



Australian Government

Department of Education, Employment and Workplace Relations

AHCPCM504A Design and maintain a specialised landscape

Release: 1

AHCPM504A Design and maintain a specialised landscape

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers designing and maintaining a specialised landscape and defines the standard required to identify plant species and cultivars using botanical nomenclature; recognise and select plants appropriate to the design criterion; identify and design with plants appropriate for the use in controlled environments; implement biological, organic and inorganic plant and plant pest management techniques; Identify and apply appropriate irrigation techniques and manage irrigation applications; identify disorders and recommend soils and plant nutrition requirements; Identify weeds and recommend appropriate weed management; provide garden design solutions; compile the recommendations and document a design plan or report.
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Application of the Unit

Application of the unit	This unit applies to the identifying the various plant families and a wide range of plants for different situations; making accurate observations of details; recognising the implications of environmental and climatic range; and assessing plants prior to planting. It requires knowledge of botanical geography; ethno botany; plant culture in Green Buildings; Conservatories and Glass Houses; lawns and lawn care; stakes and guying and irrigation and current process in new irrigation techniques.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Design with plants as a main focus of the design project	1.1. Identify plant families and genera, species and cultivars, by making accurate observations of fine details and applying logical and systematic methods of working. 1.2. Identify a wide range of plants for different design criterion and requirements, which include the use of aesthetic, ornamental, productive and economic plant groups. 1.3. Recognise and select plants appropriate to the design criterion. 1.4. Identify and design with plants appropriate for the use in Green Buildings (eg. Rooftops) Conservatories, Glass houses and Atriums.
2. Place plants in a designed space	2.1. Determine the implications of climate and environment on plant selection and design. 2.2. Recognise and choose plants that are adaptive to micro and meso climates in domestic, and small to moderate scale public space. 2.3. Assess plants prior to planting and identify their nature e.g. annual, perennial and arboreal. 2.4. Report on the cultural techniques required to establish and maintain plants in specialised environments.
3. Identify disorders and recommend soils and plant nutrition requirements	3.1. Identify soil types and condition and make recommendations for appropriate soil management techniques. 3.2. Identify organic and inorganic fertilisers and make appropriate recommendations. 3.3. Identify common plant disorders and make appropriate recommendations. 3.4. Instruct in the use and production of compost.
4. Establish and maintain plants in a designed landscape environment	4.1. Implement a range of propagation techniques. 4.2. Perform planting techniques. 4.3. Recognise appropriate situations for the use of, and make recommendations, regarding staking and guying. 4.4. Identify and apply appropriate irrigation techniques and manage irrigation applications. 4.5. Perform a range of appropriate pruning and shaping techniques ensuring optimum plant performance and make recommendations.

ELEMENT	PERFORMANCE CRITERIA
	4.6. Identify weeds and recommend appropriate weed management. 4.7. Implement biological, organic and inorganic plant and plant pest management techniques. 4.8. Compile the recommendations and document a design plan or report.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- identify plant species and cultivars using botanical nomenclature
- identify and select plants appropriate to the design criterion
- identify and design with plants appropriate for the use in controlled environments
- implement biological, organic and inorganic plant and plant pest management techniques
- Identify and apply appropriate irrigation techniques and manage irrigation applications
- identify and recommend soils and plant nutrition requirements
- Identify weeds and recommend appropriate weed management
- provide garden design solutions
- compile the recommendations and document a design plan or report
- use literacy skills to fulfil job roles as required by the organisation. The level of skill may range from reading and understanding documentation to completion of written reports
- use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views
- use numeracy skills to estimate, calculate and record complex workplace measures
- use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- botany - plant structures and physiology
- botanical geography (plant families, geographic distribution and links)
- ethno botany (sustainability and the stories of plants)

REQUIRED SKILLS AND KNOWLEDGE

- plant taxonomy and nomenclature
- aesthetic, ornamental, productive and economic plant groups
- plant families and detailed knowledge of species and cultivars used in garden design, horticulture industry and other ornamental, productive and economic plant industries
- the use and development of plants through history
- types, properties and characteristics of a wide range of soils and growing media
- horticultural media, information and knowledge based resources
- turf culture
- principles and processes of plant culture.
- allied horticultural, environmental and conservation industries and movements
- irrigation and current progress in new irrigation techniques
- AS4419-2003 and AS4454-2003.

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following:

- identify plant species and cultivars using botanical nomenclature
- recognise and select plants appropriate to the design criterion
- identify and design with plants appropriate for the use in controlled environments
- implement biological, organic and inorganic plant and plant pest management techniques
- Identify and apply appropriate irrigation techniques and manage irrigation applications
- identify disorders and recommend soils and plant nutrition requirements
- Identify weeds and recommend appropriate weed management
- provide garden design solutions
- compile the recommendations and document a design plan or report.

Context of and specific resources for assessment

Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole.

RANGE STATEMENT	
Clients may include:	• clients as private individuals • students • small and medium businesses • organisations • public bodies • community groups.
Physical elements and features may include:	• proposed or existing structures • buildings • roads and paths • watercourses • irrigation and/or drainage systems • existing plants • topographic features • views and outlooks • climate and weather conditions • soils characteristics • access to site and existing site use details.
Functional analysis may include:	• analysis of existing or proposed use of site • pedestrian movement • microclimatic notes • client requirements.

Unit Sector(s)

Unit sector	Plants
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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