health Care Administration

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# Football Clinical

## PROFICIENCIES TAUGHT

### PROFICIENCIES EVALUATED

#### Risk Management and Injury Prevention

- 1 - 1A :The student will assess the following:
  - a. height
  
- 2 - 1C :The student will demonstrate the ability to perform and evaluate the results of the following tests:
  - c. agility tests
  
- 2 - 1D :The student will demonstrate the ability to perform and evaluate the results of the following tests:
  - d. speed tests
  
- 3 - 1 :a. use a sling psychrometer  
b. use a wet bulb globe index  
c. interpret and present environmental data for the following conditions: heat; wind; humidity; potential for lightning strike; cold; poor air quality  
d. check an activity setting for physical and/or environmental hazards  
e. use and interpret weight charts
  
- 4 - 1A :The student will select and fit the following protective equipment:
  - a. protective helmet and head gear
  
- 4 - 1B :The student will select and fit the following protective equipment:
  - b. protective shoulder pads
  
- 4 - 1C :The student will select and fit the following protective equipment:
  - c. footwear for physical activity
  
- 4 - 1D :The student will select and fit the following protective equipment:
  - d. mouth guard
  
- 4 - 1E :The student will select and fit the following protective equipment:
  - e. rib brace/guard
  
- 4 - 1F :The student will select and fit the following protective equipment:
  - f. prophylactic ankle brace
  
- 4 - 1G :The student will select and fit the following protective equipment:
  - g. prophylactic knee brace
  
- 5 - 4 :The student will perform isometric tests for the following parts of the body: a. ankle; b. foot/toes; c. knee; d. hip; e. trunk/torso; f. shoulder; g. elbow; h. wrist; i. hand/fingers;
  
- 5 - 5 :The student will perform the following tests:
  - a. upper body strength test
  - b. lower body strength test
  - c. upper body power test
  - d. lower body power test
  - e. upper body muscular endurance test
  - f. lower body muscular endurance test
  
- 6 - 1 :The student will select range-of-motion exercises and activities for all major muscle groups and their associated joints and instruct a client to perform these exercises. The exercises must include the following body regions and joints:
  - a. cervical region
  - b. shoulder: joint and girdle
  - c. elbow
  - d. wrist
  - g. hip and pelvis
  - h. knee
  - i. leg
  - j. ankle

- e. hand and fingers
- f. lumbar region
- k. foot and toes

7 - 1A :The student will demonstrate the proper lifting technique for the following exercises:

- a. parallel squat
- b. heel raises
- c. power clean
- d. bench press
- e. shoulder press
- f. dead lift
- g. arm curl
- h. triceps extension
- i. knee curl (flexion)
- j. knee extension
- k. leg press

8 - 1 :The student will construct, apply, and remove the following protective devices:

- a. bony prominence pad
- b. muscle contusion pad
- c. soft playing cast (e.g., silicone, thermofoam)
- d. hard, immobilization splint or cast (e.g., thermoplastic, plaster, fiberglass)
- e. friction pad ("doughnut" pad)
- f. checkrein device

9 - 1A :The student will demonstrate the ability to tape, splint, wrap, pad or brace the following joints to limit motions:

- a. cervical spine
- f. lumbar spine

9 - 1B :The student will demonstrate the ability to tape, splint, wrap, pad or brace the following joints to limit motions:

- b. shoulder joint and girdle
- c. elbow
- d. wrist
- e. hand and fingers

9 - 1G :The student will demonstrate the ability to tape, splint, wrap, pad or brace the following joints to limit motions:

- g. hip and pelvis
- h. knee
- i. leg
- j. ankle
- k. foot and toes

### Assessment and Evaluation

1 - 1AD :The student will recognize the following postural deviations and predisposing conditions:

- a. kyphosis
- b. lordosis
- c. scoliosis
- d. pelvic obliquity
- f. hip anteversion and retroversion

1 - 2A :The student will perform a postural assessment of the following:

- a. cervical spine and head

1 - 2B :The student will perform a postural assessment of the following:

- b. shoulder

1 - 2C :The student will perform a postural assessment of the following:

- c. lumbo-thoracic region

1 - 2D :The student will perform a postural assessment of the following:

- d. hip and pelvis

1 - 2E :The student will perform a postural assessment of the following:

- e. knee

1 - 2F :The student will perform a postural assessment of the following:

- f. ankle, foot, and toes
- 2 - 1A :The student will
  - a. use standardized record keeping methods (e.g., SOAP, HIPS, HOPS)
  - b. select and use injury, rehabilitation, referral, and insurance documentation
  - c. use progress notes
- 4 - 1A :The student will identify and assess the following:
  - a. cranial nerves
  - b. dermatomes
  - c. myotomes
  - d. deep tendon reflexes
  - e. pathological reflexes
- 4 - 1B :The student will identify and assess the following:
  - b. dermatomes
  - c. myotomes
  - d. deep tendon reflexes
  - e. pathological reflexes
- 6 - H1 :obtain the medical history of an ill or injured athlete or other physically active individual suffering from a head injury.
- 6 - H2 :observe and identify the clinical signs and symptoms associated with head injury:
  - a. amnesia (retrograde or post-traumatic)
  - b. levels of consciousness
  - c. orientation (person, time, place orientation)
  - d. intracranial hematoma
  - e. balance and coordination
  - f. pupil and eye movements
  - g. pulse
  - h. blood pressure
  - i. facial postures
- 6 - H3 :observe and identify the clinical signs and symptoms associated with eye injuries and illnesses:
  - a. orbital blowout fracture
  - b. conjunctivitis
  - c. corneal abrasion
  - d. corneal laceration
  - e. detached retina
  - f. hyphema
  - g. stye
- 6 - H4 :observe and identify the clinical signs and symptoms associated with an ear injury or illness:
  - a. pinna hematoma ("cauliflower ear")
  - b. impacted cerumen
  - c. otitis externa
  - d. otitis media
- 6 - H5 :observe and identify the clinical signs and symptoms associated with nose injury:
  - a. deviated septum
  - b. epistaxis
  - c. nasal fracture
- 6 - H6 :observe and identify the clinical signs and symptoms associated with jaw, mouth, or tooth injury or illness:
  - a. gingivitis
  - b. mandibular fracture
  - c. maxilla fracture
  - d. periodontitis
  - e. temporomandibular joint dislocation
  - f. temporomandibular joint dysfunction
  - g. tooth abscess
  - h. tooth extrusion
  - i. tooth fracture
  - j. tooth intrusion
  - k. tooth luxation
- 6 - H7 :administer appropriate sensory, neurological, and circulatory tests for the head and face
- 6 - H8 :administer functional tests and activity-specific tests for head and face injuries.
- 6 - H9 :identify, palpate, and assess the integrity of bony landmarks of the head and face.
- 6 - H10 :identify, palpate, and assess the integrity of soft tissue of the head and face.
- 6 - H11 :administer commonly used special tests to make a differential assessment of the following:

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

6 - C1 :obtain the medical history of an ill or injured athlete or other physically active individual suffering from a cervical spine injury.

6 - C2 :observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:

- a. atrophy
- b. dislocation or subluxation
- c. vertebral fracture
- d. head and neck posture
- e. intervertebral disc herniation
- f. nerve root compression or stretch
- g. ischemia
- h. torticollis

6 - C3 :administer active and passive range-of-motion tests using quantifiable techniques (e.g., tape measure, goniometer, and inclinometer) for the cervical spine

6 - C4 :use manual muscle-testing techniques for the cervical spine.

6 - C5 :administer appropriate sensory, circulatory, and neurological tests for the cervical spine.

6 - C6 :administer functional tests and activity-specific tests for the cervical spine.

6 - C7 :identify, palpate, and assess the integrity of bony landmark of the cervical spine.

6 - C8 :identify, palpate, and assess the integrity of soft tissue of the cervical spine.

6 - C9 :administer commonly used special tests to make a differential assessment of the cervical spine:

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

6 - F1 :obtain the medical history of an ill or injured athlete or other physically active individual suffering a forearm, wrist, or hand pathology.

6 - F2 :observe and identify the clinical signs and symptoms associated with the following

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

6 - F3 :administer active and passive range-of-motion tests using standard goniometric techniques for the forearm, wrist, and hand

6 - F4 :use manual muscle-testing techniques for the forearm, wrist, and hand.

6 - F5 :administer appropriate sensory, neurological, and circulatory tests for the forearm, wrist, and hand.

6 - F6 :administer functional tests and activity-specific tests for the forearm, wrist, and hand.

- 6 - F7 :identify, palpate, and interpret the integrity of bony landmarks for the forearm, wrist, and hand.
- 6 - F8 :identify, palpate, and interpret the integrity of soft tissue for the forearm, wrist, and hand.
- 6 - E9 :administer commonly used special tests to make a differential assessment of the following
  - a. joint instability (e.g., valgus stress test, varus stress test)
  - b. inflammatory conditions (e.g., tests for lateral epicondylitis, tests for medial epicondylitis)
  - c. neuropathy (e.g., Tinel's sign, pronator teres syndrome, pinch grip test)
- 6 - T1 :obtain the medical history of an ill or injured athlete or other physically active individual of the thorax and lumbar spine.
- 6 - T2 :observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:
  - a. café au lait macules (spots)
  - b. dislocation or subluxation
  - c. spina bifida occulta
  - d. facet syndrome
  - e. intervertebral disc pathology
  - f. spinal posture (kyphosis/ lordosis)
  - g. leg length discrepancies
  - k. vertebral pathology (e.g., spondylitis, spondylolysis, spondylolisthesis)
  - h. nerve root compression
  - i. sacroiliac dysfunction
  - j. scoliosis
  - l. sprain
  - m. stenosis
  - n. step deformity
  - o. strain
- 6 - T3 :administer active and passive range-of-motion tests using standard qualitative and quantitative techniques for the thoracic and lumbar spine.
- 6 - T4 :Use manual muscle-testing techniques for the thoracic and lumbar spine.
- 6 - T5 :administer appropriate sensory and neurological tests for the thoracic and lumbar spine.
- 6 - T6 :administer functional tests and activity-specific tests for the thoracic and lumbar spine.
- 6 - T7 :identify, palpate, and interpret the integrity of bony landmarks of the thoracic and lumbar spine.
- 6 - T8 :identify, palpate, and interpret the integrity of soft tissue of the thoracic and lumbar spine.
- 6 - T9 :administer commonly used special tests to make a differential assessment of the following:
  - a. intervertebral disc herniation (e.g., Valsalva's maneuver)
  - b. neuropathy (e.g., straight leg raise test, well straight leg test, Babinski's reflex test, Oppenheim's gait test, Kernig's sign, Brudzinski sign test, bowstring test, Hoover sign test)
  - c. vertebral defects (e.g., stork standing test/spondylolisthesis test)
  - d. joint instability (e.g., spring test)
- 6 - K1 :obtain the medical history of an ill or injured athlete or other physically active individual suffering from knee pathology.
- 6 - K2 :observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:
  - a. bursitis
  - b. chondromalacia patella
  - c. dislocation and subluxation
  - d. fat pad contusion
  - e. fracture
  - f. leg length
  - g. meniscal tear
  - h. Osgood-Schlatter disease
  - i. osteochondritis dissecans
  - j. patellar alignment (e.g., patella alta, patella baja, squinting patella, Q angle)
  - k. patellar tendon rupture
  - l. peroneal nerve contusion or palsy
  - m. popliteal cyst
  - n. sprain
  - o. strain
  - p. tendonitis
  - q. tibial torsion
  - r. tibiofemoral alignment (e.g., ...)

- 6 - K3 :administer active and passive range-of-motion tests using standard goniometric techniques for the knee
- 6 - K4 :use manual muscle-testing techniques for the knee.
- 6 - K5 :administer appropriate sensory, neurological, and circulatory tests for the knee.
- 6 - K6 :administer functional tests and activity-specific tests for the knee
- 6 - K7 :identify, palpate, and interpret the integrity of bony landmarks of the knee
- 6 - K8 :identify, palpate, and interpret the integrity of soft tissue of the knee.
- 6 - K9 :administer commonly used special tests to make a differential assessment of the following:
  - a. uniplanar stress tests (e.g., valgus stress test, varus stress test, Lachman test, anterior drawer test, posterior drawer test, posterior sag sign)
  - b. multiplanar (rotational) stress tests (e.g., Slocum test, Hughston's test, lateral pivot shift maneuver)
  - c. meniscal tears (e.g., McMurray's test, Apley's test)
  - d. patellofemoral dysfunction (e.g., grind test, apprehension test)
  - e. intra-extracapsular swelling (e.g., sweep test, ballottable patella)

### **Acute Care of Injuries and Illnesses**

- 1 - 1 :The student will demonstrate the ability to implement an EAP for an activity, setting, or event.
- 1 - 2 :The student will correctly triage emergency situations.
- 3 - 1B :The student will demonstrate the ability to
  - b. stabilize and spine board or body splint an adult or child with a suspected spinal injury

### **Pharmacology**

- 1 - 2 :Document, or simulate the documentation of, the tracking of medications by recording the following information about the medication:
  - a. name
  - b. manufacturer
  - c. amount
  - d. dosage
  - e. lot number
  - f. expiration date

### **Therapeutic Modalities**

- 1 - 1 :The student will perform a physical examination to identify the current inflammatory stage.
- 1 - 2 :The student will perform a physical examination and interview to identify the indications, contraindications, and precautions to various treatment protocols.
- 2 - C1 :The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:
  - a. cold whirlpool treatment
  - b. controlled cold therapy unit
  - c. ice pack
  - d. vapo-coolant spray
  - e. ice immersion
  - f. ice massage
  - g. cryokinetics
- 2 - H1 :The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:
  - a. moist heat pack
  - b. paraffin treatment
  - c. contrast bath
  - d. warm whirlpool treatment
- 2 - E1 :The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:
  - a. sensory-level pain control treatment
  - b. noxious-level pain control treatment
  - f. muscle atrophy retardation treatment
  - g. acute edema treatment

- c. motor-level pain control treatment
- d. muscle re-education treatment
- e. muscle pumping treatment
- h. muscle splinting/spasm treatment
- i. iontophoresis treatment

### **Therapeutic Exercise**

- 2 - E2 :The student will set-up and apply the following types of electrical stimulation units:
  - a. monophasic stimulator (e.g., high volt stimulation)
  - b. biphasic stimulator (e.g., Transcutaneous Electrical Nerve Stimulation [TENS], Neuromuscular Electrical Stimulation [NMES])
  - c. direct current (e.g., iontophoresis)
  - d. alternating current (e.g., interferential, NMES)
  - e. multifunction electrical stimulation devices

### **Therapeutic Modalities**

- 3 - U1 :The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:
  - a. thermal ultrasound treatment
  - b. non-thermal ultrasound treatment
  - c. combination electrical-stimulation/ultrasound treatment
  - d. phonophoresis treatment
  - e. indirect application of ultrasound treatment (underwater, bladder)
- 2 - I1 :The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply intermittent compression to the upper and lower extremities.
- 2 - M1 :The student will demonstrate the ability to prepare and apply a massage treatment.
- 2 - M2 :The student will demonstrate the ability to properly perform the following therapeutic massage strokes:
  - a. effleurage
  - b. petrissage
  - c. friction (circular, transverse)
  - d. tapotement
  - e. vibration
- 2 - M3 :The student will demonstrate the ability to properly perform the following therapeutic massage strokes:
  - f. myofascial release techniques

### **Therapeutic Exercise**

- 1 - 1A :Exercise to improve the range of motion of the upper extremity, lower extremity, trunk, and cervical spine. The student will demonstrate the ability to instruct the following exercises:
  - a. passive range-of-motion exercises
  - b. active range-of-motion exercises
  - c. active-assisted range-of-motion exercises
- 1 - 1B :Exercise to improve the range of motion of the upper extremity, lower extremity, trunk, and cervical spine. The student will demonstrate the ability to instruct the following exercises:
  - d. joint mobilization
  - e. self-mobilizations
- 1 - 2 :Exercise to improve muscular strength. The student will demonstrate the ability to instruct exercises for the following parts of the body using isometric and progressive resistance techniques:
  - a. lower extremity
  - b. upper extremity
  - c. cervical spine
  - d. trunk and torso
- 1 - 4L :Exercise to improve muscular speed. The student will demonstrate the ability to instruct the following activities:
  - Lower Body

- a. reaction drills
- b. sprint work
- c. Fartlek training

1 - 5 :Exercise to improve muscular power.  
The student will demonstrate the ability to instruct plyometric exercises for the upper and lower extremities.

1 - 6U :Exercise to improve neuromuscular control and coordination.  
The student will demonstrate the ability to instruct the following activities:

Upper body

- a. PNF patterns
- b. rhythmic stabilization
- c. double- and single-arm balancing
- d. wobble board or balance apparatus
- e. weighted-ball rebounding or toss

1 - 6L :Exercise to improve neuromuscular control and coordination.  
The student will demonstrate the ability to instruct the following activities:

Lower Body

- a. PNF patterns
- b. proprioception board or balance apparatus
- c. incline board
- d. Single-leg balancing

1 - 6N :Exercise to improve neuromuscular control and coordination.  
The student will demonstrate the ability to instruct the following activities:

Neck

- a. stabilization
- b. postural correction

1 - 6T :Exercise to improve neuromuscular control and coordination.  
The student will demonstrate the ability to instruct the following activities:

Trunk

- a. stabilization
- b. postural correction

1 - 7L :Exercise to improve agility.  
The student will demonstrate the ability to instruct the following activities:

Lower Body

- a. Carioca
- b. cross-over
- c. figure eight (8)

1 - 9 :The student will demonstrate the ability to assess joint end point and to select and perform appropriate joint mobilization techniques for the appendicular and axial skeleton, including the following:

- a. long-axis distraction
- b. appropriate glides (e.g., anterior/posterior, superior/inferior)

### **General Medical Conditions and Disabilities**

1 - 8 :Measure urine values with Chemstrips (dipsticks)

1 - 92 :Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

The Eyes, Ears, Nose, and Throat

- a. common cold
- b. conjunctivitis
- e. rhinitis
- f. sinusitis

- c. laryngitis
- d. pharyngitis
- g. tetanus
- h. tonsillitis

1 - 93 :Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

**Respiratory System**

- a. asthma
- b. bronchitis
- c. hyperventilation
- d. hay fever
- e. influenza
- f. pneumonia
- g. upper respiratory infection (URI)

**Psychosocial Intervention And Referral**

2 - 1 :Simulate the following motivational techniques used during rehabilitation:

- a. verbal motivation
- b. visualization
- c. imagery
- d. desensitization

**Health Care Administration**

1 - 1A :The student will demonstrate appropriate communication skills.

- a. calm, reassure, and explain a potentially catastrophic injury to an injured adult or child, athletic personnel, and/or family member.

2 - 1 :The student will use contemporary multimedia, computer hardware, and software as related to the practice of athletic training.

3 - 1 :The student will demonstrate the ability to perform record keeping skills with sensitivity to patient confidentiality.

## Research Topics in Athletic Training

### PROFICIENCIES TAUGHT

### PROFICIENCIES EVALUATED

#### Health Care Administration

- 5 - 1 :The student will demonstrate the ability to prepare and interpret sample design for scientific research.
1. The student will interpret the following basic literature:
    - a. case study
    - b. outcome measurement, including statistical interpretation
    - c. literature review

#### Professional Development and Responsibilities

- 1 - 2 :The student will develop a professional resume.

# Seminar in Athletic Training

## PROFICIENCIES TAUGHT

### PROFICIENCIES EVALUATED

#### Risk Management and Injury Prevention

- 5 - 1 :The student will demonstrate the ability to establish repetition maximum tests.
- 5 - 2 :The student will demonstrate the ability to perform an isokinetic test for the knee and shoulder.
- 5 - 3 :The student will demonstrate the ability to interpret data obtained from isokinetic testing and to use this information to determine appropriate follow-up care.

#### Therapeutic Modalities

- 2 - T1 :The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:
  - a. mechanical traction
  - b. manual traction
  - c. positional traction

#### Therapeutic Exercise

- 1 - 3U :Exercise to improve muscular endurance.  
The student will demonstrate the ability to instruct the following exercise modalities:  
Upper body
  - a. aquatic
  - b. UBE/stationary bicycle
  - c. physioballs
- 1 - 3L :Exercise to improve muscular endurance.  
The student will demonstrate the ability to instruct the following exercise modalities:  
Lower Body
  - a. aquatic
  - b. stationary bicycle
  - c. stair
  - d. physioballs
  - e. treadmill
- 1 - 8U :Exercise to improve cardiorespiratory endurance.  
The student will demonstrate the ability to instruct the following activities:  
Upper body
  - a. upper-body ergometer
  - b. stationary bicycle
  - c. aquatic
  - d. stair climber
- 1 - 10 :The student will demonstrate the ability to instruct and perform exercises to improve activity-specific skills (running, striking, throwing, catching, swimming, biking, climbing, etc.).

#### Health Care Administration

- 5 - 1 :The student will demonstrate the ability to prepare and interpret sample design for scientific research.
  - 1. The student will interpret the following basic literature:
    - a. case study
    - b. outcome measurement, including statistical interpretation
    - c. literature review

#### Professional Development and Responsibilities

- 1 - 1 :The student will demonstrate the ability to disseminate injury prevention and health care information.  
The student will develop a presentation outline for an athletic training topic. The outline may include, but is not limited to, the following audiences:

- a. peer athletic trainers
- b. physicians
- c. parents
- d. athletic personnel
- e. general public
- f. athletes and others involved in physical activity

## **Statistics**

### **PROFICIENCIES TAUGHT**

#### **Health Care Administration**

- 5 - 1: The student will demonstrate the ability to prepare and interpret sample design for scientific research.
  - 1. The student will interpret the following basic literature:
    - a. case study
    - b. outcome measurement, including statistical interpretation
    - c. literature review

### **PROFICIENCIES EVALUATED**

## Annual Review

### PROFICIENCIES TAUGHT

#### PROFICIENCIES EVALUATED

##### Acute Care of Injuries and Illnesses

- 3 - 1B :The student will demonstrate the ability to
  - b. stabilize and spine board or body splint an adult or child with a suspected spinal injury
  
- 5 - 1 :The student will demonstrate the ability to
  - a. establish and manage an airway
  - b. establish and manage an airway in an athlete wearing protective headgear
  - c. perform CPR on an adult or child with or without a spinal injury
  - d. use a bag-valve-mask (BVM) on an adult or child for rescue breathing
  - e. use a protective pocket mask/shield on an adult or child for rescue breathing
  
- 6 - 1A :The student will demonstrate the ability to
  - a. stabilize and transport an adult or child with a head and/or spinal injury
  - b. stabilize and transport an adult or child with a fracture and/or dislocation
  
- 6 - 1F :The student will demonstrate the ability to
  - f. perform two-person CPR