



Australian Government

Assessment Requirements for SISFFIT004 Incorporate anatomy and physiology principles into fitness programming

Release: 1

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Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- effectively use knowledge of the following body systems to improve own instructional practice to plan and instruct at least five different client sessions:
 - cardiovascular
 - respiratory
 - musculoskeletal, with attention to:
 - bone strength
 - muscle endurance
 - muscle strength
 - nervous
 - digestive
- explain and demonstrate:
 - the major movements of the body, while identifying major muscles
 - actions of major joints during exercise
 - relevant information regarding structure and function of skeletal muscle, and process of muscle contraction during exercise
 - muscle actions and functions during different types of contractions.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- anatomical terminology:
 - anatomical position
 - superior
 - inferior
 - proximal
 - distal
 - lateral
 - medial
 - superficial

- deep
- planes of movement – sagittal, frontal, horizontal
- movement terminology and muscle actions:
 - flexion
 - extension
 - abduction
 - adduction
 - pronation
 - supination
 - dorsiflexion
 - plantarflexion
 - circumduction
 - inversion
 - eversion
- structural levels of body organisation:
 - cells
 - tissues
 - organs
 - organisms
- functions of major muscles during exercise and movement:
 - agonist
 - prime mover
 - antagonist
 - synergist
 - fixator
- types of muscle contractions:
 - isotonic – concentric and eccentric
 - isokinetic
 - isometric
- tissue types:
 - connective
 - muscle
 - nervous
 - epithelial
- body systems, their interdependence and contribution to a healthy body:
 - cardiovascular
 - musculoskeletal
 - nervous
 - digestive
 - respiratory

- structure and function of:
 - muscles:
 - types and classifications
 - global and local muscular systems
 - major muscle groups
 - contractibility and activation
 - nervous system:
 - nerves and nerve impulses
 - reflex arcs and relationship to stretching
 - role of nervous system in different types of training
 - skeletal system:
 - types of bones
 - major bones
 - bony landmarks
 - major joints
 - cardiovascular system:
 - heart and blood vessel anatomy
 - circulation pathways
 - role of blood
 - oxygen demands of fitness activities
 - relationships between exercise intensity and circulatory and ventilator responses
 - respiratory system:
 - mechanics of breathing
 - respiratory volumes and relationships to fitness levels and exercise
- energy systems, pathways and substrates and relevant recovery options
- thermoregulation of the human body:
 - consideration of the methods of cooling and warming
 - current environmental conditions
- exercises to promote ideal postural alignment and prevent development of pathological postures, with consideration of:
 - spinal curves
 - muscle balance
 - joint alignment.

Assessment Conditions

Skills must be demonstrated in:

- a workplace or simulated fitness industry environment that offers a variety of fitness services and facilities for clients.

Assessment must ensure access to:

- anatomical and physiological information and resources
- anatomical models or images.

Assessment must ensure use of:

- planning and evaluation documentation with inclusion of identified improvements to professional practice
- clients for the purposes of explanation and demonstration in instruction; these can be:
 - clients in the workplace, or
 - individuals who participate in project activities, role plays or simulated activities, set up for the purpose of assessment, within a training organisation.

Assessment activities that allow the individual to:

- demonstrate ability to incorporate body system knowledge into the instruction of sessions, catering for:
 - beginners, intermediate and advanced participants
 - low and high impact.

Assessors must satisfy the Standards for Registered Training Organisation's requirements for assessors, and:

- have achieved a Certificate IV in Fitness or above; and
- have at least 1 year consecutive post qualification fitness industry experience in the application of the skills and knowledge of the Certificate IV in Fitness.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1ca50016-24d2-4161-a044-d3faa200268b>