

National Unit specification: general information

Unit title: Rock Garden Construction

Unit code: H1JL 12

Superclass: SE

Publication date: May 2012

Source: Scottish Qualifications Authority

Version: 01

Summary

This Unit is intended to develop knowledge and understanding of the materials and techniques used in the construction of rock gardens. It also develops the practical skills to safely construct rock gardens.

Outcomes

- 1 Identify materials used in rock garden construction
- 2 Describe the principles of rock garden construction
- 3 Construct and maintain a rock garden using natural stone
- 4 Plant a rock garden

Recommended entry

Entry to this Unit is at the discretion of the centre.

Credit points and level

1 National Unit credit at SCQF level 6: (6 SCQF credit points at SCQF level 6*)

*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.

General information (cont)

Unit title: Rock Garden Construction

Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

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

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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

Identify materials used in rock garden construction.

Performance Criteria

- (a) Identify natural rock formations used in rock garden construction.
- (b) Identify types of stone typically used in rock garden construction.
- (c) Identify other materials used in rock garden construction.

Outcome 2

Describe the principles of rock garden construction.

Performance Criteria

- (a) Describe the characteristics of a site suitable for a rock garden.
- (b) Describe the requirements for drainage in a rock garden.
- (c) Identify rocks suitable for use in a rock garden.
- (d) Describe health and safety requirements in relation to lifting and moving rocks.

Outcome 3

Construct a rock garden using natural stone.

Performance Criteria

- (a) Construct a rock garden suitable for the chosen site.
- (b) Select and use appropriate tools and equipment.
- (c) Improve natural drainage of site.
- (d) Safely move and position small and large rocks.
- (e) Safely use winches and gantries.
- (f) Comply with all relevant health and safety requirements.

National Unit specification: statement of standards (cont)

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Outcome 4

Plant a rock garden.

Performance Criteria

- (a) Identify suitable plants for the chosen site.
- (b) Select and use appropriate tools and equipment.
- (c) Handle plants correctly.
- (d) Plant a range of plants suitable to the site.
- (e) Comply with all relevant health and safety requirements.

Evidence Requirements for this Unit

For Outcomes 1 and 2 candidates are required to produce written and/or recorded oral evidence to meet all Performance Criteria. For Outcome 1 the candidate should accurately identify a minimum of five rock formations, five types of stone and a two other types of materials used in rock garden construction.

For Outcomes 3 and 4 candidates are required to produce practical evidence of their ability to construct, as part of a team, a rock garden and to plant a rock garden.

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

For Outcome 1 natural rock formations should include outcrops, screebeds, moraines and dry riverbeds and types of stone should include but is not limited to Cumberland limestone, local sandstones, Portland stone, Tufa, peat wall formations and 'manufactured' stone.

For Outcome 2 candidates should develop their understanding of the principles of constructing a rock garden including how to select a suitable site, how to ensure sufficient drainage and the selection of rocks suitable to the site. It is important that candidates develop an understanding of the difficulties of lifting and moving heavy rocks and the health and safety considerations related to these. Manual handling techniques should be developed. Candidates should also understand the 'iceberg principles', where one-third of the rock will be above ground and two-thirds below.

Candidate's knowledge could be further developed by visits to existing rock gardens and other sites including quarries and natural rock outcrops.

Outcome 3 and 4 should have a highly practical focus where candidates apply the knowledge and skills developed in Outcomes 3 and 4 to a real situation. It is expected that candidates work as part of a small team to construct a rock garden and then to plant it up. Candidates should develop the ability to select and then work with different types, shapes and sizes of rocks and be encouraged to adapt their practice to fit with the natural materials. Health and safety is paramount in these Outcomes as candidates will be working with heavy and potentially dangerous materials. Candidates should be encouraged to be aware of their own and others safety at all times and all relevant Personal Protective Equipment must be worn. Candidates must also use the correct equipment to lift and move stones.

Guidance on learning and teaching approaches for this Unit

The learning and teaching of this Unit would be enhanced by opportunities for candidates to visit and consider different existing rock gardens. Given the practical nature of much of this Unit every opportunity to relate the learning and teaching to a practical context should be taken. Due emphasis on health and safety must be given throughout the delivery of this Unit given the potential for serious injury when working with heavy rock and stone.

National Unit specification: support notes (cont)

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Opportunities for developing Core Skills

There may be opportunities to develop the Core Skills of *Problem Solving* and *Working with Others*, although there is no automatic certification of Core Skills or Core Skills components.

Outcomes 3 and 4 may provide opportunities to develop Problem Solving at SCQF level 5 as candidates have to adapt and respond to the challenges presented by working with natural materials. There may also be opportunities to develop the Core Skill of *Working with Others* at SCQF level 5 if candidates undertake the practical activities as part of a team.

This Unit has the Critical Thinking component of Problem Solving embedded in it. This means that when candidates achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 4.

Guidance on approaches to assessment for this Unit

Outcome 1 could be assessed by an identification exercise which requires the candidate to identify a range of materials commonly used in the construction of rock gardens.

Outcome 2 could be assessed through a series of questions or by the production of a short written or recorded oral report.

Outcomes 3 and 4 could be assessed by observation of the candidates practical work recorded on an observation checklist.

The practical evidence for Outcomes 3 and 4 can be generated by candidates working as part of a team, however there must be evidence of each individual candidate meeting the Evidence Requirements.

There may be opportunities to combine the assessment of Outcomes 3 and 4, where the rock garden constructed in Outcome 3 is then planted in Outcome 4.

If this Unit is delivered as part of the NC in Horticulture at SCQF Level 5 or related awards there may also be opportunities to integrate the assessment of the practical aspects of this Unit with other practical Units, for example *Planting and Maintenance*, *Horticultural Machinery: Operation and Maintenance* and *Use of Hand Tools in Horticulture*.

National Unit specification: support notes (cont)

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Opportunities for the use of e-assessment

While aspects of Outcomes 1 and 2 may be suitable for e-assessment, the highly practical nature of Outcomes 3 and 4 do not lend themselves to 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

History of changes to Unit

Version	Description of change	Date

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