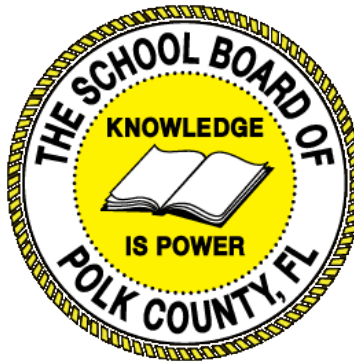




Individual Test Item Specifications

8417120- Health & Wellness 3

2015



The contents of this document were developed under a grant from the United States Department of Education. However, the content does not necessarily represent the policy of the United States Department of Education, and you should not assume endorsement by the federal government.

Table of Contents

I. Guide to the Individual Benchmark Specifications	1
Benchmark Classification System	1
Definitions of Benchmark Specifications	3
II. Individual Benchmark Specifications	4

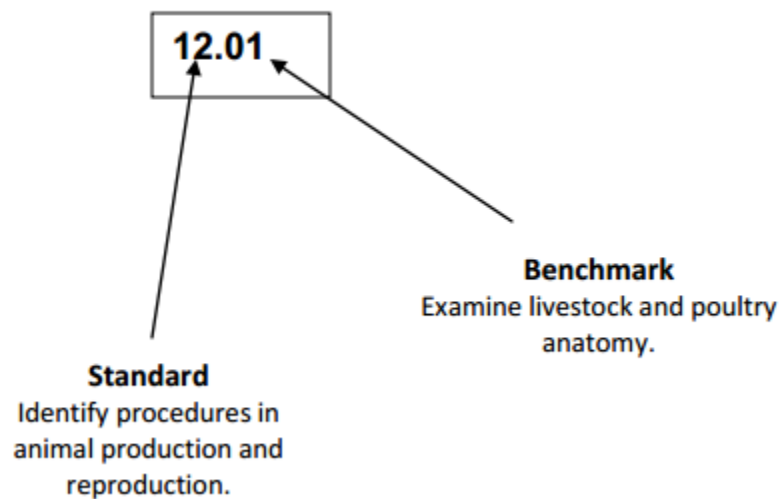
I. Guide to the Individual Benchmark Specifications

Content specific guidelines are given in the *Individual Benchmark Specifications* for each course. The *Specifications* contains specific information about the alignment of items with the Florida Standards. It identifies the manner in which each benchmark is assessed, provides content limits and stimulus attributes for each benchmark, and gives specific information about content, item types, and response attributes.

Benchmark Classification System

- Each Career and Technical Education course has its own set of course standards. The benchmarks are organized numerically, with two numbers separated by a decimal point. The first number is the standard number, and the second number is the benchmark number. You will see these numbers on the Item Specifications for each course.

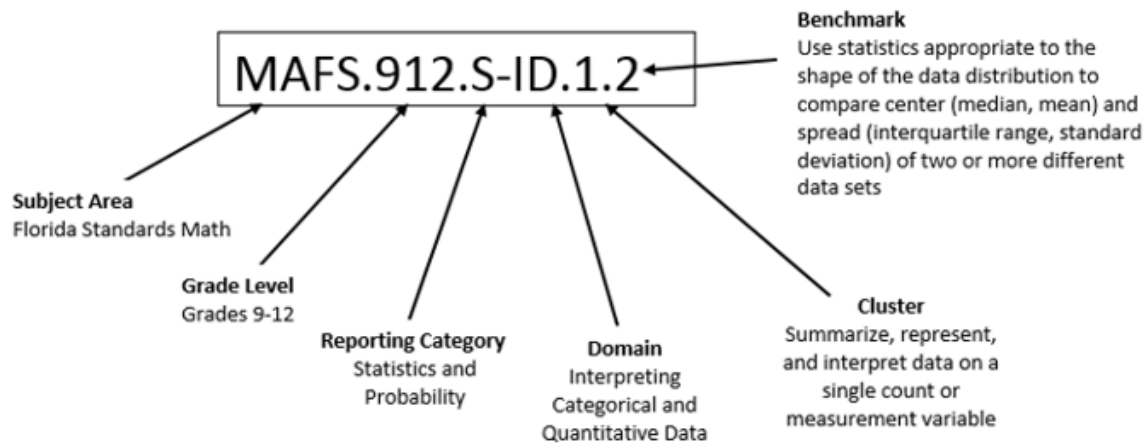
An example, from Agritechnology 1:



The image above describes the components of a Career and Technical Education Standard and Benchmark classification system.

Each MAFS benchmark is labeled with a system of letters and numbers.

- The four letters in the *first position* of the label identify the **Subject**.
- The number(s) in the *second position* represents the **Grade Level**.
- The letter(s) in the *third position* represents the **Category**.
- The number in the fourth position shows the **Domain**.
- The number in the *fifth position* identifies the **Cluster**.
- The number in the last position identifies the specific **Benchmark**.



The image above describes the components of a Florida Standard and Benchmark classification system.

Definitions of Benchmark Specifications

The *Individual Benchmark Specifications* provides standard-specific guidance for assessment item development for the Florida Department of Education Career and Technical Education item banks. For each benchmark assessed, the following information is provided.

Reporting Category	is a grouping of related benchmarks that can be used to summarize and report achievement.
Standard	refers to the standard statement presented in the Florida Standards.
Benchmark	refers to the benchmark statement presented in the Florida Standards. In some cases, two or more related benchmarks are grouped together because the assessment of one benchmark addresses another benchmark.
Item Types	are used to assess the benchmark or group of benchmark.
Cognitive Complexity	ideal level at which item should be assessed.
Benchmark Clarifications	explain how achievement of the benchmark will be demonstrated by students. In other words, the clarification statements explain what the student will do when responding to questions.
Content Limits	define the range of content knowledge and that should be assessed in the items for the benchmark.
Stimulus Attributes	define the types of stimulus materials that should be used in the items, including the appropriate use of graphic materials and item context or content.
Response Attributes	define the characteristics of the answers that a student must choose or provide.
Content Focus	addresses the broad key terms and concepts associated with the examples found in the standards, benchmarks, or benchmark clarifications.
Sample Items	are provided for each type of question assessed. The correct answer for all sample items is provided.

II. Individual Benchmark Specifications

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.01 Identify directional terms referring to areas of the body
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the various regions of the body using the appropriate terminology
Content Focus	Distal, proximal, deep, superficial, lateral, medial, anterior, posterior, dorsal, ventral
Content Limits	Items may include anatomy and physiology as it relates body orientation and location
Stimulus Attributes	May include, but not limited to, multiple choice questions or diagrams
Response Attributes	Student response based on recognizing the correct orientation of the human body
Sample Item	The knee is what in comparison to the hip? A. inferior B. lateral C. posterior D. superior Correct answer is A

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.02 Describe the human skeleton form, include names and function of the bones
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the bones associated with the axial and appendicular skeleton and the functions of those bones
Content Focus	Joints, movement, structure, osteoblasts, osteoclasts, yellow marrow, red marrow, shape
Content Limits	Items may include skeletal structure and function.
Stimulus Attributes	May include, but not limited to multiple choice questions and short answer
Response Attributes	Student response based on differentiating between the various skeletal divisions, bones, and function
Sample Item	<p>How does the body decrease blood calcium levels? Answer: The hypothalamus monitors blood calcium levels. If levels are low a signal is sent to the pituitary gland, which secretes thyroid stimulating hormone (TSH). This causes the thyroid to secrete calcitonin, which inhibits osteoclast activity for bone breakdown and stimulates osteoblast activity for bone formation, thus removing calcium from the blood.</p> <p>Rubric 2 points—Answer includes function of hypothalamus, pituitary gland, thyroid stimulating hormone, effects of calcitonin on osteoclasts and osteoblasts 1 point—Answer includes partial discussion that include 3-5 of the following: function of the hypothalamus, pituitary gland, thyroid stimulating hormone, effects of calcitonin on osteoclasts and osteoblasts. 0 points—Answer includes 0-2 of the following: the function of hypothalamus, pituitary gland, thyroid stimulating hormone, effects of calcitonin on osteoclasts and osteoblasts</p>

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.03 Describe the structure and function of the three types of muscles
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the three muscle types and their functions
Content Focus	Cardiac, smooth, skeletal, intercalated disks, sarcolemma, myofibril, peristalsis
Content Limits	Items may include the different muscle types, structures and functions
Stimulus Attributes	May include, but not limited to, multiple choice questions and short answer
Response Attributes	Student response based on differentiating between the three muscle groups and understanding how the three groups are controlled
Sample Item	<p>How is a skeletal muscle contraction caused by the release of acetylcholine? Answer: Acetylcholine is a neurotransmitter that controls muscular contraction. It works by binding to specific sites causing an influx of sodium causing depolarization to occur. This causes the release of calcium which, in turn, binds to the troponin/tropomyosin complex causing it to move to expose myosin allowing crossbridging with actin.</p> <p>Rubric: 3 points—Answer includes correct function of acetylcholine, calcium, sodium, depolarization, troponin, tropomyosin, myosin, actin, crossbridging 2 points—Answer includes correct function of 6-8 of the following: function of acetylcholine, calcium, sodium, depolarization, troponin, tropomyosin, myosin, actin, crossbridging 1 point—Answer includes the correct function of 3-5 of the following: function of acetylcholine, calcium, sodium, depolarization, troponin, tropomyosin, myosin, actin, crossbridging 0 points—Answer includes the correct function of 0-2 of the following: function of acetylcholine, calcium, sodium, depolarization, troponin, tropomyosin, myosin, actin, crossbridging</p>

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.04 Describe the anatomy of the human nervous system and its functions
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the structure and function of the nervous system.
Content Focus	Axon, myelin sheath, ulnar nerve, brachial plexus, nerve root compression, neuropathy, radiculopathy
Content Limits	Items may include nervous system structure, function and pathology
Stimulus Attributes	May include, but not limited to, multiple choice questions and short answer
Response Attributes	Student response based on understanding nerve structure, function and disease/pathology
Sample Item	A baseball player presents with numbness and tingling in his fourth and fifth digits. What nerve is involved? A. brachial B. palmar C. radial D. ulnar Correct answer is D

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.05 Describe the endocrine glands, including location and function
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the glands of the endocrine system and their functions
Content Focus	Adrenal, pancreas, insulin, homeostasis, hypothalamus, hormones
Content Limits	Items may include endocrine function and structure
Stimulus Attributes	May include, but limited to, multiple choice questions and short answer
Response Attributes	Student response based on understanding the effects of the endocrine system and maintaining homeostasis
Sample Item	<p>What structure is responsible for the body to maintain homeostasis?</p> <p>A. adrenal gland B. hypothalamus C. pancreas D. thalamus</p> <p>Correct answer is B</p>

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training
Benchmark	37.06 Discuss basic hematology including composition of blood, Rh factor and clotting
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the specific types of blood cells, their functions, blood types, and how the body responds to injury
Content Focus	Lymphocytes, monocytes, phagocytosis, hematopoiesis, erythrocytes, platelets, plasma, leukocytes, clotting, blood types
Content Limits	Items may include terms and topics relating to blood, typing, clotting, and immune function
Stimulus Attributes	May include, but not limited to, multiple choice questions and short answer
Response Attributes	Student response based on correctly identifying blood cells and their functions
Sample Item	A person showing signs of a parasitic infection would show elevated levels of what type of blood cell? A. basophil B. eosinophil C. monocyte D. neutrophil Correct answer is B

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.07 Discuss how the immune system functions
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the functions of the immune system including, but limited to, how the body fights infections
Content Focus	Lymphocytes, antibodies, active memory, passive memory, vaccinations, killer T-cells, helper T-cells, autoimmunity, immunodeficiency
Content Limits	Items may include terms, topics, and diseases relating to immune function
Stimulus Attributes	May include, but not limited to, multiple choice questions and short answer
Response Attributes	Student response based on correctly identifying immune functions and related pathologies
Sample Item	A person has been infected with chickenpox and can no longer contract the disease. What type of immunity is exhibited? A. active B. latent C. long term D. passive Correct answer is A

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.08 Describe the anatomy of the lymphatic division and the vascular system
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the anatomy, structure and function of the lymphatic system
Content Focus	Toxins, lymph fluid, lymph nodes, infection spleen, liver, kidneys
Content Limits	Items may include terms and topics relating to the lymphatic system structure, function and pathology
Stimulus Attributes	May include, but not limited to, multiple choice questions and short answer
Response Attributes	Student response based on correctly identifying the structures and functions of the lymphatic system and related pathologies
Sample Item	Inflammation of the spleen is detected by the presence of what? A. direct tenderness B. global tenderness C. point tenderness D. rebound tenderness Correct answer is D

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training
Benchmark	37.09 Describe the anatomy and physiology of the heart and its functions
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the structures and functions of the heart utilizing appropriate terminology
Content Focus	Tricuspid valve, mitral valve, semilunar valve, ventricle, atria
Content Limits	Items may include the various heart related structures and functions
Stimulus Attributes	May include, but not limited to multiple choice questions and short answer
Response Attributes	Student response based on correctly identifying the structures of the heart and their functions
Sample Item	<p>What heart structure fails, and is the cause of a heart murmur?</p> <ul style="list-style-type: none"> A. aortic semilunar valve B. mitral valve C. trabeculae carnae D. ventricle <p>Correct answer is B</p>

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.10 Describe the human circulatory systems and its pathways
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify and describe the pathways of the human circulatory system using correct terminology
Content Focus	Arteries, veins, capillaries, subclavian, femoral, brachial, carotid, jugular, temporal
Content Limits	Items may include the structure and function of the arterial and venous system
Stimulus Attributes	May include, but not limited to multiple choice questions and short answer
Response Attributes	Student response based on correctly identifying the arteries and veins of the body
Sample Item	The heart's blood supply is provided through which vessel? A. aorta B. coronary artery C. coronary sinus D. coronary vein Correct answer is B

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.11 Describe the structure and function of the respiratory system.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the major organs of the respiratory system and their functions. Students will describe the effects of aging on the respiratory system.
Content Focus	Major structures limited to pharynx, larynx, trachea, bronchi, bronchioles, alveoli, and the lungs. Neural control will be limited to phrenic nerves, Hering-Breuer reflex, and the medulla oblongata in the brain. Chemical factors will be limited to carbon
Content Limits	External respiration, internal respiration, cellular respiration, ventilation, inhalation, exhalation
Stimulus Attributes	May include a diagram/picture of the respiratory tract for labeling with multiple choice or short response questions.
Response Attributes	Students will identify major organs of the respiratory system. Students will describe neural and chemical control of breathing.
Sample Item	Where does diffusion of oxygen and carbon dioxide take place in the respiratory tract? A. alveoli B. bronchi C. larynx D. trachea Correct answer is A

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.12 Describe and demonstrate cardio-pulmonary resuscitation and the Heimlich maneuver
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)=X (ER)=
Cognitive Complexity Level	Moderate, High
Benchmark Clarification	The student will identify when to perform CPR/Heimlich maneuver and understand the steps and processes involved
Content Focus	Compressions, rate, depth, choking, AED, rescue breathing
Content Limits	Items may include the proper CPR sequence, when to perform, recognizing choking, compression/breath ratio, 1 and 2 person CPR, proper technique, AHA Guidelines. Performance skills may include Heimlich maneuver, rescue breathing, unconscious choking victim
Stimulus Attributes	Multiple choice, short or extended response giving a scenario and the student is asked to identify the medical emergency and explain the proper care that should be given. If testing performance supplies needed: CPR manikin (Adult, child and/or infant).
Response Attributes	Student response based on knowing the proper CPR sequence, choking recognition, cardiac emergency recognition
Sample Item	While performing the Heimlich maneuver in a restaurant the victim loses consciousness. What is the first thing you should do? A. activate emergency response B. check for a pulse C. perform a blind finger sweep D. start chest compressions Correct answer is A

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.13 Describe the anatomy of the human digestive system and absorption of foods
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the structures and functions of the digestive system including related pathologies
Content Focus	Organs of the digestive system and their function, diabetes, cholecystitis, ulcers, hepatitis, anorexia, bulimia
Content Limits	Items may include digestive system structure and function and related pathologies
Stimulus Attributes	May include, but not limited to, multiple choice questions, short answer, or diagrams
Response Attributes	Student response based on correctly identifying digestive system structure and function including pathologies
Sample Item	A person who exhibits insulin resistance would have what disease? A. cholecystitis B. cirrhosis C. type-1 diabetes D. type-2 diabetes Correct answer is D

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.14 Demonstrate an understanding of the anatomy of the urinary system and absorption of foods
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the structures and functions of the urinary system and related pathologies
Content Focus	Kidneys, ureter, urethra, bladder, infection, dehydration, filtration
Content Limits	Items will include structure and function of the urinary system and related pathologies
Stimulus Attributes	May include, but not limited to, multiple choice questions and short answer
Response Attributes	Student response based on correctly identifying the structures and functions of the urinary system and related pathologies
Sample Item	A person who exhibits generalized back pain, pain with urination, and is unable to find a comfortable position may be suffering from what condition? A. impingement B. kidney stones C. neuropathy D. radiculopathy Correct answer is C

Standard	37.0 Identify and describe basic human anatomy and physiology in relation to personal fitness or personal training - The student will be able to:
Benchmark	37.15 Describe the anatomy and physiology of the male and female reproductive system
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify anatomical structure and function of both male and female reproductive systems
Content Focus	Gonads, testes, ovaries, vas deferens, cancer, hematoma, menstruation
Content Limits	Items may include reproduction, structure, disease, and other related pathologies
Stimulus Attributes	May include, but not limited to, multiple choice questions and short answer
Response Attributes	Student response based on correctly identifying male and female reproductive structures and functions including related pathologies
Sample Item	Female athletes may exhibit irregular or lacking menstrual cycles. This is known as what condition? A. exercised induced amenorrhea B. gonorrhoea C. menstrual pause D. steatorrhea Correct answer is A

Standard	38.0 Define, identify and describe basic fitness, wellness, and exercise prescription and programming concepts - The student will be able to:
Benchmark	38.01 Classify health fitness standards, including components of wellness, and describe health appraisals, fitness assessments and exercise prescriptions.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Moderate, High
Benchmark Clarification	The student will describe varying heart rates, principles of programing and methods of prescribing exercise
Content Focus	Students will be able to identify the following terms; F.I.T.T.E principle, EPOC, THR, HRrest, METs, Risk Stratification
Content Limits	Students will be able to classify health fitness standards but not give medical advice to clients.
Stimulus Attributes	May include multiple choice with scenarios regarding exercise prescriptions, fitness assessments and health appraisals.
Response Attributes	Students may be able to choose correct programing concepts that include aerobic intensity and F.I.T.T.E. principles
Sample Item	Which of the following components of the exercise prescription work inversely with each other? A. frequency and intensity B. intensity and duration C. mode and duration D. mode and frequency Correct answer is B

Standard	38.0 Define, identify and describe basic fitness, wellness, and exercise prescription and programming concepts - The student will be able to:
Benchmark	38.06 Identify and describe the relationship between nutrition, diet and athletic performance.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=X
Cognitive Complexity Level	Moderate, High
Benchmark Clarification	The student will identify the effects of diet and nutrition on athletic performance
Content Focus	Diet, nutrition, athletic performance, calories, protein, metabolism, wellness, energy, ATP
Content Limits	Items may include dietary requirements, fitness assessment, wellness, exercise program creation
Stimulus Attributes	May include but not limited to multiple choice, short answer, and extended response
Response Attributes	Student response based on identifying the effects of diet and nutrition on athletic performance
Sample Item	<p>What percent of an athlete's daily caloric intake should be protein related?</p> <p>A. 5-10%</p> <p>B. 10-15%</p> <p>C. 12-15%</p> <p>D. 15-20%</p> <p>Correct answer is C</p>

Standard	38.0 Define, identify and describe basic fitness, wellness, and exercise prescription and programming concepts - The student will be able to:
Benchmark	38.12 Define cardio-respiratory endurance and the benefits of cardio-respiratory endurance training.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=X
Cognitive Complexity Level	Moderate, High
Benchmark Clarification	The student will identify various types of cardiovascular training and their benefits to overall health
Content Focus	Endurance, training, exercises, aerobic, anaerobic, fat burning
Content Limits	Items may include topics relating to cardio-respiratory endurance, training, and benefits
Stimulus Attributes	May include but not limited to multiple choice, chort answer, and extended response
Response Attributes	Student response based on correctly identifying the various concepts of fitness and wellness programming and exercise prescription
Sample Item	<p>What law states that bones adapt to the stresses applied to them?</p> <p>A. Boyle's Law B. Keppler's Law C. Newton's Law D. Wolff's Law</p> <p>Correct answer is D</p>

Standard	38.0 Define, identify and describe basic fitness, wellness, and exercise prescription and programming concepts - The student will be able to:
Benchmark	38.14 Define and identify the principles that govern cardio-respiratory exercise prescription: intensity, mode, duration, and frequency.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=X
Cognitive Complexity Level	Moderate, High
Benchmark Clarification	The student will identify the various exercises and cardiovascular training, as well how to develop an exercise program
Content Focus	Fitness, wellness, strength, endurance, flexibility
Content Limits	Items may include topics relating to exercise prescription, intensity, mode, duration, and frequency
Stimulus Attributes	May include but not limited to multiple choice, short answer, and extended response
Response Attributes	Student response based on correctly identifying the principles of exercise prescription as they relate to intensity, mode, duration and intensity
Sample Item	When running, how many minutes does it take before transitioning from anaerobic respiration to aerobic respiration? A. 10 min. B. 15 min. C. 20 min. D. 25 min. Correct answer is B

Standard	39.0 Classify and demonstrate competence and skill in the care and prevention of athletic injuries - The student will be able to:
Benchmark	39.01 Demonstrate skills necessary to recognize the causes and preventative measures associated with athletic participation
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=X
Cognitive Complexity Level	Moderate, High
Benchmark Clarification	The student will identify hazards related to athletic participation
Content Focus	Environmental hazards, physical hazards, injury prevention, heat index, hyperthermia, wind chill, hypothermia
Content Limits	Items may include topics relating to anatomy and physiology, disease, injury and related pathologies
Stimulus Attributes	May include, but not limited to multiple choice questions and short answer
Response Attributes	Student response based on correctly recognizing and identifying hazards related to athletic participation
Sample Item	Heat index measurements are in excess of 110 degrees F. What would you recommend to the coach? A. cancel practice B. practice inside C. reschedule practice for cooler time of day D. schedule half the practice outside and half the practice inside Correct answer is C

Standard	39.0 Classify and demonstrate competence and skill in the care and prevention of athletic injuries - The student will be able to:
Benchmark	39.02 Discuss selection and use of appropriate treatment modalities for athletic injuries
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=X
Cognitive Complexity Level	Moderate, High
Benchmark Clarification	The student will identify and utilize appropriate treatment modalities for athletic injuries
Content Focus	Ultrasound, electrical stimulation, cryotherapy, thermal modalities
Content Limits	Items may include topics related to anatomy and physiology, injury prevention, rehabilitation and treatment
Stimulus Attributes	May include, but not limited to multiple choice and short answer questions
Response Attributes	Student response based on correctly identifying the appropriate treatment modality
Sample Item	<p>What are the three "A's" of cryotherapy?</p> <ul style="list-style-type: none"> A. analgesic, anesthetic, anti-inflammatory B. anesthetic, anti-inflammatory, antiseptic C. antibiotic, antithesis, autologous D. anonymous, antecedent, anti-inflammatory <p>Correct answer is A</p>

Standard	39.0 Classify and demonstrate competence and skill in the care and prevention of athletic injuries - The student will be able to:
Benchmark	39.03 Identify acceptable selection and usage of rehabilitation and reconditioning techniques
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=X
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify which exercises to use to rehabilitate or recondition an athlete
Content Focus	Stretching, strengthening, range of motion, isometric, isotonic, isokinetic
Content Limits	Items may include terms and examples relating to rehabilitation and reconditioning
Stimulus Attributes	May include, but not limited to, multiple choice questions
Response Attributes	Student response based on recognizing the appropriate stretches and exercises to use when rehabilitating or reconditioning an athlete
Sample Item	An athlete has just been removed from a cast after breaking their ankle. What appropriate exercise would you prescribe? A. jumping on the involved ankle B. light jogging C. power cleaning D. range of motion Correct answer is D

Standard	39.0 Classify and demonstrate competence and skill in the care and prevention of athletic injuries
Benchmark	39.04 Demonstrate knowledge and understanding or care and prevention of athletic injuries
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=X
Cognitive Complexity Level	Moderate, High
Benchmark Clarification	The student will identify the mechanisms involved in injury occurrence and how to remedy the mechanisms
Content Focus	Kinetic chain, muscle imbalance, deconditioning, mechanism of injury, injury evaluation, special tests
Content Limits	Items may include terms relating to injury evaluation, rehabilitation and prevention
Stimulus Attributes	May include, but not limited to, multiple choice questions
Response Attributes	Student response based on recognizing hazards involved with participating in athletics, and how prevent, evaluate and treat athletic injuries
Sample Item	An athlete enters the Athletic Training Room complaining of left calf pain. After evaluation you determine that it is tightness due to overuse. What exercise would prescribe to address this issue? A. butterflies B. gastroc stretch C. hamstring curls D. straight leg raises Correct answer is B

Standard	39.0 Classify and demonstrate competence and skill in the care and prevention of athletic injuries - The student will be able to:
Benchmark	39.06 Demonstrate application of standard first aid
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)=X (ER)=
Cognitive Complexity Level	Moderate, High
Benchmark Clarification	The student will administer first aid practicing universal precautions
Content Focus	Universal precautions, blood borne pathogens, hepatitis, HIV, bandage, gloves, gauze, triple antibiotic, sharps container, biohazard
Content Limits	Items may include topics relating to appropriate first aid techniques, recognition of blood borne pathogens, and universal precautions. Performance skills may include controlling bleeding, bandaging, applying splints and slings to immobilize.
Stimulus Attributes	May include, but not limited to, multiple choice and short response questions. If doing a performance skill you will need the following supplies: Splint boards, ace bandages, triangular bandages, soft splints may include pillows or blankets. To controll
Response Attributes	Student response based on correctly identifying how to administer first aid, and recognizing the importance of universal precautions and blood borne pathogens
Sample Item	What is the appropriate way to dispose of blood soaked towels? A. in a biohazard container B. in a garbage can C. in a sharps container D. on the ground Correct answer is A

Standard	39.0 Classify and demonstrate competence and skill in the care and prevention of athletic injuries - The student will be able to:
Benchmark	39.07 Classify appropriate use of protective equipment
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	The student will identify the standards and appropriate use of protective equipment
Content Focus	Equipment, protective, pads, helmets, NOCSAE
Content Limits	Items may include different types of protective equipment, safety standards, and related pathologies associated with inappropriate protective equipment use
Stimulus Attributes	May include, but not limited to multiple choice questions
Response Attributes	Student response based on identifying the proper protective equipment to use for a sport or injury situation
Sample Item	Athletes who participate in collision sports should use equipment that address what kind of safety standards? A. NACSAE B. NAFSAE C. NICSAE D. NOCSAE Correct answer is D