

Next Generation Higher National Unit Specification

Designing Gardens and Greenspaces (SCQF level 7)

Unit code: J6EY 47
SCQF level: 7 (24 SCQF credit points)
Valid from: session 2024–25

Prototype unit specification for use in pilot delivery only (version 4.0) August 2024

This unit specification provides detailed information about the unit to ensure consistent and transparent assessment year on year.

This unit specification is for teachers and lecturers and contains all the mandatory information required to deliver and assess the unit.

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Unit purpose

This is a project-based unit, suitable for learners studying the Higher National Certificate (HNC) Horticulture, or pursuing similar routes to develop their knowledge and skills in the design of gardens and greenspace areas. While learners would benefit from previous horticultural knowledge or experience, they do not need prior knowledge to study the unit. Learners with previous practical horticulture experience can reflect on career opportunities, practise new skills, and develop existing skills in design, plant combinations and specification of garden features. If learners are studying the unit as part of the HNC Horticulture group award, they can progress to the Higher National Diploma (HND) Horticulture on completion of the HNC.

Unit outcomes

Learners who complete this unit can:

- 1 describe garden and planting design principles
- 2 design a garden or greenspace area
- 3 carry out planting in a garden or greenspace area

Evidence requirements

Outcome 1

Learners must provide evidence that they can:

- ◆ describe a range of garden and planting design principles

Outcome 2

Learners must provide evidence in the form of a basic site survey for an area of garden or greenspace. This should include:

- ◆ a client brief
- ◆ site measurements
- ◆ soil and drainage conditions
- ◆ aspect and areas of light and shade
- ◆ location of existing features and services, where relevant
- ◆ boundaries, site access and surrounding landscape, where relevant

Learners must produce a design at a suitable scale that demonstrates consideration of a client brief and site survey, and constitutes:

- ◆ a layout plan to include:
 - title box, north point and scale
 - appropriate graphics to represent hard and soft landscaping
 - appropriate labelling
- ◆ a planting plan to include:
 - title box, north point and scale
 - an appropriate selection of plants suitable to location and conditions
 - appropriate graphics to represent individual or groups of plants, correctly labelled
 - an accompanying list detailing the botanical name, conditions required and aesthetic and, if relevant, other functions of each plant

Learners can present their design in an oral presentation or in another appropriate format.

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Learners should justify their design choices in relation to the client brief, site survey, garden and planting design principles, and plant functions.

Outcome 3

Learners contribute to establishing an area of planting, and must provide evidence that they can:

- ◆ plan, cost and source planting materials
- ◆ use appropriate ground preparation techniques
- ◆ use appropriate laying out and planting techniques for a range of trees, shrubs and herbaceous plants
- ◆ demonstrate consideration of health and safety requirements
- ◆ identify plants using their botanical names

Assessment for all three outcomes can be a design project portfolio, including descriptions of design and planting principles; evidence of the design process, such as site survey information and layout and planting plans; and photographic, video or assessor checklist evidence of practical activities.

Knowledge and skills

The following table shows the knowledge and skills covered by the unit outcomes.

Knowledge	Skills
<p>Outcome 1 Learners should understand:</p> <ul style="list-style-type: none"> ◆ basic garden and planting design principles ◆ the aesthetic functions of a range of plantings ◆ the practical functions of a range of plantings 	<p>Outcome 1 Learners can:</p> <ul style="list-style-type: none"> ◆ describe a range of garden and planting design principles
<p>Outcome 2 Learners should understand:</p> <ul style="list-style-type: none"> ◆ how to communicate effectively and use appropriate questioning to gather required information for a client brief ◆ how to select and carry out appropriate surveying techniques ◆ how to test soils and determine soil characteristics, such as type, texture, structure, layers, organic matter content, pH, nutrient content and drainage conditions ◆ how to determine the aspect of an area and how this translates to areas of light and shade ◆ how to decide which soft and hard landscaping features should be retained ◆ the importance of locating services in a garden or greenspace area ◆ the importance of boundaries and surrounding landscapes in garden design ◆ the importance of planning appropriate access for the construction and ongoing use of gardens or greenspaces 	<p>Outcome 2 Learners can:</p> <ul style="list-style-type: none"> ◆ communicate effectively and gather appropriate information for a client brief ◆ carry out a range of appropriate surveying techniques ◆ test soils to determine type and conditions ◆ determine the aspect of an area and which areas will be in light and which in shade ◆ decide which soft and hard landscape features should be retained ◆ locate the location of and, if appropriate, retain access to services in garden and greenspace areas ◆ identify and design appropriate boundaries for gardens and greenspaces ◆ plan appropriate views or screening in relation to surrounding landscapes ◆ plan appropriate access for the construction and ongoing use of gardens or greenspaces ◆ apply a range of garden design principles to a design and planting plan

Knowledge	Skills
<p>Outcome 2 (continued) Learners should understand:</p> <ul style="list-style-type: none"> ◆ how to apply a range of garden design principles ◆ how to produce a garden or greenspace design to scale ◆ how to produce a planting plan to scale, and choose appropriate plants based on environment and plant function ◆ how to graphically represent hard and soft landscaping appropriately ◆ how to label drawings appropriately ◆ how to prepare for and present their garden or greenspace plans 	<p>Outcome 2 (continued) Learners can:</p> <ul style="list-style-type: none"> ◆ produce a garden or greenspace design to scale ◆ produce a planting plan to scale ◆ draw a range of graphics to represent hard and soft landscaping ◆ label a plan appropriately ◆ select a range of plants for a certain situation, soil type and for a range of functions ◆ prepare for and present their garden or greenspace plans
<p>Outcome 3 Learners should understand:</p> <ul style="list-style-type: none"> ◆ how to plan, cost and source planting materials ◆ how to justify their choices of planting materials ◆ how to prepare ground for planting ◆ how to lay out plants for planting, giving consideration to spacing and aesthetics ◆ how to plant a range of trees, shrubs and herbaceous plants using appropriate techniques ◆ how to identify a range of plants by their botanical names ◆ the importance of health and safety considerations when working on a building site 	<p>Outcome 3 Learners can:</p> <ul style="list-style-type: none"> ◆ plan, cost and source planting materials ◆ justify their choices of planting materials ◆ prepare ground for planting ◆ lay out plants for planting with appropriate spacing and consideration of aesthetics ◆ plant a range of trees, shrubs and herbaceous plants using appropriate techniques ◆ identify a range of plants by their botanical names ◆ consider health and safety when working on a building site

Meta-skills

Throughout the unit, learners develop meta-skills to enhance their employability in the horticulture sector.

Self-management

This meta-skill includes:

- ◆ focusing
- ◆ integrity
- ◆ adapting
- ◆ initiative

Learners develop these meta-skills through their surveying and planning, and in their construction of hard and soft landscaping features.

Social intelligence

This meta-skill includes:

- ◆ collaborating
- ◆ communication
- ◆ feeling
- ◆ leading

Learners develop these meta-skills when they work together to survey gardens or greenspaces and in the construction of hard and soft landscaping features. They develop communication, feeling and leading skills by interacting with clients to gather a client brief, through the presentation of their design, and then in the construction of garden or greenspace features.

Innovation

This meta-skill includes:

- ◆ curiosity
- ◆ creativity
- ◆ sense-making
- ◆ critical thinking

Learners develop these meta-skills through their reasoning processes, by researching and designing garden or greenspace plans, and by selecting appropriate materials and methods to construct a range of features.

Literacies

Learners develop core skills in the following literacies:

Numeracy

Learners develop numeracy skills by:

- ◆ calculating survey information and drawing to scale
- ◆ costing a range of hard and soft landscaping materials
- ◆ calculating required amounts of materials and plants

Communication

Learners develop communication skills by:

- ◆ gathering a client brief and presenting their completed design
- ◆ team working to construct garden or greenspace elements

Digital

Learners develop digital skills and computer literacy by:

- ◆ using various software packages, such as spreadsheet, word processing and presentation software, to present information in a variety of ways
- ◆ using CAD software, if available at your centre

Delivery of unit

You can integrate delivery of this unit with the following units by designing a space that would also be relevant to them: Maintaining Gardens and Greenspace at SCQF level 7, Ecology and Environment for Horticulture at SCQF level 7 or Social and Community Horticulture at SCQF level 7. You can integrate it with the Production Horticulture at SCQF level 7 unit by using the plants grown in the production project. If learners undertake it as part of the HNC Horticulture, learners' planting choices in the unit should be underpinned by knowledge gained in the Plant Biology at SCQF level 7 and Ecology and Environment for Horticulture at SCQF level 7 units.

Additional guidance

Content and context for this unit

Describe garden design principles and analyse planting schemes (outcome 1)

Learners should describe a range of garden design principles, such as:

- ◆ use of shape and interlock
- ◆ balance of mass and void
- ◆ unity
- ◆ emphasis or focal point
- ◆ enclosure
- ◆ rhythm
- ◆ flow
- ◆ scale and proportion
- ◆ colour
- ◆ light and shade

We expect learners to describe a meaningful range of garden design principles, such as those listed above, but recognise that garden design principles are not standardised and that terminology, classification and the importance of principles varies between designers.

Learners should describe a range of planting design principles such as:

- ◆ colour combinations
- ◆ use of plant textures
- ◆ use of plants with different forms
- ◆ use of plants with different heights

Learners can investigate a range of designers, styles or movements to investigate how these different principles can be applied in practice.

Design a garden or greenspace area (outcome 2)

A suitable garden or greenspace may be a private or public garden or park area, a college garden or commercial area, or anywhere else where a garden can realistically be created.

Learners gather a client brief from an appropriate person. This can take place, for example, on a site visit, at a college garden or at the garden of a friend or relative, and should be carried out individually where possible. During the client brief, clients obtain information such as who the users will be, what the user needs the garden for (for example, entertaining, storage, glasshouse, washing line, growing vegetables) and the aesthetic preferences of the client. We advise learners to seek a real, rather than simulated, design project. Learners have the best opportunity to develop skills through gathering a real client brief, carrying out a site survey, and making design decisions with real consequences.

Individually, or as part of a group, learners produce a site survey of a garden or greenspace area and collect measurements using basic surveying techniques, such as:

- ◆ linear measurement
- ◆ trilateration
- ◆ triangulation
- ◆ coordinates or bearings
- ◆ distance

Learners should hand- or jar-test the soil for texture, structure, pH and organic matter content, and observe drainage conditions. They can dig a soil pit to determine soil horizons and test for nutrient levels. Learners' site survey recordings should include notes on:

- ◆ aspect and areas of light and shade
- ◆ location and microclimate
- ◆ where relevant, information about retaining existing planting and hard landscaping and services
- ◆ where relevant, information about boundaries, site access and the surrounding landscape
- ◆ other relevant details likely to determine design choices

Learners produce either a hand-drawn or CAD-produced layout plan and planting plan at suitable scales. While the unit does not involve instructing learners in the use of CAD software, you may demonstrate it and learners can use it. The final garden design should draw comprehensively on the client brief and site survey and apply a range of garden design principles described in outcome 1.

Learners' plant choices should show consideration of plant functions, developing ideas from the planting analyses in outcome 1. The planting plan may be for the designed garden as a whole, a section of the garden, or for an alternative garden or greenspace area, and should be a large enough area to include a meaningful range of plants. This process can be used to develop plant-identification skills.

While other appropriate formats are acceptable, we advise learners to present their design in an oral presentation where possible, as presentation skills are important in the garden design industry. They should be able to justify their design choices by referring to their client brief and site survey, as well as to garden design principles and plant functions.

Carry out planting in a garden or greenspace area (outcome 3)

Learners contribute to the establishment of an area of planting which can be in any relevant context, such as a private garden, park, college or public space, or as part of a historical or conservation project (for example, habitat restoration). Learners should be able to plan, prepare for and safely carry out the planting either on their own or as part of a team, and be able to justify their plant choices based on factors such as aesthetics and other plant functions, environmental conditions, cost, and availability. Learners should contribute to ground preparation, such as the clearing of weeds and amelioration.

Approaches to delivery

Learners need an area of garden or greenspace to survey and from which to gather site information. Ideally, this area should not be too large; have some existing features, such as plants, trees, hard landscaping or buildings to give the design some context; and be relatively level so as not to require complicated slope surveying.

They also need access to suitable surveying equipment for their chosen survey methods, for example long tape measures; GPS equipment or mobile phones or tablets with suitable apps; and dumpy or laser levels.

Learners would benefit from seeing how CAD software works or indeed using it, although either hand-drawn or CAD-produced design is appropriate for this unit. They would also find drawing materials, such as set squares, compasses or circle templates, and scale rules, useful. Learners would find it helpful to have access to software such as presentation software to create a presentation, and spreadsheet software for costing spreadsheets.

To fulfil the soft landscaping requirements of the unit, learners need an accessible area which can be in college grounds, in a private garden, at a public park or garden, or at another project location, such as a conservation site. They also need planting and soil-improvement materials, and hand tools.

Approaches to assessment

You can assess learners through a single portfolio. This would include descriptions of their garden design principles and planting analyses; client brief and site survey information; a layout plan and planting plan; and photographic, video or assessor checklist evidence of practical activities. All three outcomes can be combined into a single project.

Opportunities for e-assessment

Learners can present their evidence for this unit using online portfolio software.

Equality and inclusion

This unit is designed to be as fair and as accessible as possible with no unnecessary barriers to learning or assessment.

You should take into account the needs of individual learners when planning learning experiences, selecting assessment methods or considering alternative evidence.

Guidance on assessment arrangements for disabled learners and/or those with additional support needs is available on the assessment arrangements web page:

www.sqa.org.uk/assessmentarrangements.

Information for learners

Designing Gardens and Greenspaces (SCQF level 7)

This information explains:

- ◆ what the unit is about
- ◆ what you should know or be able to do before you start
- ◆ what you need to do during the unit
- ◆ opportunities for further learning and employment

Unit information

In this project-based unit you learn about garden design principles and how they apply to real-life designs and the design process, and how to analyse planting schemes and determine the functions of a range of plants. You also learn the process of designing a garden or greenspace area, including producing a site survey, a layout plan and a planting plan. You develop your understanding about how to prepare ground for planting, and to source, cost, plan, and lay out and plant a range of trees, shrubs and herbaceous plants.

You do not need to have any horticulture experience before starting this unit as you will have plenty of opportunity to develop your knowledge and skills. If you study the unit as part of the Higher National Certificate (HNC) Horticulture group award, you may be able to progress to a Higher National Diploma (HND) in Horticulture or related subjects.

When you have completed the unit, you can:

- ◆ describe garden design principles and analyse planting schemes
- ◆ design a garden or greenspace area
- ◆ carry out planting in a garden or greenspace area

You are likely to be assessed through the production of a portfolio, which allows you to demonstrate your understanding of what you have learned, as well as the practical skills you have developed.

Administrative information

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Superclass: SE

History of changes

Version	Description of change	Date
2.0	Unit titles amended to better reflect unit content, specifically: <ul style="list-style-type: none">◆ Creating Gardens and Greenspace is now Design and Creation of Gardens and Greenspaces.◆ Garden and Greenspace Maintenance is now Maintaining Gardens and Greenspace.◆ Environmental Horticulture is now Ecology and Environment for Horticulture.◆ Social Horticulture is now Social and Community Horticulture.	November 2022
3.0	Amendments to the wording of outcome 1, and amendments to evidence requirements for all outcomes.	August 2023
4.0	Change of title to better-reflect content.	August 2024

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