

National Unit specification: general information

Unit title: Gardening Skills: An Introduction

Unit code: H09A 10

Superclass: SE

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Summary

This Unit is designed to enable candidates to develop introductory skills and knowledge in the performance of routine grass, garden and plant maintenance tasks. This includes propagation from seed and cuttings or division and aftercare of plants; preparation, planting and establishment maintenance tasks. Candidates will be introduced to and practice a range of basic gardening skills essential for progression to related Units and employment that can be applied in many horticultural situations including growing and maintaining: fruit, vegetable, ornamental or wild plants, garden lawns, and amenity grass or sports turf. This is an optional Unit in the National Certificate in Rural Skills at SCQF level 4. It is also suitable for use as a free-standing Unit.

This Unit is suitable for candidates who:

- are undertaking the study of this subject for the first time.
- wish to obtain basic practical skills and knowledge of gardening as an interest subject.
- wish to prepare for a career or develop their knowledge and practical skills base within land based industries and Rural Skills.
- ♦ would like to develop skills and knowledge that will help their progression on to more advanced horticulture Units at SCQF level 5 and 6.

Outcomes

- 1 Assist with routine garden and plant maintenance.
- 2 Assist with propagation and after-care of plants.
- 3 Assist with preparation, planting and establishment of plants.
- 4 Carry out routine turf maintenance tasks under supervision.

General information (cont)

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Recommended entry

Entry is at the discretion of the centre. Candidates do not need any prior knowledge or experience of gardening. However, an interest in growing plants or enjoyment of outdoor, practical work would be an advantage.

Credit points and level

1 National Unit credit at SCQF level 4: (6 SCQF credit points at SCQF level 4*)

*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.

Core Skills

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

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

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. All activities must comply with current health and safety legislation and safe working practices.

Outcome 1

Assist with routine garden and plant maintenance.

Performance Criteria

- (a) Assist with identifying, planning and organising routine garden and plant maintenance tasks.
- (b) Assist with selecting tools, equipment and materials for routine garden and plant maintenance tasks.
- (c) Carry out tasks under supervision, in accordance with safe working practices.
- (d) Tidy the site and store tools, materials, and dispose of waste in accordance with safe working practices.

Outcome 2

Assist with propagation and after-care of plants.

Performance Criteria

- (a) Assist with selecting, preparing materials and rooting plants from cuttings or division.
- (b) Assist with preparing materials, sowing and initial establishment of plants from seed.
- (c) Assist with the after-care and growing-on of plants produced from seeds and cuttings.
- (d) Carry out tasks, under supervision, in accordance with safe working practices.
- (e) Tidy the area, store tools and materials, and dispose of waste in accordance with safe working practices.
- (f) Assist with keeping propagation records.

Outcome 3

Assist with preparation, planting and establishment of plants.

Performance Criteria

- (a) Assist with selecting appropriate tools, equipment and materials for the specified tasks.
- (b) Assist with site organisation, site preparation and setting out of the plants.
- (c) Assist with planting and the post-planting care of plants.
- (d) Assist with the maintenance of a planted area to aid plant establishment.
- (e) Carry out tasks, under supervision, in accordance with safe working practices.
- (f) Tidy the site, store tools and materials, and dispose of waste in accordance with safe working practices.
- (g) Assist with keeping a record of tasks carried out.

National Unit specification: statement of standards (cont)

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Outcome 4

Carry out routine turf maintenance tasks under supervision.

Performance Criteria

- (a) Assist with identifying, planning and organising routine turf maintenance tasks
- (b) Assist with selecting tools, equipment and materials for routine turf maintenance tasks.
- (c) Carry out tasks, under supervision, in accordance with safe working practices.
- (d) Assist with tidying the site, storing tools, and materials, and disposing waste in accordance with safe working practices.
- (e) Assist with keeping a record of tasks carried out.

Evidence Requirements for this Unit

Performance and product evidence under supervised open-book conditions is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria at a standard appropriate for basic entry level skills. In particular attention should be paid to enabling candidates to achieve the required standard of safety, cleanliness, tidiness and maintenance of the health and quality of appearance of the plants and garden areas.

Centres must ensure that the scale and complexity of the assessed tasks are suitable to the level of the Unit, appropriate to the situation and Outcome and provide enough evidence to demonstrate the required level of competence. For example, in a planting exercise, two standard trees may be appropriate but if using bedding plants ten or twenty may be appropriate.

Outcome 1

Performance and product evidence is required for a minimum of three tasks (at least one from each of the three sections) carried out under supervision. Suitable tasks from each section will include:

- (i) Collection and removal of litter and debris; collection, removal and composting of plant and garden waste or other similar tasks, including the identification and selection of the correct tools, equipment and materials to use for effective completion of the task. Effective completion of the task will include correct cleaning and storage of tools, equipment and the proper disposal of any waste materials.
- (ii) Sweeping, cleaning and basic care or maintenance of hard landscape surfaces or features or other similar tasks, including the identification and selection of the correct tools, equipment and materials to use for effective completion of the task. Effective completion of the task will include correct cleaning and storage of tools, equipment and the proper disposal of any waste materials.

National Unit specification: statement of standards (cont)

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(iii) Basic maintenance of established plants and soft landscape features such as: weeding, feeding, trimming, pruning, dead-heading, staking, tying-in, mulching, watering or other similar tasks, including the identification and selection of the correct tools, equipment and materials to use for effective completion of the task. Effective completion of the task will include correct cleaning and storage of tools, equipment and the proper disposal of any waste materials.

Tasks must be completed in a safe manner at all times and comply with current Health and Safety legislation.

Outcome 2

Performance and product evidence for one activity from each of the following four sections:

- Propagation by simple cuttings or division. (Suitable methods would be: shoot tip or hardwood cuttings; division of mature clumps of herbaceous perennials or bulbs).
- Propagation by seeds. (Suitable methods would be: sowing easy to germinate seeds in trays, pots, plugs or other suitable containers or directly in the ground in-situ or in a seed-bed. This could be under cover or outdoors.)
- Growing-on and aftercare of plants produced from cuttings or division.
- Growing-on and aftercare of plants produced from seed.

Both examples of growing-on and aftercare will involve the monitoring and caring for plant health during initial establishment and as they grow and develop and will include related tasks, as appropriate, such as: watering, weeding, pest and disease control, control of growth, pricking-out, potting-up, potting-on or hardening-off.

Effective completion of the task will include correct cleaning of tools and the correct storage of materials and tools and the proper disposal of any waste materials.

Assistance with propagation record keeping must be demonstrated by the candidate during the time taken to complete the activities.

Outcome 3

Performance and product evidence for each of the following three activities:

Site preparation and setting out:

This activity will include: the selection of the correct tools, equipment and materials for the tasks, clearing, digging, raking and preparing the site; adding organic matter or fertiliser as required; measuring the site; calculating quantities of materials needed; arranging plants in position at the appropriate spacing.

National Unit specification: statement of standards (cont)

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Planting and post-planting care of plants:

Demonstrate planting methods and post-planting care appropriate for the type of plant material used. Suitable plant material will be bare-root or containerised plants of different sizes and will be selected from: annuals, biennials, perennials, herbaceous, bulbs, shrubs, trees. Appropriate requirements will include: suitable size hole, correct planting depth, suitable planting method and firming-in, providing support, protection, weed control, watering.

• Maintaining a recently planted site to aid plant establishment:

This activity will include: weeding, watering, mulching, formative pruning, dead-heading, providing or checking protection, staking, tying-in and feeding.

All tasks must be carried out in accordance with current Health and Safety legislation and safe working practices.

Completion of all tasks will include the correct cleaning and storage of tools and materials and the effective disposal of waste according to recognised industry practice.

Evidence will also include candidate assistance with keeping a record of all activities carried out.

Outcome 4

Evidence for a minimum of three tasks, one of which must be cutting grass.

The selection and use of appropriate grass cutting equipment and tools must be demonstrated by the candidate.

Two other turf maintenance tasks appropriate to the situation and season must also be demonstrated. Evidence will include the selection of correct tools, equipment and materials for the maintenance tasks selected. Maintenance tasks can include: mowing, strimming, trimming, edging, scarifying aeration, top-dressing, laying turf, turf repairs, weed or moss control, feeding.

All tasks must be carried out in accordance with current Health and Safety legislation, including safe working practices.

Successful completion of all tasks will include effective tidying of the site, correct storage of tools, equipment and materials and the safe and effective disposal of waste in accordance with industry practice.

Evidence will also include a record completed and maintained, with assistance from the candidate, of all the tasks carried out.

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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

The importance of protective clothing, safety regulations, safe working practices and procedures and legal requirements should be emphasised at all times. Some time should be spent on the identification, purpose, safe use and care of basic hand tools. The value of completing records of work should also be emphasised as part of normal routine. Records should include time taken and materials used, health and safety issues as well as details of the tasks themselves.

The Unit should be candidate-centred and focus on tasks that develop practical skills and underpinning knowledge required to provide basic transferable gardening skills that are appropriate to a wide range of amenity and production horticulture situations. Candidates should be introduced to a range of tools, methods and materials and should be supported in learning the skills and knowledge required to carry out a range of tasks covering each Outcome to a basic level of competence in terms of safety, accuracy and tidiness. The range of tasks covered will depend upon the season and situation and where possible should go beyond the minimum required for assessment evidence. Suggestions of the types of tasks that could be covered are given below:

Outcome 1

General maintenance tasks should include the normal day-to-day duties involved in keeping a garden and will vary depending on the nature and situation of the garden and the time of year. Attention should be paid to safety, cleanliness and tidiness and maintaining the health and quality of appearance of mature plantings. The care of paths, patios and other hard surfaces should include weeding, sweeping and removal of moss and algae, as appropriate. Collection and removal of garden waste could include paper, plastic, leaves, prunings and grass clippings. Composting and other sustainable activities should be encouraged.

Suitable tasks could include: collection and removal of litter and debris; collection, removal and composting of plant and garden waste; sweeping, cleaning and basic maintenance of hard landscape surfaces or features; basic maintenance of established plants and soft landscape features such as weeding, feeding, trimming, pruning, dead-heading, staking, tying-in, mulching, watering.

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Outcome 2

Plant propagation should be considered in a practical context. Seed sowing should be restricted to commonly grown plants, basic methods of sowing and different sizes of seed and container. Raising seedlings in trays, in pots and also directly in the garden should be covered.

Pricking out, hardening off and general care during establishment should be included. The planting of bulbs could include both outdoor and indoor situations. Other appropriate storage organs such as corms and tubers could be included although it is unnecessary to cover the structural differences at this stage. Vegetative propagation should be restricted to stem tip or hardwood cuttings only at this stage or division of herbaceous plants. This could include lifting and division of clumps of bulbs. Rooted cuttings or divided plants should be potted on, hardened off and planted out, as appropriate.

Suitable tasks could include:

- seed sowing, taking cuttings or division in containers, under cover or outdoors: in situ or in a seedbed.
- monitoring and caring for plants during initial establishment and growing on which may include: pricking-out, potting-up, potting-on, hardening-off.

A range of methods should be introduced: indoor, outdoor: trays, plugs, pots etc.; transplanting; different sowing methods and situations such as broadcast and drills, grass seed, annuals, perennials, vegetables.

Outcome 3

This Outcome deals with the preparation and planting of an area. The plants used and the operations carried out should be appropriate to the purpose and performed at the appropriate season. The range of situations could include an outdoor ornamental or conservation area, a vegetable/fruit growing area or an indoor planting display. It is preferable that the area is mostly cleared and does not already have established plants that have to be taken into consideration. Candidates should gain experience of a range of plants and situations to encourage general confidence in the planting, care and establishment of routinely encountered plants. Specialised groups such as aquatic plants and shrubs with complex pruning requirements should not be included.

Suitable tasks could include:

- clearing, digging, raking and preparing the site, including adding organic matter or fertiliser as required.
- measuring site, quantities of materials and arranging the spacing of plants.
- appropriate planting methods and post-planting care according to plant material used: transplants, bare-root, containerised, different sizes, annuals, biennials, perennials, herbaceous, bulbs, shrubs, trees.
- maintenance tasks to aid establishment might include: weeding, watering, mulching, formative pruning, dead-heading, staking, tying-in, feeding.

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Outcome 4

The use of appropriate grass cutting equipment should be demonstrated and practised repeatedly. Mowers should be fitted with safety devices and should only be used under close supervision. Edging should be carried out as part of the routine maintenance programme. A range of grass cutting methods and equipment should be introduced along with other turf maintenance tasks appropriate to the situation and season. These might include: mowing, strimming, trimming, edging, scarifying aeration, top-dressing, laying turf, turf repairs, weed or moss control, feeding.

Links to National Occupational Standards (NOS)

This Unit aligns to the following National Occupational Standards from Lantra:

L1 Site preparation

L2 Establish plants outdoorsCU76 Maintain plants outdoorsL3 Maintain general amenity turf

CU72 Propagate plants by vegetative methods

CU73 Propagate plants from seed

CU2 Monitor and maintain health and safety

Guidance on learning and teaching approaches for this Unit

Centres must ensure that health and safety issues are emphasised throughout the Unit and that candidates carry out tasks according to safe working practices and are provided with and use personal protective equipment (PPE) appropriate for the tasks and working environment.

The Unit should be candidate-centred and focus on developing basic practical transferable gardening skills that are appropriate to a wide range of amenity and production horticulture situations.

Centres must provide an appropriate environment in which the candidates can experience a suitable range of tasks to meet the requirements of the Unit. The importance of health and safety should be highlighted throughout the Unit.

The delivery of this Unit should be activity based. The learning and teaching approaches adopted and the time required will be determined by the individual needs of the candidate. Demonstrations should be followed by supervised participation until confidence and competence increases. Eventually opportunities should be available for the candidate to work in small groups or individually.

Skills should be demonstrated to the students and support and guidance given as they prepare for, carry out and keep records of the tasks. Throughout the Unit the reasoning behind each task and the underpinning knowledge required to support development of the basic skills should be covered and formative questioning used to help embed knowledge.

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The emphasis should be on the development and understanding of basic practical skills, the use of tools and materials and safe and well organised working practices.

Group discussion, team working activities and individual responsibilities will play an important part in the delivery of the Unit and will provide opportunities for candidates to develop their communication, working with others and employability skills. Due to the practical and variable nature of the work there will also be opportunities for candidates, supported by the tutor, to develop their problem solving skills and record how unexpected situations or challenges were met. These would be basic problems which could happen during simple tasks at any time but need to be resolved, not more complex tasks in themselves eg plants wilting or sick, a broken branch, too wet to cut grass or a drain cover where a plant is supposed to be planted.

Candidates will also be encouraged to develop their numeracy skills where opportunities arise for example: measuring distance or area, calculating quantities of materials or success rates of cuttings.

Guidance on approaches to assessment for this Unit

Centres may use the instruments of assessment which are considered by tutor/trainers to be the most appropriate. Examples of instruments of assessment which could be used for all Outcomes would be open-book practical exercises assessed by tutor observation of activity and recorded using checklists which cover all the Performance Criteria. For each Outcome candidates should assist with keeping a record of assessed tasks carried out

Due to the practical nature of the assessment it is suggested that candidates maintain some form of photographic or video record of performance along with written or oral records of tasks carried out. These might be kept in the form of a logbook, diary or portfolio of evidence on paper or in an electronic format.

An holistic approach to assessment and gathering of evidence is encouraged wherever possible. For example by carrying out as many tasks as possible in the same garden to allow experience of changes and development; to see prunings become rooted cuttings or plants cared for in pots established in a new border or by undertaking related tasks together: cut and edge grass, trim around obstacles. Further details of the types of tasks that can be used to meet the Evidence Requirements to the required level of competence in terms of safety, accuracy and tidiness are given in the Guidance on Content and Context.

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).

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Opportunities for developing Core Skills

The Unit will provide opportunities to develop *Communication* and *Working with Others* at SCQF level 4 during group discussions and team working in practical activities. The collection and organisation and recording of evidence will provide further opportunities to develop *Communication* skills.

There may also be opportunities to develop Numeracy skills in tasks involving for example, measuring distance or area, calculating quantities of materials or success rates of cuttings.

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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