

Program: Athletic Training

Date: June 1, 2015

Completed by: Roger Clark, PhD, ATC

Assessment contributors (other faculty involved in this program's assessment): Athletic Training Faculty/Staff

Please complete this form for each undergraduate, minor, certificate, and graduate program (e.g., B.A., B.S., M.S.) in your department. Please copy any addenda (e.g., rubrics) and paste them in this document, and submit it to the dean of your college/school as per the deadline established. The dean will forward it to me as an email attachment before June 2, 2014. You'll also find the form at the assessment website at <http://www.colostate-pueblo.edu/Assessment/ResultsAndReports/Pages/default.aspx>.

Please describe the 2014-2015 assessment activities for the program in Part I. Use Column H to describe improvements planned for 2015-2016 based on the assessment process. In Part II, please describe activities engaged in during 2014-2015 designed to close-the-loop (improve the program) based on assessment activities and the information gathered in 2013-2014. Thank you.

**I. Program student learning outcomes (SLOs) assessed in this cycle, processes, results, and recommendations.**

A. Which of the program SLOs were assessed during this cycle? <b>Please include the outcome(s) verbatim from the assessment plan.</b>	B. When was this SLO last assessed? <b>Please indicate the semester and year.</b>	C. What method was used for assessing the SLO? <b>Please include a copy of any rubrics used in the assessment process.</b>	D. Who was assessed? Please fully describe the student group(s) and the number of students or artifacts involved.	E. What is the expected achievement level and how many or what proportion of students should be at it?	F. What were the results of the assessment?	G. What were the department's conclusions about student performance?	H. What changes/improvements to the <u>program</u> are planned based on this assessment?
SLO #2: Students will demonstrate Prevention	Spring 2014	<u>Direct Measure:</u> Board of Certification	Graduates of the program who took	Graduates will score at or above the national	Program graduates average score=	Program students performed below the national average.	Faculty/staff will meet to discuss this outcome and begin the discussion with reviewing the

and Health Prevention		(BOC) exam results. The collective score for all students per domain area.	the BOC exam between April 2013 and February 2014.  N=12	average for this domain area.	73.43%  National Average= 77.3%		syllabi of the courses that cover competencies related to the SLO.
	N/A	<u>Indirect Measure:</u> Athletic Training Program Alumni Survey results. Students rate Per SLO (Asked how well outcome was met?) Rating: 5=excellent 4=good 3=average 2=poor, 1=not at all	2014 graduates  N=4	Students will rate the outcome at or above a score of 3.  3=average	Rating=4	Student rating of Good.	Faculty/Staff will meet to discuss why student rating of how well program prepared them in the area of this SLO doesn't match with performance on BOC exam in this content area.

SLO #3: Students will demonstrate Clinical Examination and Diagnosis	Spring 2013	<u>Direct Measure:</u> Board of Certification (BOC) exam results. The collective score for all students per domain area.	Graduates of the program who took the BOC exam between April 2013 and February 2014.  N=12	Students will score at or above the national average for this domain.	Program graduates average score= 71%  National Average= 73.13%	Program students performed below the national average.	Faculty/staff will meet to discuss this outcome and begin the discussion with reviewing the syllabi of the courses that cover competencies related to the SLO.
	N/A	<u>Indirect Measure:</u> Athletic Training Program Alumni Survey results. Students rate Per SLO (Asked how well outcome was met?) Rating: 5=excellent 4=good 3=average 2=poor, 1=not at all	2014 graduates  N=4	Students will rate the outcome at or above a score of 3.  3=average	Rating=5	Student rating of excellent.	Faculty/Staff will meet to discuss why student rating of how well program prepared them in the area of this SLO doesn't match with performance on BOC exam in this content area.

SLO #4: Students will demonstrate Acute Care of Injury and Illness	Spring 2013	<u>Direct Measure:</u> Board of Certification (BOC) exam results. The collective score for all students per domain area.	Graduates of the program who took the BOC exam between April 2013 and February 2014.  N=12	Students will score at or above the national average for this domain.	Program graduates average score= 76.65%  National Average= 80.85%	Program students performed below the national average.	Faculty/staff will meet to discuss this outcome and begin the discussion with reviewing the syllabi of the courses that cover competencies related to the SLO.
	N/A	<u>Indirect Measure:</u> Athletic Training Program Alumni Survey results. Students rate Per SLO (Asked how well outcome was met?) Rating: 5=excellent 4=good	2014 graduates  N=4	Students will rate the outcome at or above a score of 3.  3=average	Rating=3.5	Student rating of average.	Faculty/Staff will meet to discuss why student rating of how well program prepared them in the area of this SLO doesn't match with performance on BOC exam in this content area.

		3=average 2=poor, 1=not at all					
SLO#5 Students will demonstrate Therapeutic Intervention.	Spring 2013	<u>Direct Measure:</u> Board of Certification (BOC) exam results. The collective score for all students per domain area.  <u>Indirect Measure:</u> Athletic Training Program Alumni Survey results. Students rate Per SLO (Asked how well outcome	Graduates of the program who took the BOC exam between April 2013 and February 2014.  N=12  2014 graduates  N=4	Students will score at or above the national average for this domain  Students will rate the outcome at or above a score of 3.  3=average	Program graduates average score= 65.02%  National Average score= 70.2%  Rating=4	Program students performed below the national average.  Student rating=good	Faculty/staff will meet to discuss this outcome and begin the discussion with reviewing the syllabi of the courses that cover competencies related to the SLO.  Faculty/Staff will meet to discuss why student rating of how well program prepared them in the area of this SLO doesn't match with performance on BOC exam in this content area.

		was met?) Rating: 5=excellent 4=good 3=average 2=poor, 1=not at all					
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Comments: 75% of the program students past the BOC exam the first time, and the national average was 82.5% in 2013-2014.

A standard for CAATE accreditation is that a program must have at least a 70% three year aggregate first time pass rate on the BOC exam. Our first time pass rate is 76%. Twenty-one graduates took the exam and sixteen graduates pass the exam the first time in the 3 years.

**II. Follow-up (closing the loop) on results and activities from previous assessment cycles. In this section, please describe actions taken during this cycle that were based on, or implemented to address, the results of assessment from previous cycles.**

A. What SLO(s) did you address? Please include the outcome(s) verbatim from the assessment plan.	B. When was this SLO last assessed? Please indicate the semester and year.	C. What were the recommendations for change from the previous assessment?	D. Were the recommendations for change acted upon? If not, why?	E. What were the results of the changes? If the changes were not effective, what are the next steps or the new recommendations?
SLO#5 Students will demonstrate Therapeutic	Spring 2013	Faculty/staff will evaluate the course objectives and content, insuring they are aligned with the educational	Yes	2014 Program graduates average score on the BOC exam = 65.02%  National Average score= 70.2%

Intervention  Senior Survey (2014) rating=3.8		competencies assigned to courses.		<p>2014 Senior Survey reported a Rating=4</p> <p>Faculty/Staff will meet to discuss and come up with strategies to reinforce educational competencies in the student's clinical experiences. It is believed by the faculty/staff that more emphasis needs to be put on linking what the students are learning in the class room with what they are doing and allowed to do in their clinical education courses. Hands on application of theory and clinical skills should reinforce students learning overall all.</p>

Comments:

Competency Code	Competency	Course 1 Instructed	Course 1 Evaluated	Course 2 Instructed	Course 2 Evaluated
<b>Professional Development and Responsibility (PD)</b>					
	<b>Knowledge and Skills</b>				
PD-1	Summarize the athletic training profession's history and development and how current athletic training practice has been influenced by its past.	101		443	
PD-2	Describe the role and function of the National Athletic Trainers' Association and its influence on the profession.	101		443	
PD-3	Describe the role and function of the Board of Certification, the Commission on Accreditation of Athletic Training Education, and state regulatory boards.	101		443	
PD-4	Explain the role and function of state athletic training practice acts and registration, licensure, and certification agencies including (1) basic legislative processes for the implementation of practice acts, (2) rationale for state regulations that govern the practice of athletic training, and (3) consequences of violating federal and state regulatory acts.	101		443	
PD-5	Access, analyze, and differentiate between the essential documents of the national governing, credentialing and regulatory bodies, including, but not limited to, the NATA Athletic Training Educational Competencies, the BOC Standards of Professional Practice, the NATA Code of Ethics, and the BOC Role Delineation Study/Practice Analysis.	101		443	
PD-6	Explain the process of obtaining and maintaining necessary local, state, and national credentials for the practice of athletic training.	101		443	
PD-7	Perform a self-assessment of professional competence and create a professional development plan to maintain necessary credentials and promote life-long learning strategies.	101	advising	443	
PD-8	Differentiate among the preparation, scopes of practice, and roles and responsibilities of healthcare providers and other professionals with whom athletic trainers interact.	101	339	443	
PD-9	Specify when referral of a client/patient to another healthcare provider is warranted and formulate and implement strategies to facilitate that referral.	443			



PD-10	Develop healthcare educational programming specific to the target audience (eg, clients/patients, healthcare personnel, administrators, parents, general public).	443			
PD-11	Identify strategies to educate colleagues, students, patients, the public, and other healthcare professionals about the roles, responsibilities, academic preparation, and scope of practice of athletic trainers.	443			
PD-12	Identify mechanisms by which athletic trainers influence state and federal healthcare regulation.	443			

Competency Code	Competency	Course 1 Instructed	Course 1 Evaluated	Course 2 Instructed	Course 2 Evaluated
<b>Prevention and Health Promotion (PHP)</b>					
	<b>Knowledge and Skills:</b>				
	<b>General Prevention Principles</b>				
PHP-1	Describe the concepts (eg, case definitions, incidence versus prevalence, exposure assessment, rates) and uses of injury and illness surveillance relevant to athletic training.	260			
PHP-2	Identify and describe the measures used to monitor injury prevention strategies(eg, injury rates and risk, relative risks, odds ratios, risk differences, numbers needed to treat/harm).	260			
PHP-3	Identify modifiable/non-modifiable risk factors and mechanisms for injury and illness.	260			
PHP-4	Explain how the effectiveness of a prevention strategy can be assessed using clinical outcomes, surveillance, or evaluation data.	260			
PHP-5	Explain the precautions and risk factors associated with physical activity in persons with common congenital and acquired abnormalities, disabilities, and diseases.	260/233		323	488
PHP-6	Summarize the epidemiology data related to the risk of injury and illness associated with participation in physical activity.	260			
	<b>Prevention Strategies and Procedures</b>				
PHP-7	Implement disinfectant procedures to prevent the spread of infectious diseases and to comply with Occupational Safety and Health Administration (OSHA) and other federal regulations.	232/233			

PHP-8	Identify the necessary components to include in a preparticipation physical examination as recommended by contemporary guidelines (eg, American Heart Association, American Academy of Pediatrics Council on Sports Medicine & Fitness).	339		443	
PHP-9	Explain the role of the preparticipation physical exam in identifying conditions that might predispose the athlete to injury or illness.	339		443	
PHP-10	Explain the principles of the body's thermoregulatory mechanisms as they relate to heat gain and heat loss.	260	Biol 223/224	379	
PHP-11	Explain the principles of environmental illness prevention programs to include acclimation and conditioning, fluid and electrolyte replacement requirements, proper practice and competition attire, hydration status, and environmental assessment (eg, sling psychrometer, wet bulb globe temperatures [WBGT], heat index guidelines).	260 279		379	
PHP-12	Summarize current practice guidelines related to physical activity during extreme weather conditions (eg, heat, cold, lightning, wind).	260		379/389	
PHP-13	Obtain and interpret environmental data (web bulb globe temperature [WBGT], sling psychrometer, lightning detection devices) to make clinical decisions regarding the scheduling, type, and duration of physical activity.	279		379/389	
PHP-14	Assess weight loss and hydration status using weight charts, urine color charts, or specific gravity measurements to determine an individual's ability to participate in physical activity in a hot, humid environment.	379		419 A-C	
PHP-15	Use a glucometer to monitor blood glucose levels, determine participation status, and make referral decisions.	339		479	
PHP-16	Use a peak-flow meter to monitor a patient's asthma symptoms, determine participation status, and make referral decisions.	233 339		379	
PHP-17	Explain the etiology and prevention guidelines associated with the leading causes of sudden death during physical activity, including but not limited to:				

	<b>PHP-17a.</b> Cardiac arrhythmia or arrest	232/233	260	379	
	<b>PHP-17b.</b> Asthma	232/233	260	379	
	<b>PHP-17c.</b> Traumatic brain injury	260		332	
	<b>PHP-17d.</b> Exertional heat stroke	260		379	
	<b>PHP-17e.</b> Hyponatremia	260		379	
	<b>PHP-17f.</b> Exertional sickling	260		489	
	<b>PHP-17g.</b> Anaphylactic shock	232/233	260	379	
	<b>PHP-17h.</b> Cervical spine injury	233	260	332	
	<b>PHP-17i.</b> Lightning strike	233	260	389	
PHP-18	Explain strategies for communicating with coaches, athletes, parents, administrators, and other relevant personnel regarding potentially dangerous conditions related to the environment, field, or playing surfaces.	260		419 A-D	
PHP-19	Instruct clients/patients in the basic principles of ergonomics and their relationship to the prevention of illness and injury.	431		489	
	<b>Protective Equipment and Prophylactic Procedures</b>				
PHP-20	Summarize the basic principles associated with the design, construction, fit, maintenance, and reconditioning of protective equipment, including the rules and regulations established by the associations that govern its use.	379			
PHP-21	Summarize the principles and concepts related to the fabrication, modification, and appropriate application or use of orthotics and other dynamic and static splints.	233		389	
PHP-22	Fit standard protective equipment following manufacturers' guidelines.	379		419 C	
PHP-23	Apply preventive taping and wrapping procedures, splints, braces, and other special protective devices.	233 260 279		389	419 A-C

	<b>Fitness/Wellness</b>				
PHP-24	Summarize the general principles of health maintenance and personal hygiene, including skin care, dental hygiene, sanitation, immunizations, avoidance of infectious and contagious diseases, diet, rest, exercise, and weight control.	260 EXHP 162		379/479	
PHP-25	Describe the role of exercise in maintaining a healthy lifestyle and preventing chronic disease.	EXHP 162		323 EXHP 344	
PHP-26	Identify and describe the standard tests, test equipment, and testing protocols that are used for measuring fitness, body composition, posture, flexibility, muscular strength, power, speed, agility, and endurance.	EXHP 162		323	
PHP-27	Compare and contrast the various types of flexibility, strength training, and cardiovascular conditioning programs to include expected outcomes, safety precautions, hazards, and contraindications.	EXHP 162		323	
PHP-28	Administer and interpret fitness tests to assess a client's/patient's physical status and readiness for physical activity.	323		431	
PHP-29	Explain the basic concepts and practice of fitness and wellness screening.	EXHP 162	323	EXHP 344	
PHP-30	Design a fitness program to meet the individual needs of a client/patient based on the results of standard fitness assessments and wellness screening.	323			
PHP-31	Instruct a client/patient regarding fitness exercises and the use of muscle strengthening equipment to include correction or modification of inappropriate, unsafe, or dangerous lifting techniques.	323		419D	
	<b>General Nutrition Concepts</b>				
PHP-32	Describe the role of nutrition in enhancing performance, preventing injury or illness, and maintaining a healthy lifestyle.	BIOL 112		344	
PHP-33	Educate clients/patients on the importance of healthy eating, regular exercise, and general preventative strategies for improving or maintaining health and quality of life.	BIOL 112		344	

PHP-34	Describe contemporary nutritional intake recommendations and explain how these recommendations can be used in performing a basic dietary analysis and providing appropriate general dietary recommendations.	BIOL 112			
PHP-35	Describe the proper intake, sources of, and effects of micro- and macronutrients on performance, health, and disease.	BIOL 112			
PHP-36	Describe current guidelines for proper hydration and explain the consequences of improper fluid/electrolyte replacement.	BIOL 112		EXHP 344	
PHP-37	Identify, analyze, and utilize the essential components of food labels to determine the content, quality, and appropriateness of food products.	EXHP 162		BIOL 112	
PHP-38	Describe nutritional principles that apply to tissue growth and repair.	BIOL 112		339	
PHP-39	Describe changes in dietary requirements that occur as a result of changes in an individual's health, age, and activity level.	BIOL 112		EXHP 344	
PHP-40	Explain the physiologic principles and time factors associated with the design and planning of pre-activity and recovery meals/snacks and hydration practices.	EXHP 344		479	
PHP-41	Identify the foods and fluids that are most appropriate for pre-activity, activity, and recovery meals/snacks.	EXHP 344		479	
	<b>Weight Management and Body Composition</b>				
PHP-42	Explain how changes in the type and intensity of physical activity influence the energy and nutritional demands placed on the client/patient.	EXHP 344		479	
PHP-43	Describe the principles and methods of body composition assessment to assess a client's/patient's health status and to monitor changes related to weight management, strength training, injury, disordered eating, menstrual status, and/or bone density status.	EXHP 344		479	488

PHP-44	Assess body composition by validated techniques.	EXHP 344		479	
PHP-45	Describe contemporary weight management methods and strategies needed to support activities of daily life and physical activity.	EXHP 162 BIO 112		479	
	<b>Disordered Eating and Eating Disorders</b>				
PHP-46	Identify and describe the signs, symptoms, physiological, and psychological responses of clients/patients with disordered eating or eating disorders.	339		479	488
PHP-47	Describe the method of appropriate management and referral for clients/patients with disordered eating or eating disorders in a manner consistent with current practice guidelines.	339		479	488
	<b>Performance Enhancing and Recreational Supplements and Drugs</b>				
PHP-48	Explain the known usage patterns, general effects, and short- and long-term adverse effects for the commonly used dietary supplements, performance enhancing drugs, and recreational drugs.	339		488 489	
PHP-49	Identify which therapeutic drugs, supplements, and performance-enhancing substances are banned by sport and/or workplace organizations in order to properly advise clients/patients about possible disqualification and other consequences.	339		488 489	

Competency Code	Competency	Course 1 Instructed	Course 1 Evaluated	Course 2 Instructed	Course 2 Evaluated
<b>Clinical Examination and Diagnosis (CE)</b>					
	<b>Knowledge and Skills:</b>				
CE-1	Describe the normal structures and interrelated functions of the body systems.	BIOL 223		EXHP 364	
CE-2	Describe the normal anatomical, systemic, and physiological changes associated with the lifespan.	BIOL 223		EXHP 344	
CE-3	Identify the common congenital and acquired risk factors and causes of musculoskeletal injuries and common illnesses that may influence physical activity in pediatric, adolescent, adult, and aging populations.	260		330/331/332	488
CE-4	Describe the principles and concepts of body movement, including normal osteokinematics and arthrokinematics.	EXHP 364		431	
CE-5	Describe the influence of pathomechanics on function.	EXHP 364		330/331/332	488
CE-6	Describe the basic principles of diagnostic imaging and testing and their role in the diagnostic process.	260		330/331/332	
CE-7	Identify the patient's participation restrictions (disabilities) and activity limitations (functional limitations) to determine the impact of the condition on the patient's life.	330/331/332		431	
CE-8	Explain the role and importance of functional outcome measures in clinical practice and patient health-related quality of life.	330/331/332		431	
CE-9	Identify functional and patient-centered quality of life outcome measures appropriate for use in athletic training practice.	330/331/332		431	
CE-10	Explain diagnostic accuracy concepts including reliability, sensitivity, specificity, likelihood ratios, prediction values, and pre-test and post-test probabilities in the selection and interpretation of physical examination and diagnostic	330/331/332		488	



	procedures.				
CE-11	Explain the creation of clinical prediction rules in the diagnosis and prognosis of various clinical conditions.	330/331/332		431	
CE-12	Apply clinical prediction rules (eg, Ottawa Ankle Rules) during clinical examination procedures.	330/331/332		488	
CE-13	Obtain a thorough medical history that includes the pertinent past medical history, underlying systemic disease, use of medications, the patient's perceived pain, and the history and course of the present condition.	330/331/332		488	
CE-14	Differentiate between an initial injury evaluation and follow-up/reassessment as a means to evaluate the efficacy of the patient's treatment/rehabilitation program, and make modifications to the patient's program as needed.	330/331/332		431	488
CE-15	Demonstrate the ability to modify the diagnostic examination process according to the demands of the situation and patient responses.	330/331/332		431	488
CE-16	Recognize the signs and symptoms of catastrophic and emergent conditions and demonstrate appropriate referral decisions.	232/233		330/331/332	488
CE-17	Use clinical reasoning skills to formulate an appropriate clinical diagnosis for common illness/disease and orthopedic injuries/conditions.	330/331/332			
CE-18	Incorporate the concept of differential diagnosis into the examination process.	330/331/332		488	
CE-19	Determine criteria and make decisions regarding return to activity and/or sports participation based on the patient's current status.	330/331/332		431	488
CE-20	Use standard techniques and procedures for the clinical examination of common injuries, conditions, illnesses, and diseases including, but not limited to:				
	<b>CE-20a.</b> history taking	279		330/331/332	431
	<b>CE-20b.</b> inspection/observation	279		330/331/332	431

	<b>CE-20c.</b> Palpation	279	389	330/331/332	431
	<b>CE-20d.</b> functional assessment	330/331/332		431 488	
	<b>CE-20e.</b> selective tissue testing techniques / special tests	279		330/331/332	488
	<b>CE-20f.</b> neurological assessments (sensory, motor, reflexes, balance, cognitive function)	330/331/332		379 389 479	431
	<b>CE-20g.</b> respiratory assessments (auscultation, percussion, respirations, peak-flow)	233 279 389		332 339	
	<b>CE-20h.</b> circulatory assessments (pulse, blood pressure, auscultation)	233 279		330/331/332	
	<b>CE-20i.</b> abdominal assessments (percussion, palpation, auscultation)	339		332	
	<b>CE-20j.</b> other clinical assessments (otoscope, urinalysis, glucometer, temperature, ophthalmoscope, otoscope, urinalysis, glucometer, temperature)	279 /339		332	
CE-21	Assess and interpret findings from a physical examination that is based on the patient's clinical presentation. This exam can include:				
	<b>CE-21a.</b> Assessment of posture, gait, and movement patterns	EXHP 364		330	431
	<b>CE-21b.</b> Palpation	279	330/331/332	488	
	<b>CE-21c.</b> Muscle function assessment	279	330/331/332	431	
	<b>CE-21d.</b> Assessment of quantity and quality of osteokinematic joint motion	330/331/332		431	488
	<b>CE-21e.</b> Capsular and ligamentous stress testing	279	330/331/332		

	<b>CE-21f.</b> Joint play (arthrokinematics)	330/331/332		431	
	<b>CE-21g.</b> Selective tissue examination techniques / special tests	279	330/331/332	431	488
	<b>CE-21h.</b> Neurologic function (sensory, motor, reflexes, balance, cognition)	332		431	489
	<b>CE-21i.</b> Cardiovascular function (including differentiation between normal and abnormal heart sounds, blood pressure, and heart rate)	233	339	479	
	<b>CE-21j.</b> Pulmonary function (including differentiation between normal breath sounds, percussion sounds, number and characteristics of respirations, peak expiratory flow)	339		479	
	<b>CE-21k.</b> Gastrointestinal function (including differentiation between normal and abnormal bowel sounds)	339		479	
	<b>CE-21l.</b> Genitourinary function (urinalysis)	332 339		479	
	<b>CE-21m.</b> Ocular function (vision, ophthalmoscope)	339	332	479	
	<b>CE-21n.</b> Function of the ear, nose, and throat (including otoscopic evaluation)	339	332	479	
	<b>CE-21o.</b> Dermatological assessment	339		479	
	<b>CE-21p.</b> Other assessments (glucometer, temperature)	339		479/ 489	
CE-22	Determine when the findings of an examination warrant referral of the patient.	330/331/332		431	488
CE-23	Describe current setting-specific (eg, high school, college) and activity-specific rules and guidelines for managing injuries and illnesses.	260	419 A-D	443	

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CE-3	Identify the common congenital and acquired risk factors and causes of musculoskeletal injuries and common illnesses that may influence physical activity in pediatric, adolescent, adult, and aging populations.	260		330/331/332	488
CE-4	Describe the principles and concepts of body movement, including normal osteokinematics and arthrokinematics.	EXHP 364		431	
CE-5	Describe the influence of pathomechanics on function.	EXHP 364		330/331/332	488
CE-6	Describe the basic principles of diagnostic imaging and testing and their role in the diagnostic process.	260		330/331/332	
CE-7	Identify the patient's participation restrictions (disabilities) and activity limitations (functional limitations) to determine the impact of the condition on the patient's life.	330/331/332		431	
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CE-21	Assess and interpret findings from a physical examination that is based on the patient's clinical presentation. This exam can include:				
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	<b>CE-21b.</b> Palpation	279	330/331/332	488	
	<b>CE-21c.</b> Muscle function assessment	279	330/331/332	431	
	<b>CE-21d.</b> Assessment of quantity and quality of osteokinematic joint motion	330/331/332		431	488
	<b>CE-21e.</b> Capsular and ligamentous stress testing	279	330/331/332		

	<b>CE-21f.</b> Joint play (arthrokinematics)	330/331/332		431	
	<b>CE-21g.</b> Selective tissue examination techniques / special tests	279	330/331/332	431	488
	<b>CE-21h.</b> Neurologic function (sensory, motor, reflexes, balance, cognition)	332		431	489
	<b>CE-21i.</b> Cardiovascular function (including differentiation between normal and abnormal heart sounds, blood pressure, and heart rate)	233	339	479	
	<b>CE-21j.</b> Pulmonary function (including differentiation between normal breath sounds, percussion sounds, number and characteristics of respirations, peak expiratory flow)	339		479	
	<b>CE-21k.</b> Gastrointestinal function (including differentiation between normal and abnormal bowel sounds)	339		479	
	<b>CE-21l.</b> Genitourinary function (urinalysis)	332 339		479	
	<b>CE-21m.</b> Ocular function (vision, ophthalmoscope)	339	332	479	
	<b>CE-21n.</b> Function of the ear, nose, and throat (including otoscopic evaluation)	339	332	479	
	<b>CE-21o.</b> Dermatological assessment	339		479	
	<b>CE-21p.</b> Other assessments (glucometer, temperature)	339		479/ 489	
CE-22	Determine when the findings of an examination warrant referral of the patient.	330/331/332		431	488
CE-23	Describe current setting-specific (eg, high school, college) and activity-specific rules and guidelines for managing injuries and illnesses.	260	419 A-D	443	

Competency Code	Competency	Course 1 Instructed	Course 1 Evaluated	Course 2 Instructed	Course 2 Evaluated
	<b>Therapeutic Interventions (TI)</b>				
	<b>Knowledge and Skills</b>				
	<b>Physical Rehabilitation and Therapeutic Modalities</b>				
TI-1	Describe and differentiate the physiological and pathophysiological responses to inflammatory and non-inflammatory conditions and the influence of these responses on the design, implementation, and progression of a therapeutic intervention.	430/ 431		489	
TI-2	Compare and contrast contemporary theories of pain perception and pain modulation.	430			
TI-3	Differentiate between palliative and primary pain-control interventions.	430			
TI-4	Analyze the impact of immobilization, inactivity, and mobilization on the body systems (eg, cardiovascular, pulmonary, musculoskeletal) and injury response.	431			
TI-5	Compare and contrast the variations in the physiological response to injury and healing across the lifespan.	430/ 431		489	
TI-6	Describe common surgical techniques, including interpretation of operative reports, and any resulting precautions, contraindications, and comorbidities that impact the selection and progression of a therapeutic intervention program.	430/ 431		489	
TI-7	Identify patient- and clinician-oriented outcomes measures commonly used to recommend activity level, make return to play decisions, and maximize patient outcomes and progress in the treatment plan.	431			
TI-8	Explain the theory and principles relating to expected physiological response(s) during and following therapeutic interventions.	430/ 431		489	



TI-9	Describe the laws of physics that (1) underlay the application of thermal, mechanical, electromagnetic, and acoustic energy to the body and (2) form the foundation for the development of therapeutic interventions (eg, stress-strain, leverage, thermodynamics, energy transmission and attenuation, electricity).	430/ 431		489	
TI-10	Integrate self-treatment into the intervention when appropriate, including instructing the patient regarding self-treatment plans.	430/ 431		489	
TI-11	Design therapeutic interventions to meet specified treatment goals.				
	<b>TI-11a.</b> Assess the patient to identify indications, contraindications, and precautions applicable to the intended intervention.	430/ 431		419 C&D	
	<b>TI-11b.</b> Position and prepare the patient for various therapeutic interventions.	430/ 431		419 B- D	
	<b>TI-11c.</b> Describe the expected effects and potential adverse reactions to the patient.	430	389	431	419 C & D
	<b>TI-11d.</b> Instruct the patient how to correctly perform rehabilitative exercises.	431		419D	
	<b>TI-11e.</b> Apply the intervention, using parameters appropriate to the intended outcome.	430/ 431		419 B- D	
	<b>TI-11f.</b> Reassess the patient to determine the immediate impact of the intervention.	430		431	
TI-12	Use the results of on-going clinical examinations to determine when a therapeutic intervention should be progressed, regressed or discontinued.	430/ 431		419 B- D	489
TI-13	Describe the relationship between the application of therapeutic modalities and the incorporation of active and passive exercise and/or manual therapies, including therapeutic massage, myofascial techniques, and muscle energy techniques.	430/ 431		489	
TI-14	Describe the use of joint mobilization in pain reduction and restoration of joint mobility.	431		488/ 489	
TI-15	Perform joint mobilization techniques as indicated by examination findings.	431		488/ 489	
TI-16	Fabricate and apply taping, wrapping, supportive, and protective devices to facilitate return to function.	279		389	

TI-17	Analyze gait and select appropriate instruction and correction strategies to facilitate safe progression to functional gait pattern.	EXHP 364		330	
TI-18	Explain the relationship between posture, biomechanics, and ergonomics and the need to address these components in a therapeutic intervention.	330 331 332		323	
TI-19	Identify manufacturer, institutional, state, and/or federal standards that influence approval, operation, inspection, maintenance and safe application of therapeutic modalities and rehabilitation equipment.	430		443	
TI-20	Inspect therapeutic equipment and the treatment environment for potential safety hazards.	430		431	
	<b>Therapeutic Medications</b>				
TI-21	Explain the federal, state, and local laws, regulations and procedures for the proper storage, disposal, transportation, dispensing (administering where appropriate), and documentation associated with commonly used prescription and nonprescription medications.	339		443	
TI-22	Identify and use appropriate pharmaceutical terminology for management of medications, inventory control, and reporting of pharmacological agents commonly used in an athletic training facility.	339			
TI-23	Use an electronic drug resource to locate and identify indications, contraindications, precautions, and adverse reactions for common prescription and nonprescription medications.	339			
TI-24	Explain the major concepts of pharmacokinetics and the influence that exercise might have on these processes.	339			
TI-25	Explain the concepts related to bioavailability, half-life, and bioequivalence (including the relationship between generic and brand name drugs) and their relevance to the patient, the choice of medication, and the dosing schedule.	339			

TI-26	Explain the pharmacodynamic principles of receptor theory, dose-response relationship, placebo effect, potency, and drug interactions as they relate to the mechanism of drug action and therapeutic effectiveness.	339			
TI-27	Describe the common routes used to administer medications and their advantages and disadvantages.	339			
TI-28	Properly assist and/or instruct the patient in the proper use, cleaning, and storage of drugs commonly delivered by metered dose inhalers, nebulizers, insulin pumps, or other parenteral routes as prescribed by the physician.	339			
TI-29	Describe how common pharmacological agents influence pain and healing and their influence on various therapeutic interventions.	339			
TI-30	Explain the general therapeutic strategy, including drug categories used for treatment, desired treatment outcomes, and typical duration of treatment, for the following common diseases and conditions: asthma, diabetes, hypertension, infections, depression, GERD, allergies, pain, inflammation, and the common cold.	339			
TI-31	Optimize therapeutic outcomes by communicating with patients and/or appropriate healthcare professionals regarding compliance issues, drug interactions, adverse drug reactions, and sub-optimal therapy.	339			

Competency Code	Competency	Course 1 Instructed	Course 2 Evaluated	Course 2 Instructed	Course 2 Evaluated
<b>Psychosocial Strategies and Referral (PS)</b>					
	<b>Knowledge and Skills</b>				
	<b>Theoretical Background</b>				
PS-1	Describe the basic principles of personality traits, trait anxiety, locus of control, intrinsic and extrinsic motivation, and patient and social environment interactions as they affect patient interactions.	PSYCH 100		PSYCH 205	
PS-2	Explain the theoretical background of psychological and emotional responses to injury and forced inactivity (eg, cognitive appraisal model, stress response model).	PSYCH 205			
PS-3	Describe how psychosocial considerations affect clinical decision-making related to return to activity or participation (eg, motivation, confidence).	431		489	
PS-4	Summarize and demonstrate the basic processes of effective interpersonal and cross-cultural communication as it relates to interactions with patients and others involved in the healthcare of the patient.	EXHP 222		431	
PS-5	Summarize contemporary theory regarding educating patients of all ages and cultural backgrounds to effect behavioral change.	EXHP 222			
<b>Psychosocial Strategies</b>					
PS-6	Explain the importance of educating patients, parents/guardians, and others regarding the condition in order to enhance the psychological and emotional well-being of the patient.	EXHP 222		431	489
PS-7	Describe the psychological techniques (eg, goal setting, imagery, positive self-talk, relaxation/anxiety reduction) that the athletic trainer can use to motivate the patient during injury rehabilitation and return to activity processes.	PSYCH 100		PSYCH 205	
PS-8	Describe psychological interventions (eg, goal setting, motivational techniques) that are used to facilitate a patient's physical, psychological, and return to activity needs.	EXHP 222		PSYCH 205	

PS-9	Describe the psychosocial factors that affect persistent pain sensation and perception (eg, emotional state, locus of control, psychodynamic issues, sociocultural factors, personal values and beliefs) and identify multidisciplinary approaches for assisting patients with persistent pain.	EXHP 222		339	
PS-10	Explain the impact of sociocultural issues that influence the nature and quality of healthcare received (eg, cultural competence, access to appropriate healthcare providers, uninsured/underinsured patients, insurance) and formulate and implement strategies to maximize client/patient outcomes.	EXHP 222			
	<b>Mental Health and Referral</b>				
PS-11	Describe the role of various mental healthcare providers (eg, psychiatrists, psychologists, counselors, social workers) that may comprise a mental health referral network.	EXHP 222		339	488
PS-12	Identify and refer clients/patients in need of mental healthcare.			339	488
PS-13	Identify and describe the basic signs and symptoms of mental health disorders (eg, psychosis, neurosis; sub-clinical mood disturbances (eg, depression, anxiety); and personal/social conflict (eg, adjustment to injury, family problems, academic or emotional stress, personal assault or abuse, sexual assault or harassment) that may indicate the need for referral to a mental healthcare professional.			339	
PS-14	Describe the psychological and sociocultural factors associated with common eating disorders.	EXHP 162		BIOL 112	
PS-15	Identify the symptoms and clinical signs of substance misuse/abuse, the psychological and sociocultural factors associated with such misuse/abuse, its impact on an individual's health and physical performance, and the need for proper referral to a healthcare professional.	EXHP 162 / 222			
PS-16	Formulate a referral for an individual with a suspected mental health or substance abuse problem.	Psych 205		443/ 489	488
PS-17	Describe the psychological and emotional responses to a catastrophic event, the potential need for a psychological intervention and a referral plan for all parties affected by the event.	EXHP 162	339	489	443/ 488

PS-18	Provide appropriate education regarding the condition and plan of care to the patient and appropriately discuss with others as needed and as appropriate to protect patient privacy.	339		479	488
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Competency Code	Competency	Course 1 Instructed	Course 1 Evaluated	Course 2 Instructed	Course 2 Evaluated
<b>Healthcare Administration (HA)</b>					
	<b>Knowledge and Skills</b>				
HA-1	Describe the role of the athletic trainer and the delivery of athletic training services within the context of the broader healthcare system.	101	260	443	
HA-2	Describe the impact of organizational structure on the daily operations of a healthcare facility.	443			
HA-3	Describe the role of strategic planning as a means to assess and promote organizational improvement.	443			
HA-4	Describe the conceptual components of developing and implementing a basic business plan.	443			
HA-5	Describe basic healthcare facility design for a safe and efficient clinical practice setting.	443			
HA-6	Explain components of the budgeting process including: purchasing, requisition, bidding, request for proposal, inventory, profit and loss ratios, budget balancing, and return on investments.	443			
HA-7	Assess the value of the services provided by an athletic trainer (eg, return on investment).	443			
HA-8	Develop operational and capital budgets based on a supply inventory and needs assessment; including capital equipment, salaries and benefits, trending analysis facility cost, and common expenses.	443			
HA-9	Identify the components that comprise a comprehensive medical record.	101 279	379	443	
HA-10	Identify and explain the statutes that regulate the privacy and security of medical records.	101	379	443	

HA-11	Use contemporary documentation strategies to effectively communicate with patients, physicians, insurers, colleagues, administrators, and parents or family members.	379		488	419 A-D
HA-12	Use a comprehensive patient-file management system for appropriate chart documentation, risk management, outcomes, and billing.	419 A-D		431	
HA-13	Define state and federal statutes that regulate employment practices.	101		443	
HA-14	Describe principles of recruiting, selecting, hiring, and evaluating employees.	443			
HA-15	Identify principles of recruiting, selecting, employing, and contracting with physicians and other medical and healthcare personnel in the deployment of healthcare services.	443			
HA-16	Describe federal and state infection control regulations and guidelines, including universal precautions as mandated by the Occupational Safety and Health Administration (OSHA), for the prevention, exposure, and control of infectious diseases, and discuss how they apply to the practicing of athletic training.	443			
HA-17	Identify key regulatory agencies that impact healthcare facilities, and describe their function in the regulation and overall delivery of healthcare.	101		443	
HA-18	Describe the basic legal principles that apply to an athletic trainer's responsibilities.	101	260	443	
HA-19	Identify components of a risk management plan to include security, fire, electrical and equipment safety, emergency preparedness, and hazardous chemicals.	419 A-D		443	
HA-20	Create a risk management plan and develop associated policies and procedures to guide the operation of athletic training services within a healthcare facility to include issues related to security, fire, electrical and equipment safety, emergency preparedness, and hazardous chemicals.	443			
HA-21	Develop comprehensive, venue-specific emergency action plans for the care of acutely injured or ill individuals.	489			
HA-22	Develop specific plans of care for common potential emergent conditions (eg, asthma attack, diabetic emergency).	339		489	



HA-23	Identify and explain the recommended or required components of a pre-participation examination based on appropriate authorities' rules, guidelines, and/or recommendations.	339		443	
HA-24	Describe a plan to access appropriate medical assistance on disease control, notify medical authorities, and prevent disease epidemics.	339		443	
HA-25	Describe common health insurance models, insurance contract negotiation, and the common benefits and exclusions identified within these models.	443			
HA-26	Describe the criteria for selection, common features, specifications, and required documentation needed for secondary, excess accident, and catastrophic health insurance.	443			
HA-27	Describe the concepts and procedures for revenue generation and reimbursement.	443			
HA-28	Understand the role of and use diagnostic and procedural codes when documenting patient care.	419A B		419C D	443
HA-29	Explain typical administrative policies and procedures that govern first aid and emergency care.	232/ 233		443	
HA-30	Describe the role and functions of various healthcare providers and protocols that govern the referral of patients to these professionals.	260		443	

Competency Code	Competency	Course 1 Instructed	Course 1 Evaluated	Course 2 Instructed	Course 2 Evaluated
<b>Professional Development and Responsibility (PD)</b>					
	<b>Knowledge and Skills</b>				
PD-1	Summarize the athletic training profession's history and development and how current athletic training practice has been influenced by its past.	101		443	
PD-2	Describe the role and function of the National Athletic Trainers' Association and its influence on the profession.	101		443	
PD-3	Describe the role and function of the Board of Certification, the Commission on Accreditation of Athletic Training Education, and state regulatory boards.	101		443	
PD-4	Explain the role and function of state athletic training practice acts and registration, licensure, and certification agencies including (1) basic legislative processes for the implementation of practice acts, (2) rationale for state regulations that govern the practice of athletic training, and (3) consequences of violating federal and state regulatory acts.	101		443	
PD-5	Access, analyze, and differentiate between the essential documents of the national governing, credentialing and regulatory bodies, including, but not limited to, the NATA Athletic Training Educational Competencies, the BOC Standards of Professional Practice, the NATA Code of Ethics, and the BOC Role Delineation Study/Practice Analysis.	101		443	
PD-6	Explain the process of obtaining and maintaining necessary local, state, and national credentials for the practice of athletic training.	101		443	
PD-7	Perform a self-assessment of professional competence and create a professional development plan to maintain necessary credentials and promote life-long learning strategies.	101	advising	443	
PD-8	Differentiate among the preparation, scopes of practice, and roles and responsibilities of healthcare providers and other professionals with whom athletic trainers interact.	101	339	443	
PD-9	Specify when referral of a client/patient to another healthcare provider is warranted and formulate and implement strategies to facilitate that referral.	443			

PD-10	Develop healthcare educational programming specific to the target audience (eg, clients/patients, healthcare personnel, administrators, parents, general public).	443			
PD-11	Identify strategies to educate colleagues, students, patients, the public, and other healthcare professionals about the roles, responsibilities, academic preparation, and scope of practice of athletic trainers.	443			
PD-12	Identify mechanisms by which athletic trainers influence state and federal healthcare regulation.	443			

Competency Code	Competency	Primary Course Instructed	Primary Course Evaluated	Course 2 Instructed	Course 2 Evaluated
<b>Clinical Integration Proficiencies (CIP)</b>					
	<b>Prevention &amp; Health Promotion</b>				
CIP-1	Administer testing procedures to obtain baseline data regarding a client's/patient's level of general health (including nutritional habits, physical activity status, and body composition). Use this data to design, implement, evaluate, and modify a program specific to the performance and health goals of the patient. This will include instructing the patient in the proper performance of the activities, recognizing the warning signs and symptoms of potential injuries and illnesses that may occur, and explaining the role of exercise in maintaining overall health and the prevention of diseases. Incorporate contemporary behavioral change theory when educating clients/patients and associated individuals to effect health-related change. Refer to other medical and health professionals when appropriate.	323		419 A-D	
CIP-2	Select, apply, evaluate, and modify appropriate standard protective equipment, taping, wrapping, bracing, padding, and other custom devices for the client/patient in order to prevent and/or minimize the risk of injury to the head, torso, spine, and extremities for safe participation in sport or other physical activity.	279		419 A-D	
CIP-3	Develop, implement, and monitor prevention strategies for at-risk individuals (eg, persons with asthma or diabetes, persons with a previous history of heat illness, persons with sickle cell trait) and large groups to allow safe physical activity in a variety of conditions. This includes obtaining and interpreting data related to potentially hazardous environmental conditions, monitoring body functions (eg, blood glucose, peak expiratory flow, hydration status), and making the appropriate recommendations for individual safety and activity status.	339		419 A-D	

CIP-4	Perform a comprehensive clinical examination of a patient with an upper extremity, lower extremity, head, neck, thorax, and/or spine injury or condition. This exam should incorporate clinical reasoning in the selection of assessment procedures and interpretation of findings in order to formulate a differential diagnosis and/or diagnosis, determine underlying impairments, and identify activity limitations and participation restrictions. Based on the assessment data and consideration of the patient's goals, provide the appropriate initial care and establish overall treatment goals. Create and implement a therapeutic intervention that targets these treatment goals to include, as appropriate, therapeutic modalities, medications (with physician involvement as necessary), and rehabilitative techniques and procedures. Integrate and interpret various forms of standardized documentation including both patient-oriented and clinician-oriented outcomes measures to recommend activity level, make return to play decisions, and maximize patient outcomes and progress in the treatment plan.			419 A-D	
	CIP-4a upper extremity	331	488	489	
	CIP-4b lower extremity	330	488	489	
<b>Competency Code</b>	<b>Competency</b>	<b>Primary Course Instructed</b>	<b>Primary Course Evaluated</b>	<b>Course 2 Instructed</b>	<b>Course 2 Evaluated</b>
	CIP-4c head	332	488	489	
	CIP-4d neck	332	488	489	
	CIP-4e thorax	332	488	489	
	CIP-4f spine	332	488	489	

CIP-5	Perform a comprehensive clinical examination of a patient with a common illness/condition that includes appropriate clinical reasoning in the selection of assessment procedures and interpretation of history and physical examination findings in order to formulate a differential diagnosis and/or diagnosis. Based on the history, physical examination, and patient goals, implement the appropriate treatment strategy to include medications (with physician involvement as necessary). Determine whether patient referral is needed, and identify potential restrictions in activities and participation. Formulate and communicate the appropriate return to activity protocol.	330/ 331/ 332	488	419 A-D	489
CIP-6	Clinically evaluate and manage a patient with an emergency injury or condition to include the assessment of vital signs and level of consciousness, activation of emergency action plan, secondary assessment, diagnosis, and provision of the appropriate emergency care (eg, CPR, AED, supplemental oxygen, airway adjunct, splinting, spinal stabilization, control of bleeding).	233		419 A & C	
CIP-7	Select and integrate appropriate psychosocial techniques into a patient's treatment or rehabilitation program to enhance rehabilitation adherence, return to play, and overall outcomes. This includes, but is not limited to, verbal motivation, goal setting, imagery, pain management, self-talk, and/or relaxation.	431		419 A-D	
CIP-8	Demonstrate the ability to recognize and refer at-risk individuals and individuals with psychosocial disorders and/or mental health emergencies. As a member of the management team, develop an appropriate management plan (including recommendations for patient safety and activity status) that establishes a professional helping relationship with the patient, ensures interactive support and education, and encourages the athletic trainer's role of informed patient advocate in a manner consistent with current practice guidelines.	489		419 A-D	
CIP-9	Utilize documentation strategies to effectively communicate with patients, physicians, insurers, colleagues, administrators, and parents or family members while using appropriate terminology and complying with statutes that regulate privacy of medical records. This includes using a comprehensive patient-file management system (including diagnostic and procedural codes) for appropriate chart documentation, risk management, outcomes, and billing.	419 A-D		443	