



Higher National Unit specification

General information

Unit title: Lawn Construction and Maintenance (SCQF level 8)

Unit code: H7BH 35

Superclass: SF

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Version: 01

Unit purpose

Lawns are important components of most gardens and this Unit is designed to give learners the underpinning knowledge of their structure, functions, composition, construction and maintenance. In addition, learners will receive instruction on the practical skills needed to construct areas of lawn from seed or turf. This Unit is intended for learners who intend to enter the amenity/landscape sectors of the horticultural industry.

Outcomes

On successful completion of the Unit the learner will be able to:

- 1 Evaluate grass species and cultivars suitable for lawns.
- 2 Describe methods of lawn construction.
- 3 Construct an area of lawn.
- 4 Specify maintenance requirements for a lawn.

Credit points and level

1 Higher National Unit credit at SCQF level 8: (8 SCQF credit points at SCQF level 8)

Recommended entry to the Unit

While entry is at the discretion of the centres, it would be beneficial if learners had a basic knowledge of the growth and development of grasses, possibly gained by achievement of the Units F21T 34 *Plant Growth and Development* and F1JA 34 *Horticultural Practices*. In addition, it would be an advantage if learners had basic knowledge and skills in gardening which included the maintenance of lawns.

Higher National Unit Specification: General information (cont)

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Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes for this Unit specification.

There is no automatic certification of Core Skills or Core Skill components in this Unit.

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.

Equality and inclusion

This Unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

Higher 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.

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. Learners 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

Evaluate grass species and cultivars suitable for lawns.

Knowledge and/or Skills

- ◆ Functions of lawns
- ◆ Structure of lawns
- ◆ Vegetative characteristics of grass species and cultivars used for lawns
- ◆ Composition of seed mixtures required to achieve particular lawn types

Outcome 2

Describe methods of lawn construction

Knowledge and/or Skills

- ◆ Improvement of drainage of lawn area
- ◆ Primary stages of topsoil preparation
- ◆ Secondary stages of topsoil preparation
- ◆ Establishment of lawns from seed
- ◆ Establishment of lawns from turf

Outcome 3

Construct an area of lawn

Knowledge and/or Skills

- ◆ Topsoil cultivation
- ◆ Preparation of soil
- ◆ Fertiliser selection and application
- ◆ Sowing grass seed and lightly rake into seed bed
- ◆ Laying and tamping turf
- ◆ Top dressing

Higher National Unit specification: Statement of standards (cont)

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Outcome 4

Specify maintenance requirements for a lawn.

Knowledge and/or Skills

- ◆ First year maintenance of newly laid lawn
- ◆ Maintenance of an established lawn for a calendar year

Evidence Requirements for this Unit

Outcome 1

Written and/or recorded oral evidence is required to demonstrate that the learner can:

- ◆ describe the key functions of lawns.
- ◆ describe the structure of lawns.
- ◆ describe the vegetative characteristics of grass species and cultivars used for lawns.
- ◆ outline the composition of seed mixtures required to achieve particular lawn types.

The assessment of this Outcome can be combined with Outcome 2.

Outcome 2

Written and/or recorded oral evidence is required to demonstrate that the learner can:

- ◆ describe the appropriate methods to improve soil drainage of the lawn area.
- ◆ describe the primary stages of soil preparation for a new area of lawn.
- ◆ describe the secondary stages of soil preparation ready for sowing or laying turf to create a new lawn.
- ◆ describe the establishment of lawns from seed.
- ◆ describe the establishment of lawns from turf.

The assessment of this Outcome can be combined with Outcome 1.

Outcome 3

Evidence for the Knowledge and/or Skills in this Outcome will be generated by a practical assessment. Each learner will need evidence to show that they can construct an area of lawn to a satisfactory standard.

Learners should be taught lawn construction using both seed and turf, but practical assessment need only sample one method. The first four of the six bullet points listed under Knowledge and/or Skills must be assessed on each occasion, and either the fifth (sow grass seed), or both the sixth (lay turf) and seventh (apply top dressing). Learners must achieve a satisfactory level in the first four items, and either the fifth, or both the sixth and seventh.

Higher National Unit specification: Statement of standards (cont)

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A learner's response can be judged satisfactory where the evidence shows that the learner can:

- ◆ use hand tools to cultivate a small area of topsoil to produce a weed-free coarse tilth.
- ◆ breakdown coarse tilth to a fine consolidated tilth.
- ◆ develop a firm even level seed/turf bed.
- ◆ apply fertiliser (if appropriate) at the correct rate and rake into soil surface correctly.
- ◆ sow grass seed at the recommended rate and rake in.
- ◆ lay turf and tamp to make good soil contact.
- ◆ apply top dressing to turf joints and brush in.

Outcome 4

Written and/or recorded oral evidence is required to demonstrate that the learner can, in the context of a suitable case study or hypothetical garden situation:

- ◆ specify maintenance tasks during the first year following sowing or laying a new lawn.
- ◆ specify the maintenance of an established lawn for a calendar year.



Higher National Unit Support Notes

Unit title: Lawn Construction and Maintenance (SCQF level 8)

Unit Support Notes are offered as guidance and 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

The Unit aims to provide knowledge and skills needed for the construction and management of high quality ornamental lawns excluding sports turf for learners intending to take up employment in garden design, development or management. The Unit also provides knowledge required by learners intending to seek more advanced studies in horticulture or landscape management.

Outcome 1 should start by outlining the structure of lawns in terms of the shoot and leaf system, or 'sward', and the root zone in relation to the quality of a lawn. The division of lawns into two major types (fine and coarse) should be described followed by the uses and key desirable functional features of each type of lawn. Vegetative characteristics of the species of grass used for fine and coarse lawns should be described and the best cultivars of each species selected in relation to the lawn type. The potential influence of particular cultivars on sward quality should be described. The availability of blends or mixtures of the grasses for each type of lawn from the major turf grass seed suppliers should be investigated as well as those which are used by the major suppliers of lawn turf. This should allow learners to select seed mixtures suitable for fine and coarse quality lawns as well as turf containing the appropriate species and cultivars for the desired lawn quality.

Outcome 2 should start by outlining a simple site analysis of an area for a new lawn in terms of the essential environmental needs of the grass plants, including high light intensity for photosynthesis in the leaves and appropriate air, water and soil nutrient availability for efficient root activity. The importance of good soil/root zone drainage for healthy growth and functioning of grass roots should be explained and simple, effective methods to improve drainage should be described. The importance of improving soil drainage before sowing the seed or laying the turf should be emphasised. Primary cultivation of the top soil by digging or ploughing followed by forking and raking or harrowing, stone picking and firming to produce a finer tilth seed or turf bed, and application of fertiliser should be described. The need for a lawn seedbed to be quite firm and evenly firm, with no soft areas which could sink later, should be emphasised. Methods for ensuring that the grass seed is sown evenly and at the correct rate over the whole lawn area should be described. This could include sowing by hand or with mechanical aids, followed by light/shallow raking or chain harrowing to increase soil contact with a proportion of the seed. Description of techniques for laying, firming, top dressing and trimming edges of turf on the prepared lawn area should be included.

Higher National Unit Support Notes (cont)

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Outcome 3 should start with completion of a risk assessment for the processes involved in creating an area of lawn on a given site from seed or turf. Each stage of primary and secondary cultivation of the soil to the preparation of the seed or turf bed for the lawn should be demonstrated to the learner before they carry it out. When demonstrating seed/turf bed levelling and final raking, emphasis should be placed on firming and raking to the correct tilth, and on removing stones from the upper 50–100 mm of soil.

Fertiliser application and incorporation should be demonstrated followed by sowing appropriate grass seed at the correct rate and lightly raking it into part of the area. The remaining area should be used for demonstrating the laying of turf.

Outcome 4 should start by outlining the first steps of managing a new lawn to ensure that it passes successfully through the transition period from seed germination or laying of the turf to full establishment, and regular mowing at the desired summer cutting height using the appropriate type of mower. The main part of the Outcome considers key tasks for management and maintenance of an established lawn over a 12 month period. Mowing, including selection of a mower with the appropriate cutting mechanism and collection system and adjustment of height of cut in relation to the desired finish for the lawn, should be described. Variations in direction and frequency of mowing and cutting heights for different times of the year should also be outlined. Fertilisers for use on lawns should be described in terms of the effects of their contents on the turf and the timing and frequency of their application. The role, methods and timing of irrigation should be outlined. The timing, principles and methods of scarification and aeration of turf should be described followed by the process of top dressing. An outline of weeds, moss, pests and diseases of turf and their cultural and chemical controls should be given. Other disorders that can affect turf like dry patch, compaction and waterlogging and their prevention and control should be described.

Guidance on approaches to delivery of this Unit

This Unit is likely to form part of a Group Award, which is primarily designed to provide learners with technical or professional knowledge and skills related to occupations in amenity horticulture or landscape management. Learners will need to relate information learnt in this Unit to the requirements of the Graded Unit.

Delivery should place emphasis on the practical aspects of lawn construction. It should include a range of approaches from formal lectures to discussions and library sessions, giving access to lawn orientated journals and publications, and appropriate websites. Also, current grass seed and turf suppliers' catalogues and specifications should be available. Practical sessions on lawn construction and maintenance should be carried out at the appropriate time of year which means having access to suitable ground for construction and to high quality established lawn areas for carrying out the post-establishment lawn maintenance tasks.

Higher National Unit Support Notes (cont)

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Guidance on approaches to assessment of this Unit

Outcome 1

The assessment of this Outcome can be combined with Outcome 2. This could be conducted at a single assessment event lasting no more than one and a half hours and carried out under supervised conditions. It would be possible, if desired, to break this assessment down into two assessment events that assess each of the two Outcomes separately.

In the assessment, learners could answer a specific extended response question or a series of restricted response questions under supervised, closed-book conditions.

Outcome 2

The assessment of this Outcome can be combined with Outcome 1. This could be conducted at a single assessment event lasting no more than one and a half hours and carried out under supervised conditions. It would be possible, if desired, to break this assessment down into two assessment events that assess each of the two Outcomes separately.

In the assessment, learners could answer a specific extended response question or a series of restricted response questions under supervised, closed-book conditions.

Outcome 3

This Outcome should be assessed using a series of practical tasks in which learners prepare the topsoil for sowing grass seed or laying turf to construct a lawn. An observation checklist should be used to record their performance. Each learner will need evidence to show that they can construct an area of lawn to a satisfactory standard. A brief diary (one sheet of A4) should also be submitted as written evidence of undertaking the practical tasks.

The first four of the six bullet points listed under Knowledge and/or Skills must be assessed on each occasion, and either the fifth (sow grass seed), or both the sixth (lay turf) and seventh (apply top dressing). Learners must achieve a satisfactory level in the first four items, and either the fifth, or both the sixth and seventh.

Outcome 4

This Outcome could be assessed using an open-book assignment in which learners produce a written maintenance schedule of approximately 750–1,000 words for the first year of a new lawn and for a further calendar year on an established lawn. Where a hypothetical situation or case study is used, it should relate to either a coarse or fine lawn within a garden. Learners who have access to a suitable workplace can base their maintenance programme on lawns at their place of work.

All the bullet points listed under the Knowledge and/or Skills items must be assessed on each assessment occasion, and learners must provide a satisfactory response to each one.

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Higher National Unit Support Notes (cont)

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Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

Opportunities for 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 social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at www.sqa.org.uk/e-assessment.

Although parts of this Unit could be delivered by e-assessment, it would require a considerable degree of planning by the centre to ensure the sufficiency and authenticity of learner evidence. Arrangements would have to be made to ensure that:

- ◆ The closed-book tests for Outcomes 1 and 2 are delivered in a supervised environment.
- ◆ The practical tasks in Outcome 3 are supervised by a responsible person and clearly recorded (using an assessment checklist, or on video) for the assessor.
- ◆ The evidence for Outcome 4 is held in an e-portfolio and sent to the assessor.

Opportunities for developing Core and other essential skills

The Core Skill of *Working with Others* at SCQF level 6 could be developed in this Unit in the practical tasks for Outcome 3. *Working with Others* involves the ability to work with others to plan, agree and take responsibility for tasks; to support co-operative working in appropriate ways; and to review the effectiveness of one's contribution. This would fit with a group task to construct an area of lawn for Outcome 3. The general skill at SCQF level 6 is 'Work with others in a group to analyse, plan and complete a complex activity'. Although individual learners must conduct each practical task to a satisfactory standard and submit a brief diary of the tasks undertaken, they could work as a group to construct the lawn for Outcome 3 which is a complex activity.

Learners could analyse the tasks and negotiate roles and responsibilities. They could also respond to the needs of others, support co-operative working and evaluate their own contribution. This Core Skill could be developed without formal certification.

On completion of this Unit, learners should have acquired the knowledge and practical skills to construct and manage a lawn. This will enhance their employment opportunities in the amenity/landscape industry or in professional gardening.

History of changes to Unit

Version	Description of change	Date

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General information for learners

Unit title: Lawn Construction and Maintenance (SCQF level 8)

This section will help you decide whether this is the Unit for you by explaining what the Unit is about, what you should know or be able to do before you start, what you will need to do during the Unit and opportunities for further learning and employment.

This Unit is designed to provide you with knowledge and practical skills to construct and manage a lawn which should be appropriate for employment in the landscape industry or in professional gardening. It also provides knowledge you require if you intend to pursue more advanced studies in landscape or garden design or management or amenity horticulture.

At the start of the Unit, you will be introduced to the various uses or functions of lawns, their nature or structure and to the range of grass types of which they are composed. This should enable you to select the most appropriate mixture of grasses from the range available to most closely match the functions to be performed by the lawn. You will learn about the environmental needs of a lawn, especially relating to light and shade of the site and drainage capacity of the soil, and methods to improve them. There will be verbal and practical instruction on constructing a lawn from seed or turf and on how to manage it during the transition period to establishment. In addition, maintenance tasks for an established lawn covering a year will be taught.

On completion of this Unit you should be able to:

- 1 Evaluate grass species and cultivars suitable for lawns.
- 2 Describe methods of lawn construction.
- 3 Construct an area of lawn.
- 4 Specify maintenance requirements for a lawn.

In order to complete this Unit successfully, you will be required to achieve a satisfactory level of performance in a mix of practical and theory based assessments.