



National Unit Specification: general information

UNIT Irrigating Sports Surfaces (SCQF level 5)

CODE F6V4 11

SUMMARY

This Unit allows the candidate to carry out practical and effective irrigation of a range of turf or artificial surfaces. It will also assist the candidate in detecting and repairing irrigation component faults.

OUTCOMES

- 1 Describe the problems of irrigating sports surfaces.
- 2 Describe the types of water sources and storage used for irrigation.
- 3 Outline a range of irrigation components used for sports surfaces.
- 4 Carry out repair or replacement of defective irrigation components.

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

Publication date: May 2009

Source: Scottish Qualifications Authority

Version: 01

© Scottish Qualifications Authority 2009

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

Additional copies of this Unit Specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre, telephone 0845 279 1000.

National Unit Specification: general information (cont)

UNIT Irrigating Sports Surfaces (SCQF level 5)

CORE SKILLS

Achievement of this Unit gives automatic certification of the following:

Complete Core Skill None

Core Skill component Critical Thinking at SCQF Level 4

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

UNIT Irrigating Sports Surfaces (SCQF level 5)

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 the problems of irrigating sports surfaces.

Performance Criteria

- (a) Outline the main surface and subsurface problems associated with achieving efficient irrigation on turf or artificial surfaces.
- (b) Describe relevant, practical methods to increase effective irrigation on turf or artificial surfaces.

OUTCOME 2

Describe the types of water sources and storage used for irrigation.

Performance Criteria

- (a) Identify suitable water sources for irrigation.
- (b) Describe practical advantages and disadvantages of these water sources.
- (c) Describe current laws and organisations influencing use of water sources for sports surfaces.
- (d) Describe a range of suitable water storage methods.

OUTCOME 3

Outline a range of irrigation components used for sports surfaces.

Performance Criteria

- (a) Outline a range of relevant components associated with modern installed sports irrigation systems.
- (b) Outline a range of relevant components associated with modern mobile sports irrigators.

OUTCOME 4

Carry out repair or replacement of defective irrigation components.

Performance Criteria

- (a) Identify common faults that can occur within irrigation components.
- (b) Carry out the repair or replacement of a faulty component safely and systematically.
- (c) Check component is working correctly.

National Unit Specification: statement of standards (cont)

UNIT Irrigating Sports Surfaces (SCQF level 5)

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 which demonstrates that the candidate has achieved Outcome 1. The assessment will be a closed-book assessment under controlled conditions and will last no longer than 30 minutes.

Outcome 2 — Written and/or recorded oral evidence

Written and/or recorded oral evidence is required which demonstrates that the candidate has achieved Outcome 2. The assessment will be a closed-book assessment under controlled conditions and will last no longer than 25 minutes.

Outcomes 1 and 2 may be carried out as one assessment provided that all the criteria above are met.

Outcome 3 — Written and/or recorded oral evidence

Written and/or recorded oral evidence is required which demonstrates that the candidate has achieved Outcome 3. The candidate must identify a range of currently available irrigation components

Outcome 4 — Performance evidence

Performance evidence is required which demonstrates that the candidate has achieved Outcome 4. The candidate must demonstrate understanding of the systematic procedures required for safe and efficient application of the tasks.

An assessor record/checklist of the development of performance should be retained by the centre as should the recorded performance of the candidate's achievement.

Assessment may be carried out using e-assessments. Centres must satisfy themselves that the questions used are comparable to other instruments of assessment currently available and evidence available for verification purposes.

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

UNIT Irrigating Sports Surfaces (SCQF Level 5)

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:

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

The Unit allows the candidate to carry out practical and effective irrigation of a range of turf or artificial surfaces. It will also assist the candidate in detecting and repairing irrigation component faults.

Candidates should appreciate the impact irrigation can have on the playing conditions on natural turf and artificial surface. The type of water source, suitability for sports areas and the restrictions on availability should also be discussed.

The range of components and suitability for various size of sports surface venue should be explored.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Though some of the learning and teaching packages may imply classroom-based activity it would be beneficial to augment this with on-site observation of problems, solutions, etc. Group discussion prompted by prepared examples of, for example, case studies would assist in maintaining interest and relevance to practical irrigation in Outcomes 1 and 2.

It would be useful for candidates to undertake on-site visits to discuss real life problems. Industry speakers could assist with the assignment-related work of Outcome 3 and practices of Outcome 4. On-site visits to see installed system components in position would be appropriate.

National Unit Specification: support notes (cont)

UNIT Irrigating Sports Surfaces (SCQF level 5)

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

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

- ◆ *Information Technology* (SCQF level 4), through the assignment development
- ◆ *Problem Solving* (SCQF level 4), through identifying faults
- ◆ *Communication* (SCQF level 4), through providing written and/or oral feedback in carrying out practical tasks in Outcome 4

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

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.

For Outcome 3, it is recommended that candidates are given access to product literature, web sites and other media sources.

Attention should be given to ensuring that the theoretical background to Outcomes is referenced to practical activities wherever possible. The range of surfaces discussed should reflect those commonly used by the candidate.

If re-assessment is required the centre must provide a sampling from a range of content within the Outcome.

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)*.

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