ST 410
Clinical Education in Athletic Training III

PROFICIENCIES

EVALUATED

Assessment and Evaluation

The student will perform a postural assessment of the following:

- hip and pelvis
- knee
- ankle, foot, and toes

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- uniplanar stress tests (e.g., valgus stress test, varus stress test, Lachman test, anterior drawer test, posterior drawer test, posterior sag sign)
- multiplanar (rotational) stress tests (e.g., Slocum test, Hughston's test, lateral pivot shift maneuver)
- meniscal tears (e.g., McMurray's test, Apley's test)
- patellofemoral dysfunction (e.g., grind test, apprehension test)

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

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

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

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

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

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

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

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

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

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

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

Therapeutic Modalities

The student will perform a physical examination to identify the current inflammatory stage.

The student will perform a physical examination and interview to identify the indications, contraindications, and precautions to various treatment protocols.

The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:

- cold whirlpool treatment
- ice immersion
- controlled cold therapy unit
- ice massage
- ice pack
- cryokinetics
- vapo-coolant spray

The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:

- moist heat pack
- contrast bath
- paraffin treatment
- warm whirlpool treatment

The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:

- sensory-level pain control treatment
- muscle atrophy retardation treatment
- noxious-level pain control treatment
- acute edema treatment
- motor-level pain control treatment
- muscle splinting/spasm treatment
- muscle re-education treatment
- iontophoresis treatment
- muscle pumping treatment

The student will set-up and apply the following types of electrical stimulation units:

- monophasic stimulator (e.g., high volt stimulation)
- biphasic stimulator (e.g., Transcutaneous Electrical Nerve Stimulation [TENS], Neuromuscular Electrical Stimulation [NMES])
- direct current (e.g., iontophoresis)
- alternating current (e.g., interferential, NMES)
- multifunction electrical stimulation devices

The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:

- thermal ultrasound treatment
- non-thermal ultrasound treatment
- combination electrical-stimulation/ultrasound treatment
- phonophoresis treatment
- indirect application of ultrasound treatment (underwater, bladder)

The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:

- mechanical traction
- manual traction
- positional traction

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.

The student will demonstrate the ability to prepare and apply a massage treatment.

The student will demonstrate the ability to properly perform the following therapeutic massage strokes:

- effleurage
- tapotement
- petrissage
- vibration
- friction (circular, transverse)
- myofascial release techniques

Nutritional Aspects

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

- weight loss
- weight gain

The student will demonstrate the ability to access and assess the following nutritional intake values:

- RDA or equivalency
- vitamin intake
- protein intake
- mineral intake
- fat intake
- fluid intake
- carbohydrate intake

Psychosocial Intervention And Referral

The student will demonstrate the ability to determine energy expenditure and caloric intake.

Nutritional Aspects

The student will demonstrate the ability to calculate the basal metabolic rate of energy expenditure.