

Hope College
Athletic Training Program

Clinical Proficiency Concordance

This document contains all of the 748 clinical proficiencies required of students enrolled in CAAHEP-accredited athletic training programs. Clinical proficiencies are essential skills that competent entry-level athletic trainers should possess. This concordance should be used in conjunction with Knight's third edition of *Assessing Clinical Proficiencies in Athletic Training* (2001, Human Kinetics). The concordance is designed to help students and faculty understand which athletic training practicum course (KIN 198, 298, 398, 498) will contain the instruction and assessment of these proficiencies. The athletic training program will also offer instruction and assessment of the 542 competencies in athletic training (see the document, *Athletic Training Competencies Distributed by Course*). The competencies are typically taught and assessed in the didactic courses and the clinical proficiencies are usually taught in the practicum courses.

SUBJECT AREA	TEACHING OBJECTIVE	SPECIFIC OUTCOME	MODULE IN KNIGHT, 3 RD ED.	PRACTICUM LEVEL (SEMESTER TAUGHT)	DIDACTIC COURSES
Risk Management and Injury Prevention	The student will perform anthropometric measurement techniques and other appropriate examination and screening procedures.	The student will assess the following:			
		➤ Height	D1	298a (3)	223
		➤ Weight	D1	298a (3)	223
		➤ Blood pressure	D1, E1	298a (3), 298b(4)	405
		➤ Pulse	D1, E1	298a (3), 298b(4)	405
		➤ Limb girth	D1	298a (3)	385, 386
		➤ Limb length	D1	298a (3)	385, 386
		➤ Vision using a Snellen eye chart	D1	298a (3)	405
		➤ Body composition, using a manual skinfold caliper and appropriate formulas	D1	298a (3)	223
	The student will perform fitness tests and record and interpret the data using accepted procedures and equipment.	The student will demonstrate the ability to perform and evaluate the results of the following tests:			
		➤ Flexibility tests	D3, E5	298a (3)	223
		➤ Strength (repetition) testing	E6	298a (3)	223
		➤ Agility tests	E6	298a (3)	402
		➤ Speed tests	E6	298a (3)	402
	The student will demonstrate the ability to 1) obtain and interpret	The student will:			
		➤ Use a sling psychrometer	B9	198a (1)	340

	<p>environmental data, 2) recognize potential hazardous conditions and situations in the activity setting, and 3) make the appropriate recommendations for activity.</p>	<ul style="list-style-type: none"> ➤ Use a wet bulb globe index ➤ Interpret and present environmental data for the following conditions: heat; wind; humidity; potential for lightning strike; cold; poor air quality ➤ Check an activity setting for physical and/or environmental hazards ➤ Use and interpret weight charts 	<p>B9</p> <p>B9</p> <p>B9</p> <p>B9</p>	<p>198a (1)</p> <p>198a (1)</p> <p>198a (1)</p> <p>198a (1)</p>	<p>340</p> <p>340</p> <p>340</p> <p>340</p>
	<p>The student will demonstrate the ability to select and fit standard protective equipment that provides safe and healthy participation in physical activity.</p>	<p>The student will select and fit the following protective equipment:</p> <ul style="list-style-type: none"> ➤ Protective helmet and head gear ➤ Protective shoulder pads ➤ Footwear for physical activity ➤ Mouthguard ➤ Rib brace/guard ➤ Prophylactic ankle brace ➤ Prophylactic knee brace 	<p>D2</p> <p>D2</p> <p>D2</p> <p>C9</p> <p>D2</p> <p>C1</p> <p>C2</p>	<p>298b (4)</p> <p>298b (4)</p> <p>298b (4)</p> <p>298b (4)</p> <p>298b (4)</p> <p>198a (1)</p> <p>298b (4)</p>	<p>340</p> <p>340</p> <p>340</p> <p>340</p> <p>340</p> <p>340</p> <p>340</p>
	<p>The student will operate and instruct the use of isometric, isotonic, and isokinetic weight training equipment.</p>	<p>The student will demonstrate the ability to establish repetition maximum tests.</p>	<p>E6</p>	<p>298a (3)</p>	<p>223</p>
		<p>The student will demonstrate the ability to perform an isokinetic test for the knee and shoulder.</p>	<p>E6, H8</p>	<p>298a (3)</p>	<p>402</p>
		<p>The student will demonstrate the ability to interpret data obtained from isokinetic testing and to use this information to</p>	<p>E6, H8</p>	<p>298a (3)</p>	<p>402</p>

		determine appropriate follow-up care.			
		<p>The student will perform isometric tests for the following parts of the body:</p> <ul style="list-style-type: none"> ➤ Ankle ➤ Foot/toes ➤ Knee ➤ Hip ➤ Trunk/torso ➤ Shoulder ➤ Elbow ➤ Wrist ➤ Hand/fingers 	<p>E6, H5 E6, H5 E6, H5 E6, H5 E6, H5 E6, H5 E6, H5 E6, H5 E6, H5</p>	<p>298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3)</p>	<p>386 386 386 386 386 385 385 385 385</p>
		<p>The student will perform the following tests:</p> <ul style="list-style-type: none"> ➤ Upper body strength test ➤ Lower body strength test ➤ Upper body power test ➤ Lower body power test ➤ Upper body muscular endurance test ➤ Lower body muscular endurance test 	<p>E6 E6 E6 E6 E6 E6</p>	<p>298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3)</p>	<p>402 402 402 402 402 402</p>
	The student will instruct and demonstrate for the client specific flexibility exercises and activities.	<p>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:</p> <ul style="list-style-type: none"> ➤ Cervical region ➤ Shoulder: joint and girdle ➤ Elbow ➤ Wrist 	<p>D3 D3 D3 D3</p>	<p>298a (3) 298a (3) 298a (3) 298a (3)</p>	<p>402 402 402 402</p>

		<ul style="list-style-type: none"> ➤ Hand and fingers ➤ Lumbar region ➤ Hip and pelvis ➤ Knee ➤ Leg ➤ Ankle ➤ Foot and toes 	D3 D3 D3 D3 D3 D3 D3	298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3)	402 402 402 402 402 402 402
	The student will demonstrate the ability to instruct and establish a safe environment for the use of strength and conditioning equipment.	<p>The student will demonstrate the proper lifting technique for the following exercises:</p> <ul style="list-style-type: none"> ➤ Parallel squat ➤ Heel raises ➤ Power clean ➤ Bench press ➤ Shoulder press ➤ Dead lift ➤ Arm curl ➤ Triceps extension ➤ Knee curl (flexion) ➤ Knee extension ➤ Leg press 	D4 D4 D4 D4 D4 D4 D4 D4 D4 D4 D4	298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3) 298a (3)	340 340 340 340 340 340 340 340 340 340 340
		<p>The student will demonstrate the proper spotting technique for the following exercises</p> <ul style="list-style-type: none"> ➤ parallel squat ➤ bench press ➤ shoulder press ➤ power clean ➤ dead lift 	D4 D4 D4 D4 D4	298a (3) 298a (3) 298a (3) 298a (3) 298a (3)	340 340 340 340 340
	The student will demonstrate the ability to construct custom protective devices. These devices include, but are not limited to, those that protect contusions, sprains, strains, wounds, and fractures from further injury.	<p>The student will construct, apply, and remove the following protective devices:</p> <ul style="list-style-type: none"> ➤ bony prominence pad ➤ friction pad ("doughnut" pad) ➤ muscle contusion pad ➤ checkrein device ➤ soft playing cast (e.g., silicone, thermofoam) ➤ hard, immobilization 	C6, C7 C4 C3 C6 J11 C3, C5, C8	298b (4), 198b(2) 198b(2) 198a(1) 298b(4) 498a(7) 198a(1), 198b(2)	198, 298 198, 298 198, 298 198, 298 298 198, 298

		splint or cast (e.g., thermoplastic, plaster, fiberglass)			
	The student will demonstrate the ability to select and apply preventative and protective taping, wrapping, splinting, bracing, and rehabilitative devices in order to prevent further injury.	The student will demonstrate the ability to tape, splint, wrap, pad or brace the following joints to limit motions: <ul style="list-style-type: none"> ➤ cervical spine ➤ hip and pelvis ➤ shoulder joint and girdle ➤ knee ➤ elbow ➤ leg ➤ wrist ➤ ankle ➤ hand and fingers ➤ foot and toes ➤ lumbar spine 	C9 C5 C6 C2 C7 C3 C7 C1 C8 C4 C5	298b(4) 198a(1), 298b(4) 298b(4) 298b(4) 198a(1), 198b(2) 198a(1) 198a(1) 198a(1) 198a(1), 198b(2) 198a(1), 198b(2) 298b(4)	205 205 205 205 205 205 205 205 205 205 205
Assessment and Evaluation	The student will conduct static and postural evaluation and screening procedures.	The student will recognize the following postural deviations and predisposing conditions: <ul style="list-style-type: none"> ➤ kyphosis ➤ genu valgum, varum, and recurvatum ➤ lordosis ➤ rearfoot valgus and varus ➤ scoliosis ➤ forefoot valgus and varus ➤ pelvic obliquity ➤ pes cavus and planus ➤ tibial torsion ➤ foot and toe posture ➤ hip anteversion and retroversion 	E2 E2 E2 E2 E2 E2 E2 E2 E2	298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3)	386 386 386 386 386 386 386 386 386
		The student will perform a postural assessment of the following:			

		<ul style="list-style-type: none"> ➤ cervical spine and head ➤ hip and pelvis ➤ shoulder ➤ knee ➤ lumbo-thoracic region ➤ ankle, foot, and toes 	E2 E2 E2 E2 E2	298a(3) 298a(3) 298a(3) 298a(3) 298a(3)	386 386 385, 386 386 386
		The student will identify and classify body types as: <ul style="list-style-type: none"> ➤ endomorph ➤ ectomorph ➤ mesomorph 	E2 E2 E2	298a(3) 298a(3) 298a(3)	222, 385 222, 385 222, 385
	The student will perform record keeping skills while maintaining patient confidentiality.	The student will: <ul style="list-style-type: none"> ➤ use standardized record keeping methods (e.g., SOAP, HIPS, HOPS) ➤ select and use injury, rehabilitation, referral, and insurance documentation ➤ use progress notes 	A2 A2 A2	198a(1) 198a(1) 198a(1)	385, 386 385, 386 385, 386
	The student will demonstrate the ability to palpate anatomical structures	The student will identify and palpate the following: <ul style="list-style-type: none"> ➤ bony landmarks of the head, trunk, spine, scapula, and extremities ➤ soft tissue structures of the head, trunk, spine, and extremities ➤ abdominal and thoracic structures ➤ primary neurological and circulatory structures 	E4 (& multiple J modules) E4 (& multiple J modules) E4 (& multiple J modules) E4 (& multiple J modules)	198b(2) 198b(2) 198b(2) 198b(2)	385, 386 385, 386 385, 386, 405 385, 386, 405
	The student will	The student will			

	<p>assess neurological responses.</p>	<p>identify and assess the following:</p> <ul style="list-style-type: none"> ➤ cranial nerves ➤ deep tendon reflexes ➤ dermatomes ➤ pathological reflexes ➤ myotomes 	<p>E3 (& multiple J modules) E3 (& multiple J modules) E3 (& multiple J modules) E3 (& multiple J modules) E3 (& multiple J modules)</p>	<p>298a(3) 298a(3) 298a(3) 298a(3) 298a(3)</p>	<p>385 385, 386 385, 386 385, 386 385, 386</p>
	<p>The student will perform proper clinical evaluation techniques, including range-of-motion testing (active, passive, assisted).</p>	<p>The student will qualitatively assess active, passive, resistive range of motion for the following:</p> <ul style="list-style-type: none"> ➤ temporomandibular joint ➤ hip ➤ cervical spine ➤ lumbar spine ➤ shoulder ➤ thoracic spine ➤ elbow ➤ knee ➤ wrist and hand ➤ ankle ➤ thumb and 	<p>E5 (& multiple J modules) E5 (& multiple J modules) E5 (& multiple J modules) E5 (& multiple J modules) E5 (& multiple J modules) E5 (& multiple J modules) E5 (& multiple J modules) E5 (& multiple J modules) E5 (& multiple J modules) E5 (& multiple J modules) E5 (& multiple J modules)</p>	<p>298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3)</p>	<p>385, 405 386 386 386 385 386 385 386 385 386 385</p>

		fingers	multiple J modules)		
		➤ foot and toes	E5 (& multiple J modules)	298a(3)	386
	The student will perform clinical evaluations of major body areas to assess and interpret for injury and illness. (Head and Face)	Obtain the medical history of an ill or injured athlete or other physically active individual.	J13	498b(8)	385, 386, 405
		Observe and identify the clinical signs and symptoms associated with head injury:			
		➤ amnesia (retrograde or post-traumatic)	J13	498b(8)	385, 405
		➤ pupil and eye movements	J13	498b(8)	385, 405
		➤ levels of consciousness	J13	498b(8)	205, 385
		➤ pulse	J13	498b(8)	205, 385, 405
		➤ orientation (person, time, place orientation)	J13	498b(8)	385
		➤ blood pressure	J13	498b(8)	385, 405
		➤ intracranial hematoma	J13	498b(8)	385
		➤ facial postures	J13	498b(8)	385
		➤ balance and coordination	J13	498b(8)	385
		Observe and identify the clinical signs and symptoms associated with eye injuries and illnesses:			
		➤ orbital blowout fracture	J13	498b(8)	385, 405
		➤ detached retina	J13	498b(8)	385, 405
		➤ conjunctivitis	J13	498b(8)	405
		➤ hyphema	J13	498b(8)	205, 405
		➤ corneal abrasion	J13	498b(8)	205, 405
		➤ stye	J13	498b(8)	405
		➤ corneal laceration	J13	498b(8)	405
		Observe and identify the clinical signs and symptoms associated with an ear injury or			

		illness:			
		➤ pinna hematoma (“cauliflower ear”)	J13	498b(8)	385, 405
		➤ otitis externa	J13	498b(8)	385, 405
		➤ impacted cerumen	J13	498b(8)	385, 405
		➤ otitis media	J13	498b(8)	385, 405
		Observe and identify the clinical signs and symptoms associated with nose injury:			
		➤ deviated septum	J13	498b(8)	385, 405
		➤ epistaxis	J13	498b(8)	385, 405
		➤ nasal fracture	J13	498b(8)	385, 405
		Observe and identify the clinical signs and symptoms associated with jaw, mouth, or tooth injury or illness:			
		➤ gingivitis	J13	498b(8)	385, 405
		➤ tooth abscess	J13	498b(8)	385, 405
		➤ mandibular fracture	J13	498b(8)	385, 405
		➤ tooth extrusion	J13	498b(8)	385, 405
		➤ maxilla fracture	J13	498b(8)	385, 405
		➤ tooth fracture	J13	498b(8)	385, 405
		➤ periodontitis	J13	498b(8)	385, 405
		➤ tooth intrusion	J13	498b(8)	385, 405
		➤ temporomandibular joint dislocation	J13	498b(8)	385, 405
		➤ tooth luxation	J13	498b(8)	385, 405
		➤ temporomandibular joint dysfunction	J13	498b(8)	385, 405
		Administer appropriate sensory, neurological, and circulatory tests	J13	498b(8)	385, 405
		Administer functional tests and activity-specific tests	J13	498b(8)	385, 405
		Identify, palpate, and assess the integrity of bony landmarks	J13	498b(8)	385, 405
		Identify, palpate, and assess the integrity of	J13	498b(8)	385, 405

		soft tissue			
		administer commonly used special tests to make a differential assessment of the following:			
		➤ cranial nerves (e.g., eye motion, facial muscles)	J13	498b(8)	385
		➤ cognitive tests (e.g., recall, serial 7s, digit span)	J13	498b(8)	385
		➤ cerebellar function (e.g., Romberg's test, finger-to-nose test, heel-toe walking, heel-to-knee standing)	J13	498b(8)	385
		➤ Spinal nerve roots (e.g., upper quarter screen)	J13	498b(8)	385
	The student will perform clinical evaluations of major body areas to assess and interpret for injury and illness. (Cervical Spine)	Obtain the medical history of an ill or injured athlete or other physically active individual	J12	498b(8)	386
		Observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:			
		➤ Atrophy	J12	498b(8)	386
		➤ intervertebral disc herniation	J12	498b(8)	386
		➤ dislocation or subluxation	J12	498b(8)	386
		➤ nerve root compression or stretch	J12	498b(8)	386
		➤ vertebral fracture	J12	498b(8)	386
		➤ ischemia	J12	498b(8)	386
		➤ head and neck posture	J12	498b(8)	386
		➤ torticollis	J12	498b(8)	386
		Administer active and passive range-of-	E5, J12	298a(3), 498b(8)	386

		motion tests using quantifiable techniques (e.g., tape measure, goniometer, and inclinometer)			
		Use manual muscle-testing techniques	J12	498b(8)	386
		Administer appropriate sensory, circulatory, and neurological tests	J12	498b(8)	386
		Administer functional tests and activity-specific tests	J12	498b(8)	386
		Identify, palpate, and assess the integrity of bony landmarks	J12	498b(8)	386
		Identify, palpate, and assess the integrity of soft tissue	J12	498b(8)	386
		Administer commonly used special tests to make a differential assessment of the following:			
		➤ nerve root compression (e.g., distraction/compression test, Spurling's test, shoulder depression test)	J12	498b(8)	386
		➤ brachial plexus neuropathy (e.g., brachial tension test, Tinel's sign)	J12	498b(8)	386
		➤ cervical disc herniation (e.g., Valsalva's maneuver)	J12	498b(8)	386
		➤ neurovascular dysfunction (e.g., vertebral artery test)	J12	498b(8)	386
	The student will perform clinical	Obtain the medical history of an ill or	J9	498a(7)	385

	evaluations of major body areas to assess and interpret for injury and illness. (Shoulder)	injured athlete or other physically active individual			
		Observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:			
		➤ atrophy	J9	498a(7)	385
		➤ positioning (Sprengel's deformity)	J9	498a(7)	385
		➤ bursitis	J9	498a(7)	385
		➤ strain	J9	498a(7)	385
		➤ dislocation or subluxation	J9	498a(7)	385
		➤ scapulohumeral rhythm	J9	498a(7)	385
		➤ efficiency of movement	J9	498a(7)	385
		➤ scapular winging	J9	498a(7)	385
		➤ fracture	J9	498a(7)	385
		➤ step deformity	J9	498a(7)	385
		➤ sprain	J9	498a(7)	385
		➤ symmetry	J9	498a(7)	385
		➤ nerve injury	J9	498a(7)	385
		➤ tenosynovitis and tendonitis	J9	498a(7)	385
		administer active and passive range-of-motion tests using standard goniometric techniques	E5, J9	298a(3), 498a(7)	385
		use manual muscle-testing techniques	J9	498a(7)	385
		administer appropriate sensory, neurological, and circulatory tests	J9	498a(7)	385
		administer functional tests and activity-specific tests	J9	498a(7)	385
		identify and palpate bony landmarks	J9	498a(7)	385
		Identify and palpate soft tissue landmarks	J9	498a(7)	385
		Administer commonly used special tests to			

		<p>make a differential assessment of the following</p> <ul style="list-style-type: none"> ➤ glenohumeral instability (e.g., anterior drawer test, posterior drawer test, relocation test, apprehension test, clunk test, sulcus sign) ➤ acromioclavicular instability (e.g., shear test, compression test) ➤ rotator cuff impingement/inflammation (e.g., Speed's test, drop arm test, empty can test, impingement test, Hawkins-Kennedy impingement test, Neer impingement test, pectoralis major contracture test) ➤ biceps and biceps tendon pathology (e.g., Yergason's test, Ludington's test) ➤ thoracic outlet syndrome (e.g., Adson's maneuver, Allen test, military brace position) 	J9	498a(7)	385
			J9	498a(7)	385
			J9	498a(7)	385
			J9	498a(7)	385
			J9	498a(7)	385
	The student will perform clinical evaluations of major body areas to assess and interpret for injury and illness. (Elbow)	Obtain the medical history of an ill or injured athlete or other physically active individual	J10	498a(7)	385
		Observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing			

		conditions:			
		➤ symmetry	J10	498a(7)	385
		➤ epicondylitis	J10	498a(7)	385
		➤ carrying angle (cubital valgus and varus)	J10	498a(7)	385
		➤ tenosynovitis and tendonitis	J10	498a(7)	385
		➤ dislocation or subluxation	J10	498a(7)	385
		➤ osteochondritis dissecans	J10	498a(7)	385
		➤ fracture	J10	498a(7)	385
		➤ sprain	J10	498a(7)	385
		➤ atrophy	J10	498a(7)	385
		➤ strain	J10	498a(7)	385
		➤ efficiency of movement	J10	498a(7)	385
		➤ nerve injury	J10		385
		➤ bursitis	J10		385
		Administer active and passive range-of- motion tests using standard goniometric techniques	J10, E5	498a(7), 298a(3)	385
		Use manual muscle- testing techniques	J10	498a(7)	385
		Administer appropriate sensory, neurological, and circulatory tests	J10	498a(7)	385
		Administer functional tests and activity- specific tests	J10	498a(7)	385
		Identify, palpate, and interpret the integrity of bony landmarks	J10	498a(7)	385
		Identify, palpate, and interpret the integrity of soft tissue	J10	498a(7)	385
		Administer commonly used special tests to make a differential assessment of the following			
		➤ joint instability (e.g., valgus stress test, varus stress test)	J10	498a(7)	385
		➤ inflammatory conditions (e.g., tests for lateral epicondylitis,	J10	498a(7)	385

		<p>tests for medial epicondylitis)</p> <ul style="list-style-type: none"> ➤ neuropathy (e.g., Tinel's sign, pronator teres syndrome, pinch grip test) 	J10	498a(7)	385
	The student will perform clinical evaluations of major body areas to assess and interpret for injury and illness. (Forearm, Wrist, and Hand)	Obtain the medical history of an ill or injured athlete or other physically active individual	J11	498a(7)	385
		<p>Observe and identify the clinical signs and symptoms associated with the following:</p> <ul style="list-style-type: none"> ➤ fracture (Colles' fracture, Bennett's fracture, carpal fracture ["boxer's fracture"], metacarpal fracture, phalanges fracture) ➤ dislocation or subluxation ➤ disease states (e.g., clubbed nails, spoon-shaped nails) ➤ 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 	<p>J11</p> <p>J11</p> <p>J11</p> <p>J11</p>	<p>498a(7)</p> <p>498a(7)</p> <p>498a(7)</p> <p>498a(7)</p>	<p>385</p> <p>385</p> <p>385</p> <p>385</p>

		<ul style="list-style-type: none"> ➤ neck deformity, trigger finger) ➤ neurovascular involvement (e.g., carpal tunnel syndrome, bishop's or benediction deformity, ape hand, claw fingers, drop-wrist deformity, Volkmann's contracture) 	J11	498a(7)	385
		Administer active and passive range-of-motion tests using standard goniometric techniques	J11, E5	498a(7), 298a(3)	385
		Use manual muscle-testing techniques	J11	498a(7)	385
		Administer appropriate sensory, neurological, and circulatory tests	J11	498a(7)	385
		Administer functional tests and activity-specific tests	J11	498a(7)	385
		Identify, palpate, and interpret the integrity of bony landmarks	J11	498a(7)	385
		Identify, palpate, and interpret the integrity of soft tissue	J11	498a(7)	385
		Administer commonly used special tests to make a differential assessment of the following:			
		<ul style="list-style-type: none"> ➤ inflammatory conditions (e.g., Finkelstein test) 	J11	498a(7)	385
		<ul style="list-style-type: none"> ➤ joint instability (e.g., valgus stress test, varus stress test, glide tests) 	J11	498a(7)	385
		<ul style="list-style-type: none"> ➤ neurovascular pathology (e.g., Tinel's sign, Phalen's test) 	J11	498a(7)	385

	The student will perform clinical evaluations of major body areas to assess and interpret for injury and illness. (Thoracic/Lumbar Spine)	Obtain the medical history of an ill or injured athlete or other physically active individual	J7	398b(6)	386
		Observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:			
		➤ café au lait macules (spots)	J7	398b(6)	386
		➤ dislocation or subluxation	J7	398b(6)	386
		➤ spina bifida occulta	J7	398b(6)	386
		➤ facet syndrome	J7	398b(6)	386
		➤ intervertebral disc pathology	J7	398b(6)	386
		➤ spinal posture (kyphosis/lordosis)	J7	398b(6)	386
		➤ leg length discrepancies	J7	398b(6)	386
		➤ nerve root compression	J7	398b(6)	386
		➤ sacroiliac dysfunction	J7	398b(6)	386
		➤ scoliosis	J7	398b(6)	386
		➤ vertebral pathology (e.g., spondylitis, spondylolysis, spondylolisthesis)	J7	398b(6)	386
		➤ sprain	J7	398b(6)	386
		➤ stenosis	J7	398b(6)	386
		➤ step deformity	J7	398b(6)	386
		➤ strain	J7	398b(6)	386
		Administer active and passive range-of-motion tests using standard qualitative and quantitative techniques	J7, E5	398b(6), 298a(3)	386
		Use manual muscle-testing techniques	J7	398b(6)	386
		Administer appropriate sensory and neurological	J7	398b(6)	386

		tests			
		Administer functional tests and activity-specific tests	J7	398b(6)	386
		Identify, palpate, and interpret the integrity of bony landmarks	J7	398b(6)	386
		Identify, palpate, and interpret the integrity of soft tissue	J7	398b(6)	386
		Administer commonly used special tests to make a differential assessment of the following:			
		➤ intervertebral disc herniation (e.g., Valsalva's maneuver)	J7	398b(6)	386
		➤ 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)	J7	398b(6)	386
		➤ vertebral defects (e.g., stork standing test/spondylolisthesis test)	J7	398b(6)	386
		➤ joint instability (e.g., spring test)	J7	398b(6)	386
	The student will perform clinical evaluations of major body areas to assess and interpret for injury and illness. (Hip and Pelvis)	Obtain the medical history of an ill or injured athlete or other physically active individual	J6	398b(6)	386
		Observe and identify the clinical signs and symptoms associated with common injuries, illnesses, and predisposing conditions:			

		<ul style="list-style-type: none"> ➤ leg length discrepancies ➤ osteitis pubis ➤ hip retroversion ➤ athletic pubalgia ➤ hip anteversion ➤ bursitis ➤ Legg-Calv9-Perthes disease ➤ piriformis syndrome ➤ apophysitis ➤ iliotibial band syndrome ➤ slipped capital femoral epiphysis ➤ contusion ➤ dislocation or subluxation ➤ sprain ➤ fracture ➤ strain ➤ stress fracture ➤ tendonitis 	J6	398b(6)	386
		Administer active and passive range-of-motion tests using standard goniometric techniques and/or a tape measure	J6	398b(6)	386
		Use manual muscle-testing techniques	J6	398b(6)	386
		Administer appropriate sensory, neurological, and circulatory tests	J6	398b(6)	386
		Administer functional tests and activity-specific tests	J6	398b(6)	386
		Identify, palpate, and interpret the integrity of bony landmarks	J6	398b(6)	386
		Identify, palpate, and interpret the integrity of soft tissue	J6	398b(6)	386
		Administer commonly used special tests to make a differential assessment of the following:			
		<ul style="list-style-type: none"> ➤ sacroiliac 	J6	398b(6)	386

		<ul style="list-style-type: none"> contusion or palsy ➤ popliteal cyst ➤ sprain ➤ strain ➤ tendonitis ➤ tibial torsion ➤ tibiofemoral alignment (e.g., genu recurvatum, genu valgum, genu varum) 	<p>J4</p> <p>J4</p> <p>J4</p> <p>J4</p> <p>J4</p> <p>J4</p>	<p>398a(5)</p> <p>398a(5)</p> <p>398a(5)</p> <p>398a(5)</p> <p>398a(5)</p> <p>398a(5)</p>	<p>386</p> <p>386</p> <p>386</p> <p>386</p> <p>386</p> <p>386</p>
		Administer active and passive range-of-motion tests using standard goniometric techniques	J4, E5	398a(5), 298a(3)	386
		Use manual muscle-testing techniques	J4	398a(5)	386
		Administer appropriate sensory, neurological, and circulatory tests	J4	398a(5)	386
		Administer functional tests and activity-specific tests	J4	398a(5)	386
		Identify, palpate, and interpret the integrity of bony landmarks	J4	398a(5)	386
		Identify, palpate, and interpret the integrity of soft tissue	J4	398a(5)	386
		Administer commonly used special tests to make a differential assessment of the following:			
		<ul style="list-style-type: none"> ➤ uniplanar stress tests (e.g., valgus stress test, varus stress test, Lachman test, anterior drawer test, posterior drawer test, posterior sag sign) 	J4	398a(5)	386
		<ul style="list-style-type: none"> ➤ multiplanar (rotational) stress tests (e.g., Slocum test, Hughston's test, lateral pivot shift) 	J4	398a(5)	386

		<ul style="list-style-type: none"> ➤ 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) 	J4	398a(5)	386
			J4	398a(5)	386
			J4	398a(5)	386
	The student will perform clinical evaluations of major body areas to assess and interpret for injury and illness. (Leg, Ankle, and Foot)	Obtain the medical history of an ill or injured athlete or other physically active individual	J1, J2, J3	398a(5)	386
		Observe and identify the clinical signs and symptoms associated with the following common injuries, illnesses, and predisposing conditions:			
		<ul style="list-style-type: none"> ➤ overuse injures (e.g., bursitis, exostosis, fasciitis, stress fracture, tarsal tunnel syndrome, tendonitis and/or tenosynovitis, tibial stress syndrome) ➤ Achilles tendon rupture ➤ compartment syndromes ➤ apophysitis ➤ dislocation or subluxation ➤ foot type/structure (e.g., forefoot varus/valgus, equinus deformity, pes 	J1, J2, J3	398a(5)	386
			J3	398a(5)	386
			J3	398a(5)	386
			J1	398a(5)	386
			J1, J2	398a(5)	386
			J1	398a(5)	386

		deformity, pes cavus/planus, plantar flexed first ray, rearfoot [hindfoot] varus/valgus)			
		➤ fracture	J1, J2, J3	398a(5)	386
		➤ deep vein thrombosis (e.g., Homans' sign)	J3	398a(5)	386
		➤ neuroma	J1	398a(5)	386
		➤ osteochondritis dissecans	J1	398a(5)	386
		➤ sprain	J1, J2	398a(5)	386
		➤ strain	J1, J2, J3	398a(5)	386
		➤ toe structure/alignment (e.g., bunion, claw toes, hallux rigidus, hallux valgus, hammer toes, mallet toe, Morton's foot syndrome)	J1	398a(5)	386
		➤ weight-bearing versus non-weight-bearing alignment	J1	398a(5)	386
		➤ gait	J1	398a(5)	386
		Administer active and passive range-of-motion tests using standard goniometric techniques	J1, J2, J3, E5	398a(5), 298a(3)	386
		Use manual muscle-testing techniques	J1, J2, J3	398a(5)	386
		Administer appropriate sensory, neurological, and circulatory tests	J1, J2, J3	398a(5)	386
		Administer functional tests and activity-specific tests	J1, J2, J3	398a(5)	386
		Identify, palpate, and interpret the integrity of bony landmarks	J1, J2, J3	398a(5)	386
		Identify, palpate, and interpret the integrity of soft tissue	J1, J2, J3	398a(5)	386
		Administer the following commonly used special tests to make a differential assessment:			

		<ul style="list-style-type: none"> ➤ compression test (e.g., Pott's fracture) J1 398a(5) 386 ➤ talar tilt test J2 398a(5) 386 ➤ percussion test J1 398a(5) 386 ➤ Thompson test J3 398a(5) 386 ➤ anterior drawer test J2 398a(5) 386 ➤ Tinel's sign J1 398a(5) 386 ➤ Kleiger's test J2 398a(5) 386 ➤ Homans' sign J3 398a(5) 386 			
Acute Care of Injury and Illness	The student will demonstrate the ability to implement an emergency action plan (EAP).	The student will demonstrate the ability to implement an EAP for an activity, setting, or event.	B1	198a(1)	404
		The student will correctly triage emergency situations.	B1	198a(1)	205
	The student will demonstrate the ability to apply first-aid techniques using universal precautions.	<p>The student will demonstrate the ability to:</p> <ul style="list-style-type: none"> ➤ manage open and closed wounds B7 198a(1) 205 ➤ apply direct and indirect pressure to control bleeding B7 198a(1) 205 ➤ clean, debride, and protect an open wound B7 198a(1) 205 ➤ apply superficial skin closures B7 198a(1) 205 ➤ properly apply and remove gloves and other personal protective equipment B8 198a(1) 205 ➤ properly dispose of biohazardous waste B8 198a(1) 205 ➤ apply appropriate dressings B7 198a(1) 205 ➤ apply ice, compression, and elevation to an acute sprain, strain, or B6 198a(1) 205 			

		contusion			
	The student will demonstrate the ability to apply immobilization devices to applicable body parts.	<p>The student will demonstrate the ability to:</p> <ul style="list-style-type: none"> ➤ select and apply an appropriate splint to a sprain, strain, fracture, subluxation, and dislocation ➤ stabilize and spine board or body splint an adult or child with a suspected spinal injury 	B4	198b(2)	205
			B4	198b(2)	205
	The student will recognize and manage environmentally related injuries and illnesses and, when indicated, refer the patient to the proper medical professional.	<p>The student will evaluate and manage the following:</p> <ul style="list-style-type: none"> ➤ heat exhaustion ➤ heat stroke ➤ heat syncope ➤ hypothermia 	B4 B4 B4 B4	198b(2) 198b(2) 198b(2) 198b(2)	205, 340, 430 205, 340, 430 205, 340, 430 205, 340, 430
	The student will demonstrate the ability to perform basic life-support techniques.	<p>The student will demonstrate the ability to:</p> <ul style="list-style-type: none"> ➤ establish and manage an airway ➤ establish and manage an airway in an athlete wearing protective headgear ➤ perform CPR on an adult or child with or without a spinal injury ➤ use a bag-valve-mask (BVM) on an adult or child for rescue breathing ➤ use a protective pocket mask/shield on an adult or child 	B2 B2 B2 B2 B2	198b(2) 198b(2) 198b(2) 198b(2) 198b(2)	205 205 205 205 205

		for rescue breathing			
	The student will demonstrate the ability to use various methods of stabilization and transportation to facilitate the movement or ambulation of the injured person.	The student will demonstrate the ability to:			
		➤ stabilize and transport an adult or child with a head and/or spinal injury	B4	198b(2)	205
		➤ stabilize and transport an adult or child with a fracture and/or dislocation	B4	198b(2)	205
		➤ select, fit, and instruct the patient in the use of crutches	B6	198a(1)	205
		➤ select, fit, and instruct the patient in the use of a cane	B6	198a(1)	205
		➤ transport an injured adult or child using a manual conveyance technique	B4	198b(2)	205
		➤ perform two-person CPR	B2	198b(2)	205
		➤ assist a drowning victim	B2	198b(2)	205

Pharmacology	The student will locate and utilize pharmaceutical products, storage, dispensing, and tracking information.	<p>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:</p> <ul style="list-style-type: none"> ➤ generic and brand names ➤ dosing ➤ indications for use ➤ other notes (e.g., banned substance) ➤ contraindications ➤ side (adverse) effects ➤ warnings 	<p>F1 F1 F1 F1 F1 F1 F1</p>	<p>298b(4) 298b(4) 298b(4) 298b(4) 298b(4) 298b(4) 298b(4)</p>	<p>405 405 405 405 405 405 405</p>
		<p>Document, or simulate the documentation of, the tracking of medications by recording the following information about the medication:</p> <ul style="list-style-type: none"> ➤ name ➤ dosage ➤ manufacturer ➤ lot number ➤ amount ➤ expiration date 	<p>F2 F2 F2 F2 F2 F2</p>	<p>298b(4) 298b(4) 298b(4) 298b(4) 298b(4) 298b(4)</p>	<p>405 405 405 405 405 405</p>
		<p>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:</p> <ul style="list-style-type: none"> ➤ determine type of over-the-counter 	<p>F2</p>	<p>398b(4)</p>	<p>405</p>

		<p>(OTC) medication to be used according to the physical ailment and established protocols</p> <ul style="list-style-type: none"> ➤ identify the precautions, expiration date, lot number, and dosage for the medication as provided on the package and individual dose packets ➤ administer OTC medication by providing verbal and written instruction for its use to the patient and then recording and documenting the administration 	F2	398b(4)	405
			F2	398b(4)	405
	The student will activate a poison control service.	<p>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:</p> <ul style="list-style-type: none"> ➤ name and location of person making the call ➤ name and age of person who has taken the medication ➤ name and dosage of the drug taken ➤ time the drug was taken ➤ signs and symptoms associated with overdose or poison situation, including vital 	B11	198b(2)	205
			B11	198b(2)	205
			B11	198b(2)	205
			B11	198b(2)	205
			B11	198b(2)	205

		signs			
	The student will demonstrate the ability to instruct the use of and administer bronchodilators and epinephrine.	<p>Replicate the following procedures for using an emergency epinephrine injection to prevent anaphylaxis:</p> <ul style="list-style-type: none"> ➤ identify indications for an epinephrine injection ➤ demonstrate proper use through verbal and nonverbal instruction ➤ identify signs and symptoms that might indicate an allergic reaction to or overdose of epinephrine ➤ demonstrate proper storage of epinephrine injectable ➤ demonstrate proper disposal of used injection system 	B10	298a(3)	205, 405
			B10	298a(3)	205, 405
			B10	298a(3)	205, 405
			B10	298a(3)	205, 405
			B10	298a(3)	205, 405
		<p>Replicate the following procedures for using an emergency bronchodilator (inhaler) to prevent asthma attacks:</p> <ul style="list-style-type: none"> ➤ identify indications for use of a bronchodilator ➤ demonstrate proper use through verbal and nonverbal instruction ➤ identify signs and symptoms that might indicate an allergic reaction to or overdose of 	B10	298a(3)	405
			B10	298a(3)	405
			B10	298a(3)	405

		<ul style="list-style-type: none"> ➤ a bronchodilator demonstrate proper storage of a bronchodilator 	B10	298a(3)	405
Therapeutic Modalities	The student will relate the findings of a physical examination to determine the appropriate course of treatment.	The student will perform a physical examination to identify the current inflammatory stage.	<u>ADD TO G1-G11</u>	198a(1), 198b(2), 298a(3), 298b(4), 398b(6)	401, 402
		The student will perform a physical examination and interview to identify the indications, contraindications, and precautions to various treatment protocols.	G1-G12	198a(1), 198b(2), 298a(3), 298b(4), 398b(6)	401
	The student will demonstrate the ability to apply therapeutic modalities.	<p style="text-align: center;"><u>Cryotherapy</u></p> <p>The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:</p> <ul style="list-style-type: none"> ➤ cold whirlpool treatment ➤ ice immersion ➤ controlled cold therapy unit ➤ ice massage ➤ ice pack ➤ cryokinetics ➤ vapo-coolant spray 	<p>G4</p> <p>G4</p> <p>G4</p> <p>G4</p> <p>G4</p> <p>G5</p> <p>G4</p>	<p>198b(2)</p> <p>198b(2)</p> <p>198b(2)</p> <p>198b(2)</p> <p>198b(2)</p> <p>198b(2)</p> <p>198b(2)</p>	<p>401</p> <p>401</p> <p>401</p> <p>401</p> <p>401</p> <p>401</p> <p>401</p>
		<p style="text-align: center;"><u>Thermotherapy</u></p> <p>The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:</p> <ul style="list-style-type: none"> ➤ moist heat pack ➤ contrast bath ➤ paraffin treatment 	<p>G2</p> <p><u>ADD TO G1</u></p>	<p>198a(1)</p> <p>198a(1)</p> <p>198a(1)</p>	<p>401</p> <p>401</p> <p>401</p>

		➤ warm whirlpool treatment	G3 G1	198a(1)	401
		<u>Electrotherapy</u> The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:			
		➤ sensory-level pain control treatment	G10	198b(2)	401
		➤ muscle atrophy retardation treatment	G10	298a(3)	401
		➤ noxious-level pain control treatment	G10	298a(3)	401
		➤ acute edema treatment	G10	298a(3)	401
		➤ motor-level pain control treatment	G10	298a(3)	401
		➤ muscle splinting/spasm treatment	G10	198b(2)	401
		➤ muscle re-education treatment	G10	298a(3)	401
		➤ iontophoresis treatment	G10	298b(4)	401
		➤ muscle pumping treatment	G10	298a(3)	401
		<u>Electrotherapy</u> The student will set-up and apply the following types of electrical stimulation units:			
		➤ monophasic stimulator (e.g., high volt stimulation)	G10	198b(2)	401
		➤ biphasic stimulator (e.g., Transcutaneous Electrical Nerve Stimulation [TENS], Neuromuscular Electrical	G10	198b(2)	401

		<p>Stimulation [NMES])</p> <ul style="list-style-type: none"> ➤ direct current (e.g., iontophoresis) ➤ alternating current (e.g., interferential, NMES) ➤ multifunction electrical stimulation devices 	<p>G10</p> <p>G10</p> <p>G10</p>	<p>398b(4)</p> <p>198b(2)</p> <p>198b(2), 298a(3)</p>	<p>401</p> <p>401</p> <p>401</p>
		<p><u>Ultrasound</u></p> <p>The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:</p> <ul style="list-style-type: none"> ➤ thermal ultrasound treatment ➤ non-thermal ultrasound treatment ➤ combination electrical-stimulation/ultrasound treatment ➤ phonophoresis treatment ➤ indirect application of ultrasound treatment (underwater, bladder) 	<p>G8</p> <p>G8</p> <p>G8</p> <p>G8</p> <p>G8</p>	<p>198a(1)</p> <p>198a(1)</p> <p>198a(1)</p> <p>198a(1)</p> <p>198a(1)</p>	<p>401</p> <p>401</p> <p>401</p> <p>401</p> <p>401</p>
		<p><u>Traction</u></p> <p>The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:</p> <ul style="list-style-type: none"> ➤ mechanical traction ➤ manual traction ➤ positional traction 	<p>G12</p> <p>G12</p> <p>G12</p>	<p>298b(4)</p> <p>298b(4)</p> <p>298b(4)</p>	<p>401</p> <p>401</p> <p>401</p>

		<p style="text-align: center;"><u>Intermittent Compression</u></p> <p>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.</p>	G7	198b(2)	401
		<p style="text-align: center;"><u>Therapeutic Massage</u></p> <p>The student will demonstrate the ability to prepare and apply a massage treatment.</p>	G11	298a(3)	401
		<p style="text-align: center;"><u>Therapeutic Massage</u></p> <p>The student will demonstrate the ability to properly perform the following therapeutic massage strokes:</p> <ul style="list-style-type: none"> ➤ effleurage ➤ tapotement ➤ petrissage ➤ vibration ➤ friction (circular, transverse) ➤ myofascial release techniques 	G11 G11 G11 G11 G11 G11	298a(3) 298a(3) 298a(3) 298a(3) 298a(3) 298a(3)	401 401 401 401 401 401
Therapeutic Exercise	The student will demonstrate the ability to perform therapeutic exercises.	<p>Exercise to improve the range of motion of the upper extremity, lower extremity, trunk, and cervical spine.</p> <p>The student will demonstrate the ability to instruct the following exercises:</p>			

		<ul style="list-style-type: none"> ➤ passive range-of-motion exercises ➤ active range-of-motion exercises ➤ active-assisted range-of-motion exercises ➤ joint mobilization ➤ self-mobilizations 	D3, H3 D3, H3 D3, H3 H4 H4	298a(3) 298a(3) 298a(3) 298a(3) 298a(3)	402 402 402 402 402
		<p>Exercise to improve muscular strength.</p> <p>The student will demonstrate the ability to instruct exercises for the following parts of the body using isometric and progressive resistance techniques:</p> <ul style="list-style-type: none"> ➤ lower extremity ➤ upper extremity ➤ cervical spine ➤ trunk and torso 	H5, H6, H7 H5, H6, H7 H5, H6, H7 H5, H6, H7	298a(3) 298a(3) 298a(3) 298a(3)	402 402 402 402
		<p>Exercise to improve muscular endurance.</p> <p>The student will demonstrate the ability to instruct the following exercise modalities:</p> <p><u>Upper Body</u></p> <ul style="list-style-type: none"> ➤ aquatic ➤ UBE/Stationary bicycle ➤ Physioballs ➤ Treadmill <p><u>Lower Body</u></p> <ul style="list-style-type: none"> ➤ Aquatic ➤ Stationary bicycle ➤ stair 	H9, H10 H9, H15 H9 H15 H9, H10 H9, H15 H9, H15	298b(4) 298b(4) 298b(4) 298b(4) 298b(4) 298b(4) 298b(4)	402 402 402 402 402 402 402
		<p>Exercise to improve muscular speed.</p> <p>The student will demonstrate the ability to instruct the following activities:</p>			

		<p><u>Upper Body</u></p> <ul style="list-style-type: none"> ➤ reaction drills H12 298b(4) 402 ➤ sprint work H12 298b(4) 402 ➤ Fartlek training H12 298b(4) 402 <p><u>Lower Body</u></p> <ul style="list-style-type: none"> ➤ Reaction drills H12 298b(4) 402 		
		<p>Exercise to improve muscular power. The student will demonstrate the ability to instruct plyometric exercises for the upper and lower extremities.</p>	H14	298b(4) 402
		<p>Exercise to improve neuromuscular control and coordination.</p> <p>The student will demonstrate the ability to instruct the following activities:</p> <p><u>Upper Body</u></p> <ul style="list-style-type: none"> ➤ PNF patterns H11 298b(4) 402 ➤ Rythmic stabilization H11 298b(4) 402 ➤ Double and single arm balancing H11 298b(4) 402 ➤ Wobble board or balance apparatus H11 298b(4) 402 ➤ Weighted ball rebounding or toss H11 298b(4) 402 <p><u>Lower Body</u></p> <ul style="list-style-type: none"> ➤ PNF patterns H11 298b(4) 402 ➤ Proprioception board or balance apparatus H11 298b(4) 402 ➤ Incline board H11 298b(4) 402 ➤ Single leg balancing H11 298b(4) 402 <p><u>Neck</u></p>		

		<ul style="list-style-type: none"> ➤ Stabilization ➤ Postural correction <p><u>Trunk</u></p> <ul style="list-style-type: none"> ➤ Stabilization ➤ Postural correction 	H11 H11	298b(4) 298b(4)	402 402
		<p>Exercise to improve agility.</p> <p>The student will demonstrate the ability to instruct the following activities:</p> <p><u>Upper Body</u></p> <ul style="list-style-type: none"> ➤ Throwing ➤ Catching <p><u>Lower Body</u></p> <ul style="list-style-type: none"> ➤ Carioca ➤ Cross-over ➤ Figure eight (8) 	H13 H13	298b(4) 298b(4)	402 402
		<p>Exercise to improve cardiorespiratory endurance.</p> <p>The student will demonstrate the ability to instruct the following activities:</p> <p><u>Upper Body</u></p> <ul style="list-style-type: none"> ➤ Upper body ergometer ➤ Stationary bicycle ➤ Aquatic ➤ Stair climber <p><u>Lower Body</u></p> <ul style="list-style-type: none"> ➤ Bicycle ergometer ➤ Treadmill ➤ Stair climber ➤ aquatic 	H15 H15 H15 H15	298b(4) 298b(4) 298b(4) 298b(4)	402 402 402 402
		<p>The student will demonstrate the ability to assess joint end point and to select and perform</p>			

		<p>appropriate joint mobilization techniques for the appendicular and axial skeleton, including the following:</p> <ul style="list-style-type: none"> ➤ long-axis distraction ➤ appropriate glides (e.g., anterior/posterior, superior/inferior) 	H4	298a(3)	402
			H4	298a(3)	402
		The student will demonstrate the ability to instruct and perform exercises to improve activity-specific skills (running, striking, throwing, catching, swimming, biking, climbing, etc.).	H16	298b(4)	402
General Medical Conditions and Disabilities	<i>(no specific teaching objectives for this section)</i>	<p>Obtain a basic medical history that includes the following components:</p> <ul style="list-style-type: none"> ➤ previous medical history ➤ current medication history ➤ previous surgical history ➤ relevant social history ➤ pertinent family medical history ➤ chief medical complaint 	E1	298b(4)	405
			E1	298b(4)	405
			E1	298b(4)	405
			E1	298b(4)	405
			E1	298b(4)	405
		<p>Ascertain body temperature via the following:</p> <ul style="list-style-type: none"> ➤ oral temperature ➤ axillary temperature ➤ tympanic temperature 	E1	298b(4)	405
			E1	298b(4)	405
			E1	298b(4)	405
		Ascertain the			

		<p>following vital signs:</p> <ul style="list-style-type: none"> ➤ blood pressure ➤ pulse (rate and quality) ➤ respirations (rate and quality) 	<p>E1</p> <p>E1</p> <p>E1</p>	<p>298b(4)</p> <p>298b(4)</p> <p>298b(4)</p>	<p>222, 405</p> <p>205, 222, 405</p> <p>205, 405</p>
		<p>Palpate the four abdominal quadrants to assess for the following:</p> <ul style="list-style-type: none"> ➤ guarding and rigidity ➤ pain 	<p>E1</p> <p>E1</p>	<p>298b(4)</p> <p>298b(4)</p>	<p>340, 405</p> <p>340, 405</p>
		<p>Use a stethoscope to identify the following:</p> <ul style="list-style-type: none"> ➤ normal breath sounds ➤ normal heart sounds ➤ normal bowel sounds 	<p>E1</p> <p>E1</p> <p>E1</p>	<p>298b(4)</p> <p>298b(4)</p> <p>298b(4)</p>	<p>405</p> <p>405</p> <p>405</p>
		<p>Identify pathological breathing patterns to make a differential assessment for the following respiratory conditions:</p> <ul style="list-style-type: none"> ➤ apnea ➤ bradypnea ➤ tachypnea ➤ dyspnea ➤ hyperventilation ➤ obstructed airway 	<p>E1</p> <p>E1</p> <p>E1</p> <p>E1</p> <p>E1</p> <p>B2, E1</p>	<p>298b(4)</p> <p>298b(4)</p> <p>298b(4)</p> <p>298b(4)</p> <p>298b(4)</p> <p>198b(2), 298b(4)</p>	<p>205, 405</p> <p>205, 405</p> <p>205, 405</p> <p>205, 405</p> <p>205, 405</p> <p>205, 405</p>
		<p>Demonstrate proficiency in the use of an otoscope to examine the nose and the outer and middle ear.</p>	<p>E1</p>	<p>298b(4)</p>	<p>405</p>
		<p>Measure urine values with Chemstrips (dipsticks)</p>	<p>E1</p>	<p>298b(4)</p>	<p>405</p>
		<p>Recognize the signs, symptoms, and predisposing conditions associated</p>			

		<p>with the following diseases and conditions:</p> <p><u>Skin</u></p> <ul style="list-style-type: none"> ➤ abscesses J14 498b(8) 405 ➤ herpes zoster J14 498b(8) 405 ➤ acne vulgaris J14 498b(8) 405 ➤ hives J14 498b(8) 405 ➤ carbuncle J14 498b(8) 405 ➤ impetigo J14 498b(8) 405 ➤ cellulitis J14 498b(8) 405 ➤ psoriasis J14 498b(8) 405 ➤ molluscum contagiosum J14 498b(8) 405 ➤ ringworm J14 498b(8) 405 ➤ dermatitis J14 498b(8) 405 ➤ scabies J14 498b(8) 405 ➤ eczema J14 498b(8) 405 ➤ sebaceous cysts J14 498b(8) 405 ➤ folliculitis J14 498b(8) 405 ➤ tinea cruris J14 498b(8) 405 ➤ frostbite J14 498b(8) 405 ➤ tinea pedis J14 498b(8) 405 ➤ furunculosis J14 498b(8) 405 ➤ verruca plantaris J14 498b(8) 405 ➤ herpes simplex J14 498b(8) 405 ➤ verruca vulgaris J14 498b(8) 405 ➤ tinea versicolor J14 498b(8) 405 ➤ tinea capitis J14 498b(8) 405 ➤ pediculosis J14 498b(8) 405 		
		<p>Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:</p> <p><u>The Eyes, Ears, Nose, and Throat</u></p> <ul style="list-style-type: none"> ➤ common cold J16 498b(8) 405 ➤ rhinitis J16 498b(8) 405 ➤ conjunctivitis J16 498b(8) 405 ➤ sinusitis J16 498b(8) 405 ➤ laryngitis J16 498b(8) 405 ➤ tetanus J16 498b(8) 405 ➤ pharyngitis J16 498b(8) 405 ➤ tonsillitis J16 498b(8) 405 		
		<p>Recognize the signs, symptoms, and predisposing</p>		

		<p>conditions associated with the following diseases and conditions:</p> <p><u>Respiratory System</u></p> <ul style="list-style-type: none"> ➤ asthma ➤ influenza ➤ bronchitis ➤ pneumonia ➤ hyperventilation ➤ upper respiratory infection (URI) ➤ hay fever 	<p>J16</p> <p>J16</p> <p>J16</p> <p>J16</p> <p>J16</p> <p>J16</p> <p>J16</p> <p>J16</p>	<p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p>	<p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p>
		<p>Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:</p> <p><u>Cardiovascular System</u></p> <ul style="list-style-type: none"> ➤ hypertension ➤ migraine headache ➤ hypertrophic cardiomyopathy ➤ shock ➤ hypotension ➤ syncope 	<p>J17</p> <p>J17</p> <p>J17</p> <p>B4</p> <p>J17</p> <p><u>ADD TO J17</u></p>	<p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>198b(2)</p> <p>498b(8)</p> <p>498b(8)</p>	<p>405</p> <p>405</p> <p>405</p> <p>205, 405</p> <p>405</p> <p>405</p>
		<p>Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:</p> <p><u>Endocrine System</u></p> <ul style="list-style-type: none"> ➤ diabetes ➤ hypothyroidism ➤ hyperthyroidism ➤ pancreatitis 	<p>J15</p> <p>J15</p> <p>J15</p> <p>J15</p>	<p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p>	<p>205, 405</p> <p>405</p> <p>405</p> <p>405</p>
		<p>Recognize the signs, symptoms, and predisposing conditions associated</p>			

		<p>with the following diseases and conditions:</p> <p><u>Gastrointestinal Tract</u></p> <ul style="list-style-type: none"> ➤ appendicitis ➤ gastritis ➤ colitis ➤ gastroenteritis ➤ constipation ➤ indigestion ➤ diarrhea ➤ ulcer ➤ esophageal reflux ➤ irritable bowel syndrome 	<p>J17</p> <p>J17</p> <p>J17</p> <p>J17</p> <p>J17</p> <p>J17</p> <p>J17</p> <p>J17</p> <p>J17</p> <p>J17</p>	<p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p>	<p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p>
		<p>Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:</p> <p><u>Eating Disorders</u></p> <ul style="list-style-type: none"> ➤ anorexia ➤ bulimia ➤ obesity 	<p>F4</p> <p>F4</p> <p>F4</p>	<p>398b(6)</p> <p>398b(6)</p> <p>398b(6)</p>	<p>307, 405</p> <p>307, 405</p> <p>307, 405</p>
		<p>Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:</p> <p><u>Sexually Transmitted Diseases/Diseases Transmitted by Body Fluid</u></p> <ul style="list-style-type: none"> ➤ HIV/AIDS ➤ genital warts ➤ hepatitis ➤ gonorrhea ➤ chlamydia ➤ syphilis 	<p>J18</p> <p>J18</p> <p>J18</p> <p>J18</p> <p>J18</p> <p>J18</p>	<p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p>	<p>203, 405</p> <p>203, 405</p> <p>203, 405</p> <p>203, 405</p> <p>203, 405</p> <p>203, 405</p>
		<p>Recognize the signs, symptoms, and</p>			

		<p>predisposing conditions associated with the following diseases and conditions:</p> <p><u>Genitourinary Tract and Organs</u></p> <ul style="list-style-type: none"> ➤ kidney stones ➤ urinary tract infection ➤ spermatic cord torsion ➤ hydrocele ➤ candidiasis ➤ varicocele ➤ urethritis 	<p>J18</p> <p>J18</p> <p>J18</p> <p>J18</p> <p>J18</p> <p>J18</p> <p>J18</p>	<p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p>	<p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p>
		<p>Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:</p> <p><u>Gynecological Disorders</u></p> <ul style="list-style-type: none"> ➤ amenorrhea ➤ pelvic inflammatory disease ➤ dysmenorrhea ➤ vaginitis ➤ oligomenorrhea 	<p>J18</p> <p>J18</p> <p>J18</p> <p>J18</p> <p>J18</p> <p>J18</p>	<p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p>	<p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p> <p>405</p>
		<p>Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:</p> <p><u>Viral Syndromes</u></p> <ul style="list-style-type: none"> ➤ infectious mononucleosis ➤ measles ➤ mumps 	<p>J15</p> <p>J15</p> <p>J15</p>	<p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p>	<p>405</p> <p>405</p> <p>405</p>
		<p>Recognize the signs, symptoms, and predisposing</p>			

		<p>conditions associated with the following diseases and conditions:</p> <p><u>Neurological Disorders</u></p> <ul style="list-style-type: none"> ➤ epilepsy ➤ reflex sympathetic dystrophy ➤ syncope ➤ meningitis 	<p>J15</p> <p>J15</p> <p>J15</p> <p>J15</p>	<p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p>	<p>405</p> <p>405</p> <p>405</p> <p>405</p>
		<p>Recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:</p> <p><u>Systemic Diseases</u></p> <ul style="list-style-type: none"> ➤ iron-deficiency anemia (systemic) ➤ sickle cell anemia (systemic) ➤ Lyme disease 	<p>J15</p> <p>J15</p> <p>J15</p>	<p>498b(8)</p> <p>498b(8)</p> <p>498b(8)</p>	<p>405</p> <p>405</p> <p>405</p>
Nutritional Aspects of Injury and Illnesses	The student will demonstrate the ability to design general nutrition programs for athletes and others involved in physical activity.	<p>The student will demonstrate the ability to access and recommend nutritional guidelines for the following:</p> <ul style="list-style-type: none"> ➤ pre-participation meal ➤ weight gain ➤ weight loss ➤ fluid replacement 	<p>F3</p> <p>F3</p> <p>F3</p> <p>F3</p>	<p>398b(6)</p> <p>398b(6)</p> <p>398b(6)</p> <p>398b(6)</p>	<p>307</p> <p>307</p> <p>307</p> <p>307</p>
		The student will demonstrate the ability to use the nutritional food pyramid.	F3	398b(6)	307
		The student will demonstrate the ability to access and assess the following nutritional intake			

		values: <ul style="list-style-type: none"> ➤ RDA or equivalency ➤ vitamin intake ➤ protein intake ➤ mineral intake ➤ fat intake ➤ fluid intake ➤ carbohydrate intake 	F3 F3 F3 F3 F3 F3	398b(6) 398b(6) 398b(6) 398b(6) 398b(6) 398b(6) 398b(6)	307 307 307 307 307 307 307
		The student will demonstrate the ability to determine energy expenditure and caloric intake.	F3	398b(6)	307
		The student will demonstrate the ability to calculate the basal metabolic rate of energy expenditure.	F3	398b(6)	307
		Simulate intervention with an individual who has the signs and symptoms of disordered eating	F4	398b(6)	307, Psych 420
		Identify proper referral sources for disordered eating.	F4	398b(6)	307, 404, Psych 420
Psychosocial Intervention and Referral	The student will demonstrate the ability to intervene and make the referral to appropriate medical or allied medical professional.	Simulate intervention with an individual who has a substance abuse problem and recommend appropriate referral	K2	398a(5)	Psych 420
		Simulate a confidential conversation with a health care professional concerning suspected substance abuse by an athlete or other physically active individual	K2	398a(5)	Psych 420
		Locate the available community-based	K3	398a(5)	Psych 420

		resources for psychosocial intervention			
	The student will integrate motivational techniques into the rehabilitation program.	<p>Simulate the following motivational techniques used during rehabilitation:</p> <ul style="list-style-type: none"> ➤ verbal motivation ➤ imagery ➤ visualization ➤ desensitization 	<p>H2 H2 H2 H2</p>	<p>498a(7) 498a(7) 498a(7) 498a(7)</p>	<p>402 402 402 402</p>
Health Care Administration	The student will demonstrate appropriate communication skills.	<p>The student will:</p> <ul style="list-style-type: none"> ➤ calm, reassure, and explain a potentially catastrophic injury to an injured adult or child, athletic personnel, and/or family member ➤ effectively communicate and work with physicians, emergency medical technicians (EMTs), and other members of the allied health care community and sports medicine team ➤ appropriately communicate with athletic personnel and family members ➤ use ethnic and cultural sensitivity in all aspects of communication ➤ communicate with diverse community populations 	<p>K1 K1 K1 K1 K1</p>	<p>498a(7) 498a(7) 498a(7) 498a(7) 498a(7)</p>	<p>404 404 404 404 404</p>
	The student will use contemporary multimedia, computer hardware,	The student will access information and manage data using contemporary			

	and software as related to the practice of athletic training.	<p>multimedia, computer equipment, and software. This should include, but not be limited to, use of the following:</p> <ul style="list-style-type: none"> ➤ word processing software ➤ injury tracking software ➤ file management systems ➤ the World Wide Web ➤ spreadsheets ➤ communication (e-mail) ➤ budgeting software ➤ presentation software 			
			L1	498b(8)	340
			L1	498b(8)	340
			L1	498b(8)	340
			L1	498b(8)	340
			L1	498b(8)	340
			L1	498b(8)	340
			M2	498a(7)	340
	The student will demonstrate the ability to perform record keeping skills with sensitivity to patient confidentiality.	<p>The student will</p> <ul style="list-style-type: none"> ➤ use standardized record keeping methods (e.g., SOAP, HIPS, HOPS) ➤ select and use injury, rehabilitation, referral, and insurance documentation ➤ use progress notes ➤ organize patient files to allow systematic storage and retrieval 	A2	198a(1)	385, 386
			A2	198a(1)	404
			A2	198a(1)	385, 386
			A2	198a(1)	404
	The student will demonstrate the ability to develop athletic training facilities and administrative plans.	<p>The student will demonstrate the ability to develop facility design plans that include, but are not limited to, the following components:</p> <ul style="list-style-type: none"> ➤ basic floor plan design ➤ facility evacuation 			
			L5	398a(6)	404
			L5	398a(6)	404

		<ul style="list-style-type: none"> ➤ basic rehabilitation and treatment area plans 	L5	398a(6)	404
		<p>The student will demonstrate the ability to develop administrative plans that include but are not limited to, the following components:</p> <ul style="list-style-type: none"> ➤ risk management ➤ developing policies and procedures ➤ developing budget (expendable and capital) ➤ addressing facility hazards 	L4 L4 L4 L4	398a(6) 398a(6) 398a(6) 398a(6)	404 404 404 404
	The student will demonstrate the ability to prepare and interpret sample design for scientific research.	<p>The student will interpret the following basic literature:</p> <ul style="list-style-type: none"> ➤ case study ➤ outcome measurement, including statistical interpretation ➤ literature review 	M1 M1 M1	498a(7) 498a(7) 498a(7)	Math 210 Math 210 Math 210
Professional Development and Responsibilities	The student will demonstrate the ability to disseminate injury prevention and health care information.	<p>The student will develop a presentation outline for an athletic training topic. The outline may include, but is not limited to, the following audiences:</p> <ul style="list-style-type: none"> ➤ peer athletic trainers ➤ physicians ➤ parents ➤ athletic personnel ➤ general public ➤ athletes and others involved in physical activity 	M2 M2 M2 M2 M2 M2	498a(7) 498a(7) 498a(7) 498a(7) 498a(7) 498a(7)	404 404 404 404 404 404
		The student will	M3	498b(8)	404

develop a
professional resume.