



National Unit Specification: general information

UNIT Environmental Issues: Sportsturf (SCQF level 5)

CODE F6TV 11

SUMMARY

This Unit introduces candidates to environmental issues which will enable them to assess current practices, produce and implement recommendations for improvement.

It has been designed to give candidates an understanding of general environmental issues, specific working practices and practical skills involved in making improvements to the environment surrounding sports turf areas.

OUTCOMES

- 1 Describe the environmental issues relevant to sportsturf.
- 2 Carry out an environmental assessment relevant to sportsturf.
- 3 Carry out environmental improvements relevant to sportsturf.

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

CREDIT VALUE

1 credit at SCQF level 5 (6 SCQF credit points at SCQF level 5*).

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Administrative Information

Superclass: SF

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National Unit Specification: general information (cont)

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CORE SKILLS

Achievement of this Unit gives automatic certification of the following:

Complete Core Skill None

Core Skill component Critical Thinking at SCQF Level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit Specification.

National Unit Specification: statement of standards

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Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

OUTCOME 1

Describe environmental issues relevant to sportsturf.

Performance Criteria

- (a) Describe accurately the main environmental issues associated with sportsturf management.
- (b) Describe accurately the main environmental issues associated with regular sportsturf maintenance.

OUTCOME 2

Carry out an environmental assessment relevant to sportsturf.

Performance Criteria

- (a) Identify environmental issues and current practices in relation to a given situation.
- (b) Describe environmental issues and current practices in relation to the given situation.
- (c) Make recommendations for the environmental improvement of the given situation.
- (d) Produce a report in accordance with the specified instructions.

OUTCOME 3

Carry out environmental improvements relevant to sportsturf.

Performance Criteria

- (a) Select and use appropriate tools and equipment.
- (b) Carry out environmental improvements in accordance with instructions.
- (c) Carry out environmental improvements in accordance with current Health and Safety Legislation.
- (d) Dispose of waste materials correctly and leave site in a safe and tidy manner.

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EVIDENCE REQUIREMENTS FOR THIS UNIT

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

All relevant operational procedures undertaken in this Unit must adhere to current health and safety legislation, regulations, codes of practice and manufacturers' recommendations where appropriate.

Outcome 1 — Written and/or recorded oral evidence

Written and/or recorded oral evidence is required to demonstrate that the candidate has achieved Outcome 1 to the standard specified in the Outcome and Performance Criteria.

The candidate must describe:

- ◆ the use of pesticides
- ◆ fertilisers
- ◆ recycling green waste
- ◆ wildlife and conservation

Outcome 2 — Written and/or recorded oral evidence

Written and/or recorded oral evidence is required to demonstrate that the candidate has achieved Outcome 2 to the standard specified in the Outcome and Performance Criteria.

Candidates should produce a report which must:

- ◆ be well structured
- ◆ identify good and poor practices on a given site
- ◆ evaluate these practices stating their positive and negative effects on the environment

The report must refer to the following areas:

- ◆ water run off
- ◆ drainage
- ◆ wildlife management
- ◆ storage of machinery, tool and materials
- ◆ recycling of waste materials and arisings
- ◆ working practices

Within the report, candidates must also make recommendations for the environmental improvement of the site by altering working practices, management decisions and investing in new resources.

This is an open-book assignment in which candidates should present their findings using the written word, photographic and graphical media as appropriate.

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Outcome 3 — Performance evidence

Performance Evidence is required to demonstrate that the candidate has achieved Outcome 3 to the standard specified in the Outcome and Performance Criteria.

Performance evidence for this Outcome will be collected by assessors completing an observational checklist following the candidates successful completion of given tasks.

The following must form part of the observational checklist:

- ◆ Carry out all work in accordance with instructions from assessor
- ◆ Carry out all work in a safe manner
- ◆ Comply with all current health and safety legislation
- ◆ Use tools, machinery and materials in the correct manner
- ◆ Carry out environmental improvements
- ◆ Dispose of arisings and waste in the most appropriate manner
- ◆ Leave site in a tidy manner
- ◆ Clean tools and machinery and return to appropriate storage area

Centres must be satisfied that the evidence submitted is the work of individual candidates.

When using Performance Evidence, assessor observation checklists and other assessment records should be maintained and kept up to date to keep track of candidate progress and to provide evidence for internal and external verification purposes.

National Unit Specification: support notes

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This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

This Unit is an optional Unit of the National Certificate in Greenkeeping, but may also be taken as a free-standing Unit.

This Unit is aligned to the following Lantra, Sector Skills Council's National Occupational Standard (NOS) Units:

- ◆ (CU2) Monitor and Maintain Health and Safety
- ◆ (L27) Use and maintain equipment and machines
- ◆ (L2) Establish plants outdoors
- ◆ (CU5) Develop personal performance and maintain working relationships
- ◆ (L6) Present, maintain and repair sportsturf surfaces for play

Outcome 1

This Unit has been designed to give candidates an overview of environmental issues relating to sportsturf. General areas of interest should be covered such as:

- ◆ The need for pesticide use
- ◆ Good cultural practices
- ◆ Fertilisers
- ◆ Recycling of materials, especially green waste
- ◆ Water and drainage issues relating to run off
- ◆ Possible contamination of the soil and water courses

Outcome 2

Candidates have then to make an assessment of a given area to identify current practices and make comment on whether these are good or bad practices. Issues covered may include:

- ◆ The choice of materials
- ◆ Fuels and oils used
- ◆ Machinery selection
- ◆ Pesticide selection
- ◆ Fertiliser
- ◆ Working practices
- ◆ Appreciation of wildlife and conservation issues relevant to the site

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The production of a report covering all of these observations and assessments will conclude with recommendations for the improvement of the site.

Outcome 3

This Outcome is based around practical tasks which involve carrying out environmental improvements relevant to a given site. This need not be the same site as in Outcome 2, but it may well be an implementation of some of the recommendations arising from the report. Candidates may be encouraged to keep a diary or work log of practical work carried out.

On completion of this Unit, candidates should have a greater understanding of environmental issues and have participated in practical improvements.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

This Unit should encompass a variety of teaching methods from class based lecturers, on site inspections, internet based sources of information and practical implementation of environmental improvements. It has been designed to give candidates a wider appreciation of environmental issues and the impact which turf maintenance operations can have on the environment. The management of turf areas should also be discussed which could include:

- ◆ Reduction in overall pesticide use
- ◆ Promotion of wildlife habitats

Candidates should have the opportunity to learn and apply practical skills in the implementation of environmental improvements, for example:

- ◆ Creating composting areas
- ◆ Green waste recycling
- ◆ Tree and shrub planting and maintenance
- ◆ Wetland creation
- ◆ Water features for conservation
- ◆ Enhancing areas for wildlife habitat
- ◆ Improving drainage

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

In the Unit, candidates may have the opportunity to develop aspects of the following Core Skills:

Communication (SCQF level 4) could be developed through reading material, writing class notes, producing a report, and working on practical projects by following instructions.

Working with Others (SCQF level 4) may be developed in the practical implementation of environmental improvements.

Information Technology (SCQF level 4) may be developed through investigation and production of the report.

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GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

For Outcome 1, the candidate could be presented with assessments designed to test the knowledge of different environmental issues associated with turf maintenance.

The instruments of assessment that could be employed for Performance Criteria (a) and (b) are short-answer written questions and could cover current legislation and current proposals.

For Outcome 2 candidates should prepare a written report which covers all of the Evidence Requirements for Performance Criteria (a), (b) and (c), namely:

- (a) Identify environmental issues and current practices in relation to a given situation.
- (b) Describe environmental issues and current practices in relation to the given situation.
- (c) Make recommendations for the environmental improvement of the given situation.

For Performance Criterion (d) candidates should produce a report, which is:

- ◆ well structured
- ◆ well presented
- ◆ contains relevant written and graphical or photographic information

Assessors may consider giving candidates a blank template of a report to enable candidates to complete all relevant sections to the required standard.

For Outcome 3, an observation checklist should be developed defining the key stages of the practical operations. Assessors should prepare a clear brief for candidates before the practical operations commence.

A log book or diary could be used for the candidate to record progress and to record equipment, materials and labour during the operations.

Time should be allowed for any necessary re-assessment.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

National Unit Specification: support notes (cont)

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DISABLED CANDIDATES AND/OR THOSE WITH ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website

www.sqa.org.uk/assessmentarrangements