



**Australian Government**

# **SISFFIT019 Incorporate exercise science principles into fitness programming**

**Release: 1**

# SISFFIT019 Incorporate exercise science principles into fitness programming

## Modification History

Not applicable.

## Application

This unit describes the performance outcomes, skills and knowledge required to incorporate an understanding of exercise science principles into fitness instruction, programming and provision of fitness advice.

This unit applies to the use of physiological and mechanical principles in training to improve the health- and skill-related components of fitness of clients who have recently completed industry endorsed pre-exercise screening and risk stratification procedures.

This unit applies to personal trainers who typically work autonomously in controlled and uncontrolled fitness environments. Work is performed according to relevant legislation and organisational policies and procedures.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

## Pre-requisite Unit

Nil

## Competency Field

Fitness

## Unit Sector

Fitness

## Elements and Performance Criteria

### ELEMENTS

Elements describe the essential outcomes

1. Consolidate understanding of exercise science principles.

### PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1 Source and access information on exercise science principles relevant to fitness outcomes.
- 1.2 Discuss/explain how understanding of exercise science principles contribute to safe/optimum technique and skill development.

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| 2. Apply knowledge to own professional practice.                 | <p>1.3 Use a wide range of terminology relevant to exercise science principles and fitness outcomes.</p> <p>2.1 Assess ways in which knowledge of exercise science principles may be used, adapted or challenged in instruction and provision of fitness advice.</p> <p>2.2 Identify current and emerging knowledge of exercise science principles relevant to development of own professional practice.</p> <p>2.3 Use knowledge of exercise science principles in day-to-day professional practice.</p> <p>2.4 Modify approach to fitness programming activities and advice as required.</p> |
| 3. Maintain and update knowledge of exercise science principles. | <p>3.1 Identify and use opportunities to update and expand own knowledge of exercise science principles.</p> <p>3.2 Monitor response to changes made to own professional practice or instruction.</p> <p>3.3 Continue to adjust own practice to optimise results.</p>  |

## Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

<b>SKILLS</b>	<b>DESCRIPTION</b>
Oral communication skills to:	<ul style="list-style-type: none"> <li>• provide clients with information related to exercise in a manner which they can understand and implement to their exercise sessions.</li> </ul>
Numeracy skills to:	<ul style="list-style-type: none"> <li>• calculate forces and implement basic biomechanical concepts and mathematical equations</li> <li>• interpret how equipment and body position can be changed to alter the forces applied to the body.</li> </ul>
Learning skills to:	<ul style="list-style-type: none"> <li>• ensure application of up-to-date exercise science principles.</li> </ul>
Problem-solving skills to:	<ul style="list-style-type: none"> <li>• accommodate the changing anatomical and physiological responses of the body to exercise programming and instruction</li> <li>• determine how equipment and body position can be changed to alter the forces applied to the body.</li> </ul>
Planning and organising skills to:	<ul style="list-style-type: none"> <li>• develop exercise programs that incorporate complex understanding of the anatomical and physiological adaptations that occur from different types of exercise.</li> </ul>

## **Unit Mapping Information**

SISFFIT419A Apply exercise science principles to planning exercise

## **Links**

Companion Volume implementation guides are found in VETNet -

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