



**Australian Government**

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

**Release: 1**

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

## 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.education.gov.au/Pages/TrainingDocs.aspx?q=1ca50016-24d2-4161-a044-d3faa200268b>