



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **LMTFP3006B Apply foot anatomy principles to footwear production**

**Revision Number: 1**

## **LMTFP3006B Apply foot anatomy principles to footwear production**

### **Modification History**

Not applicable.

### **Unit Descriptor**

**Unit descriptor** This unit covers the skills and knowledge to identify and describe the main structure and functions of the foot and to apply these principles to the design and production of footwear.

## Application of the Unit

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The unit applies to identifying the structure and functions of the foot and how normal footwear design features meet these requirements. The unit does not cover abnormal anatomy or medical conditions affecting feet. The retailing, alteration and manufacture of footwear for clients needing shoes or prostheses for surgical and medical conditions are covered by the Medical Grade Footwear units and qualifications.

The unit applies to small manufacturers making footwear by hand and dealing direct with the public.

Work may involve individual and team activities.

The application of this unit is according to OHS practices of the enterprise and workplace practices, which may include:

- requirements prescribed by legislation, awards, agreements and conditions of employment
- standard operating procedures
- work instructions
- oral, written and visual communication
- quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team or section output
- housekeeping
- tasks related to environmental protection, waste disposal, pollution control, and recycling

This unit applies skills in problem solving to determine and apply foot anatomy principles. Learning and self management are required relate principles to footwear characteristics and the impact of footwear on foot functioning. Teamwork and communication skills are required in order to refer foot conditions to suitable practitioners as required.

## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

### Prerequisites

## Employability Skills Information

**Employability Skills** This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

Not applicable.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Describe the structure and functions of the foot	1.1 The main <i>foot structures</i> are identified. 1.2 Functions of main foot muscles are described. 1.3 Functions of main tendons and ligaments in foot are described. 1.4 The main <i>functions</i> of foot are identified.
2 Describe the main features and functions of footwear	2.1 <i>Types of footwear</i> are identified and their uses described. 2.2 <i>Footwear features</i> are described. 2.3 <i>Processes</i> used to produce footwear features are described. 2.4 <i>Instances</i> where <i>specialised footwear</i> may be required are identified.
3 Assess the impact of footwear features	3.1 The effect of poor-fitting or poorly made shoes is described. 3.2 Features of footwear are related to foot function and structure. 3.3 Footwear product is assessed for its capacity to support ideal performance of foot. 3.4 Referral to a medical practitioner, podiatrist or medical grade footwear practitioner is suggested if a surgical or medical footwear condition is suspected. 3.5 Quality processes used in workplace to ensure production of optimal footwear products are identified.

## Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Demonstrates knowledge of:

- types and uses of footwear
- OHS practices, including hazard identification and control measures
- quality practices
- workplace practices
- recording and reporting practices

Demonstrates skills to:

- read, interpret and follow information on work specifications, standard operating procedures and work instructions, and other reference material
- maintain accurate records
- clarify and check task-related information

## Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

<b>Critical aspects of evidence</b>	Demonstrates skills and knowledge to: <ul style="list-style-type: none"><li>• identify foot structure</li><li>• identify functions of the foot</li><li>• identify special requirements for footwear</li></ul>
<b>Consistency in performance</b>	Consistently applies skills and knowledge when: <ul style="list-style-type: none"><li>• organising work</li><li>• completing tasks according to instructions</li><li>• working systematically with attention to detail according to instructions</li><li>• identifying improvements and avoiding damage</li><li>• using workplace practices</li><li>• using OHS practices</li><li>• recording and reporting accidents and incidents</li><li>• assessing operational readiness of equipment</li><li>• recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions</li></ul>
<b>Resource implications</b>	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
<b>Context for assessment</b>	Assessment may occur on the job or in an appropriately simulated environment.
<b>Interdependent assessment</b>	This unit may be assessed independently or in combination with other relevant units.

## Range Statement

### RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Legislative/regulatory requirements All work must comply with relevant Federal and State or Territory legislative or regulatory requirements.

Foot structures may include:	<ul style="list-style-type: none"> <li>• muscles</li> <li>• bones</li> <li>• ligaments</li> <li>• joints</li> <li>• nervous system</li> </ul>
Functions may include:	<ul style="list-style-type: none"> <li>• balance</li> <li>• walking</li> <li>• standing</li> <li>• running</li> <li>• climbing</li> <li>• specific sports</li> <li>• kicking</li> <li>• jumping</li> </ul>
Types of footwear may include:	<ul style="list-style-type: none"> <li>• safety boots</li> <li>• work boots and shoes</li> <li>• fashion shoes</li> <li>• everyday wear shoes</li> <li>• walking boots and shoes</li> <li>• sport shoes</li> </ul>
Footwear features may include:	<ul style="list-style-type: none"> <li>• steel caps</li> <li>• moulded soles</li> <li>• heels</li> <li>• reinforcement</li> <li>• lining</li> <li>• laces and buckles</li> <li>• elastic sides</li> <li>• size</li> <li>• shape</li> </ul>
Processes may include:	<ul style="list-style-type: none"> <li>• designing</li> <li>• developing patterns and lasts</li> <li>• stitching</li> </ul>

- Instances may include:
- selection of materials
  - manufacture of uppers, inner soles, linings, soles
  - quality checks
  - injuries
  - health conditions such as diabetes
  - amputations
  - diseases affecting the foot or ankle
  - sizing
  - foot muscle and structural features
  - deformities
- Specialised footwear may be required for:
- flat feet
  - size difference
  - wide feet

## **Unit Sector(s)**

**Sector** Footwear Production