



Higher National Unit specification

General information for centres

Unit title: Water Gardens: Design and Construction

Unit code: F2B7 35

Unit purpose: This Unit introduces the candidates to the history of water gardens and to water garden design, it is designed to give candidates the basic understanding and skills which will allow them to design and specify a water feature.

On completion of the Unit the candidate should be able to:

- 1 Describe the historical development and characteristic design features of the water garden.
- 2 Evaluate the maintenance and management of a water feature.
- 3 Design and specify a water feature.

Credit points and level: 1 HN credits at SCQF level 8: (8 SCQF credit points at SCQF level 8*)

**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.*

Recommended prior knowledge and skills: It is recommended that candidates should have good design skills. This may be demonstrated by the achievement of the following Units:

F21M 34 *Design Process and Composition in the Landscape: An Introduction* (SCQF level 7)
F1J8 34 *Garden Design Concepts* (SCQF level 7)

Core Skills: There are opportunities to develop the Core Skills of *Problem Solving* and *Communication* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

Assessment: Assessment should reflect the teaching approach taken by a particular centre. Outcomes 1, 2 could be combined in one instrument of assessment, normally a written assessment. Outcome 3 could be assessed through a design based candidate centred project, and would normally include an oral presentation of the project.

Higher National Unit specification: statement of standards

Unit title: Water Gardens: Design and Construction

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Describe the historical development and characteristic design features of the water garden

Knowledge and/or Skills

- ◆ Historical development
- ◆ Landscape movements
- ◆ Function
- ◆ Purpose
- ◆ Design characteristics of water
- ◆ Sustainability

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ outline the principle landscape movements throughout history in relation to water gardens
- ◆ describe the various functions of water within a garden setting
- ◆ describe the purpose of water within a garden setting
- ◆ describe the design characteristics of water
- ◆ describe the issues of sustainability which should be considered when designing a water feature

Where knowledge is sampled, the sample should comprise at least three of the bullet points listed under the knowledge and/or skills. In order to ensure that candidates will not be able to foresee the sample, the whole content listed must be taught. Moreover, a different sample is required each time the Outcome is assessed, to which candidates must give a satisfactory response. Where sampling is used the assessment must be undertaken by a closed-book supervised assignment.

Assessment Guidelines

This Outcome could be assessed by a written or recorded oral assignment. The assessment of this Outcome may be combined with Outcome 2.

Higher National Unit specification: statement of standards (cont)

Unit title: Water Gardens: Design and Construction

Outcome 2

Evaluate the maintenance and management of a water feature

Knowledge and/or Skills

- ◆ Formal
- ◆ Informal
- ◆ Ecosystems
- ◆ Aquatic vegetation
- ◆ Material selection
- ◆ Water feature construction
- ◆ Pumps
- ◆ Water feature management
- ◆ Water feature maintenance

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ describe the characteristics of a formal water feature
- ◆ describe the characteristics of an informal water feature
- ◆ describe the key features of a water ecosystem
- ◆ describe appropriate materials for use in the construction of water features
- ◆ describe the key issues in the management of water features
- ◆ describe the key issues in the maintenance of water features

Where knowledge is sampled, the sample should comprise at least three of the bullet points listed under the knowledge and/or skills. In order to ensure that candidates will not be able to foresee the sample is required each time the Outcome is assessed, to which candidates must give a satisfactory response. Where sampling is used the assessment must be undertaken by a closed-book supervised assignment.

Assessment Guidelines

This Outcome could be assessed by a written or recorded oral assignment. The assessment of this Outcome may be combined with Outcome 2.

Outcome 3

Design and specify a water feature

Knowledge and/or Skills

- ◆ Site survey
- ◆ Site assessment
- ◆ Interpretation of brief

Higher National Unit specification: statement of standards (cont)

Unit title: Water Gardens: Design and Construction

- ◆ Appropriate material selection
- ◆ Appropriate feature specification
- ◆ Graphic presentation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ conduct a site survey
- ◆ analyse a given site in relation to given brief requirements
- ◆ design an appropriate water feature for a given location
- ◆ specify an appropriate water feature for a given location
- ◆ present a water feature design

Where knowledge is sampled, the sample should comprise at least three of the bullet points listed under the Knowledge and/or Skills. In order to ensure that candidates will not be able to foresee the sample, the whole content listed must be taught. Moreover, a different sample is required each time the Outcome is assessed, to which candidates must give a satisfactory response. Where sampling is used the assessment must be undertaken by a closed-book supervised assignment.

Assessment Guidelines

This Outcome could be assessed by the production of a package of annotated drawings supported with additional information.

Administrative Information

Unit code: F2B7 35

Unit title: Water Gardens: Design and Construction

Superclass category: SA

Original date of publication: August 2007

Version: 01

History of changes:

| Version | Description of change | Date |
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Higher National Unit specification: support notes

Unit title: Water Gardens: Design and Construction

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

Water is a unique component in any garden or landscape, and is unparalleled in its versatility and in its ability to influence the mood and character of any garden. Effective use of water features depends on understanding its function and place in the overall garden design and also having knowledge of the construction of features. This Unit will look at all aspects of water gardening, both interior and exterior. Candidates will explore how to use water, within given situations and gain detailed knowledge of the design and construction of features. Candidates will meet professionals involved in the design and construction of water gardens.

Outcome 1 will allow candidates to trace the development of water gardening throughout history, from Paradise Gardens to modern styles. The identification of design characteristics will allow candidates to combine them with issues of function and purpose to produce designs for features.

Outcome 2 will cover a range of issues concerning water features and water bodies from formal to informal, including ecosystems, water catchment areas, water quality, nutrients, evaporation and siltation, site assessment procedures, scale, aquatic vegetation, usage of materials, including lighting and the management of plant and wildlife within features. Candidates will also explore the detailed aspects of specification, which should include all issues related to pumps such as, water volume calculations, flow rates, automatic top-up mechanisms, overflows. Candidates should be made aware of the implications of design in relation to the future maintenance and management of water features.

Outcome 3 is the design of a water feature. Candidates will be expected to undertake a site survey and analysis, interpret a clients brief and to present the completed proposals. Assessment submission will normally be a package of drawings, candidates will normally make an oral presentation of their work and should be encouraged to give a critique on the work of others.

Guidance on the delivery and assessment of this Unit

The content of this Unit can be delivered flexibly to reflect interests and approaches at a particular centre.

The Unit will be delivered through lectures, tutorials, practicals and site visits. Visits and visiting speakers should be arranged to provide examples of good practice and inspirational design.

Candidates will be encouraged to critically evaluate water features, and to analyse the characteristics of their successful use within gardens.

Suitable approaches to generating evidence may include the production of a design workbook, annotated drawings and practical assessment, which may be supported by oral explanation by the candidate.

Higher National Unit specification: support notes (cont)

Unit title: Water Gardens: Design and Construction

The following texts or equivalents are appropriate for the Unit:

- ◆ Archer-Wills A, (1999), *Water Power*, Conran Octopus Ltd
- ◆ Cobham R, (1990), *Amenity Landscape Management*, E&F Spon, London. Chapter 5, p341–360
- ◆ Robinson P, (1997), *Water Gardening*, The Royal Horticultural Society, Dorling Kindersley, London
- ◆ Sweden J, (1995), *Gardening with Water*, Random House, New York
- ◆ Buczaki S, (2000), *Best Water Gardens*, Octopus Publishing, London
- ◆ Nash H, Hughes E, (1999), *Waterfalls, Fountains, Pools and Streams: Designing and Building Water features in your Garden*, Sterling Publishing Co., New York
- ◆ Porter V, (1988), *The Pond Book*, Christopher Helm, London

In addition candidates should be referred to technical leaflets and design journals.

Opportunities for developing Core Skills

There may be opportunities to develop the Core Skills of *Problem Solving* and *Communication* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Open learning

Elements of this Unit could be delivered by distance or flexible learning. It is probable that candidates would need to attend the centre for assessment of Outcome 3, though this could be done in other locations under supervision.

Candidates with disabilities and/or additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (www.sqa.org.uk).

General information for candidates

Unit title: Water Gardens: Design and Construction

This Unit introduces you to the history of water gardens and to water garden design. It is designed to give you the basic understanding and skills, which will allow you to design and specify a water feature.

The Unit will start by tracing the historical development and characteristic design features of the water garden. You will then evaluate the design, maintenance, and management of a specified water feature. You will gain knowledge in typical specifications, material selection, pumps with an overview of maintenance and management issues.

The final section of the Unit will be in the production of a design and specifications for a water feature, for a given purpose and location.

On completion of the Unit you should be able to:

- 1 Describe the historical development and characteristic design features of the water garden.
- 2 Evaluate the maintenance and management of a water feature.
- 3 Design and specify a water feature.

In order to complete this Unit successfully, you will be required to achieve a satisfactory level of performance in pieces of coursework, these would normally be in the form of a written or recorded oral assignment and the submission of a drawings package.