# **Modification history**

Release	Comments
Release 2	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 4.0.
Release 1	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 1.0.

AHCTRF401	Develop a sports turf maintenance program	
Application	This unit of competency describes the skills and knowledge required to develop a sports turf maintenance program, prepare implementation documents, communicate the program to staff and key stakeholders and review and update the program.	
	The unit applies to individuals who apply specialist skills to provide solutions to technical and unpredictable problems. They work autonomously, instruct and monitor the work of others within a team. They use discretion and judgment in the selection, allocation and use of available resources.	
	No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.	
Prerequisite Unit	Nil	
Unit Sector	Turf (TRF)	

Elements	Performance Criteria	
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
Determine soil properties and plant health	procedures	
	1.2 Monitor testing activities against testing program and initiate remedial action where activity does not comply	
	1.3 Assess and interpret test results with due consideration of influencing factors and record results	
	1.5 Compare tests results with cultural requirements of turf grass species and determine nutritional status of the soil according to accepted industry standards	
2. Identify the requirements of a sports turf	2.1 Establish turf grass optimum presentation characteristics according to client requirements and industry best practice	
maintenance program	2.2 Identify budgetary constraints for the turf area according to workplace finances	
	2.3 Identify maintenance requirements for varying conditions for turf growing cycle	
	2.4 Select turf maintenance practices to maintain turf health according to sports turf standards of presentation	
	2.5 Identify and verify availability of resources, tools, equipment and machinery required for the sports turf maintenance program	
	2.6 Assess requirements and constraints and document a sports turf	
3. Prepare and document	playing surface maintenance program according to workplace procedures 3.1 Prepare detailed plan, specifications and budget according to	
the sports turf maintenance program	requirements of program  3.2 Develop and document on-site procedures and schedules for the sports	
	turf maintenance program  3.3 Develop contingencies to ensure deadlines are met according to client and play requirements	

Elements	Performance Criteria	
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
Communicate sports turf maintenance program to	4.1 Instruct staff and key stakeholders on turf maintenance program and procedures	
key stakeholders	4.2 Monitor implementation of turf maintenance program and provide feedback to staff and stakeholders	
5. Review the sports turf maintenance program	5.1 Monitor performance of program against workplace standards and record discrepancies	
	5.2 Review the sports turf maintenance program to ensure it remains responsive to changing conditions	
	5.3 Adjust and make changes to the program to overcome discrepancies in program outcomes	
	5.4 Document and report remedial action and changes to maintenance program according to management and workplace procedures	

Foundation Skills	
	language, literacy, numeracy and employment skills that are essential for ompetency but are not explicit in the performance criteria.
Skill	Description
Reading	Interpret complex technical documents related to sports turf maintenance programs
Writing	Use language appropriate for work team when writing workplace procedures
Oral communication	Consider target audience when presenting complex information to work team and key stakeholders
Numeracy	Performs calculations to analyse budget information, interpret tests and results and develop schedule for maintaining sports turf

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
AHCTRF401 Develop a sports turf maintenance program	AHCTRF401Develop a sports turf maintenance program	Changes to Elements and Performance Criteria for clarity Updated Performance Evidence and Knowledge Evidence	Equivalent unit

Links	Companion Volumes, including Implementation Guides, are available at VETNet:
	https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549- 9c62-4a5e-bf1a-524b2322cf72

TITLE	Assessment requirements for AHCTRF401 Develop a sports
	turf maintenance program

#### **Performance Evidence**

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has prepared a sports turf maintenance program for play on at least one of the following types of sports turf surfaces:

- golf course, at least one hole including tees and surrounds, rough, fairways and greens
- bowling green
- · cricket pitch including wicket surface and outfield
- sports field (football, soccer, rugby lacrosse, hockey, polo)
- race track
- turf farm
- lawn tennis
- croquet lawn
- other sports turf surface.

#### The program must include the following:

- a twelve month cycle for the sports turf playing surface
- · specify all maintenance practices including:
  - irrigation
  - mowing and rolling
  - fertiliser applications
  - pesticide (pests, diseases and weeds) applications
  - plant growth regulator applications
  - · renovation practices
  - surface setup standards and player expectations
- be implemented for a period of no less than eight weeks to verify the performance outcomes documented in the program.

#### There must also be evidence that the individual has:

- prepared an annual sports turf maintenance program according workplace procedures and budget
- assessed and incorporated in maintenance program, test results, optimum performance characteristics, budgetary constraints and resource implications
- scheduled activities and informed key stakeholders and staff of their respective roles and responsibilities
- monitored and reviewed the program to ensure program outcomes are achieved
- implemented appropriate course of action to overcome program deficiencies
- documented and reported actions and changes to maintenance program.

## **Knowledge Evidence**

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- biological principles and processes of a range of sports turf species for playing surfaces including:
  - growth habits and cultural requirements of specific turf plant species and cultivars under a range of soil and environmental conditions
  - maintenance requirements and practices for specific turf plant species and cultivars after initial establishment
  - nutrients required by specific turf plant species and cultivars and the effects of nutrient deficiency and toxicity on individual plant species and cultivars, including symptoms
  - · plant diseases, pests and disorders and weeds of specific turf plant species and cultivars
- site evaluation techniques including analysis of the condition of soils, plants, and the site for turf maintenance activities
  - soil ameliorants commonly required to treat the soil problems experienced by the enterprise
  - the characteristics of soil and other growth media types, uses and additives to enhance the available nutrition for specific turf plant species and cultivars

## **Knowledge Evidence**

- the main simple and compound fertiliser products available to the enterprise
- design and development of maintenance programs within turf grass requirements and workplace constraints including:
  - requirements to build healthy turf to meet national or international standards
  - standards and player expectations of the playing surface
  - · availability of equipment and materials
  - budgetary pressures and meeting financial imperatives
  - soil and plant testing programs and their development including:
    - types of soil and plant tissue tests used in turf management
    - field testing activities
    - off-site and laboratory testing activities and role of consultants
    - scheduling and timing of tests for optimum results
    - sampling techniques for soils and plant tissue
- test results their interpretation and reporting procedures including:
  - · seasonal impact
  - expected results for turf species and cultivars
  - historical records
- turf species cultural requirements practices and their implication for maintenance program including:
  - · irrigation methods and water budget
  - mowing and rolling methods, frequency for turf play surface requirements
  - fertiliser and ameliorant applications timing and impact on turf health and growth
  - pests and disease control and pesticide application
  - impact and management of plant growth regulators and their application to turf grass
  - · planned maintenance for renovation of worn and damaged surfaces
  - maintenance implications for setting up for sports play
- unplanned activity and outcomes and what to do about them including:
  - developing contingencies to manage unpredictable situations
  - managing adverse climatic conditions
  - adverse or unplanned turf usage
- record keeping and reporting procedures and practices.

### **Assessment Conditions**

Assessment of skills must take place under the following conditions:

- physical conditions:
  - access to a sports turf facility or an environment that accurately represents workplace conditions on which to implement and monitor a maintenance program
- resources, equipment and materials:
  - access to national and international sports turf industry standards
  - access to player and user expectations for playing surface
  - access to soil and plant tissue analysis reports for interpretation
- specifications:
  - workplace documents including procedures, instructions, maintenance budget, and resource list for planning purposes
- relationships:
  - work team
  - management
- timeframe:
  - maintenance program must span a 12 months
  - implementation of a minimum of 8 weeks to verify the program outcomes.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-
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