

ST 421  
Clinical Education in Athletic Training IV

## **PROFICIENCIES**

### **EVALUATED**

#### **Risk Management and Injury Prevention**

The student will demonstrate the ability to perform and evaluate the results of the following tests:

- flexibility tests
- strength (repetition) testing
- agility tests
- speed tests

The student will demonstrate the ability to establish repetition maximum tests.

The student will demonstrate the ability to perform an isokinetic test for the knee and shoulder.

The student will demonstrate the ability to interpret data obtained from isokinetic testing and to use this information to determine appropriate follow-up care.

The student will perform isometric tests for the following parts of the body:

- ankle
- foot/toes
- knee
- hip
- trunk/torso
- shoulder
- elbow
- wrist
- hand/fingers

The student will perform the following tests:

- upper body strength test
- lower body power test
- lower body strength test
- upper body muscular endurance test
- upper body power test
- lower body muscular endurance test

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:

- cervical region
- hip and pelvis

- shoulder: joint and girdle
- knee
- elbow
- leg
- wrist
- ankle
- hand and fingers
- foot and toes
- lumbar region

The student will demonstrate the proper lifting technique for the following exercises:

- parallel squat
- arm curl
- heel raises
- triceps extension
- power clean
- knee curl (flexion)
- bench press
- knee extension
- shoulder press
- leg press
- dead lift

The student will demonstrate the proper spotting technique for the following exercises:

- parallel squat
- bench press
- shoulder press
- power clean
- dead lift

### **Therapeutic Exercise**

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:

- passive range-of-motion exercises
- active range-of-motion exercises
- active-assisted range-of-motion exercises
- joint mobilization
- self-mobilizations

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:

- lower extremity
- upper extremity
- cervical spine
- trunk and torso

Exercise to improve muscular endurance.

The student will demonstrate the ability to instruct the following exercise modalities:

- Upper body
  - Aquatic
  - UBE/stationary bicycle

- physioballs
- Lower Body
  - Aquatic
  - stationary bicycle
  - stair
  - physioballs
  - treadmill

Exercise to improve muscular speed.

The student will demonstrate the ability to instruct the following activities:

- Upper body
  - reaction drills
- Lower Body
  - reaction drills
  - sprint work
  - Fartlek training

Exercise to improve muscular power.

The student will demonstrate the ability to instruct plyometric exercises for the upper and lower extremities.

Exercise to improve neuromuscular control and coordination.

The student will demonstrate the ability to instruct the following activities:

- Upper body
  - PNF patterns
  - rhythmic stabilization
  - double- and single-arm balancing
  - wobble board or balance apparatus
  - weighted-ball rebounding or toss
- Lower Body
  - PNF patterns
  - proprioception board or balance apparatus
  - incline board
  - Single-leg balancing
- Neck
  - Stabilization
  - postural correction
- Trunk
  - Stabilization
  - postural correction

Exercise to improve agility.

The student will demonstrate the ability to instruct the following activities:

- Upper body
  - Throwing
  - catching
- Lower Body
  - Carioca
  - cross-over
  - figure eight (8)

Exercise to improve cardiorespiratory endurance.

The student will demonstrate the ability to instruct the following activities:

- Upper body

- upper-body ergometer
- stationary bicycle
- aquatic
- stair climber
- Lower Body
  - bicycle ergometer
  - treadmill
  - stair climber
  - aquatic

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:

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

The student will demonstrate the ability to instruct and perform exercises to improve activity-specific skills (running, striking, throwing, catching, swimming, biking, climbing, etc.).

### **Psychosocial Intervention And Referral**

The student will simulate the following motivational techniques used during rehabilitation:

- verbal motivation
- imagery
- visualization
- desensitization

### **Health Care Administration**

The student will demonstrate the ability to prepare and interpret sample design for scientific research.

- The student will interpret the following basic literature:
  - case study
  - outcome measurement, including statistical interpretation
  - literature review

### **Professional Development and Responsibilities**

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

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

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

The student will develop a professional resume.