



National Unit specification: general information

Unit title: Agricultural Crops: An Introduction

Unit code: H096 10

Superclass: SD

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Summary

The purpose of this Unit is to provide candidates with entry level knowledge enabling them to identify and describe a range of crops commonly grown within the UK agricultural industry. Candidates will also conduct a study of one locally grown agricultural crop and present their findings.

The Unit is intended for those with limited or no prior knowledge or experience of agricultural crops and should enable them to progress to other Units providing more in-depth knowledge and experience.

This is an optional Unit within the National Certificate in Rural Skills at SCQF level 4. It is also available as a free-standing Unit.

Outcomes

- 1 Describe a range of agricultural crops and their uses.
- 2 Conduct a study of one locally grown agricultural crop.

Recommended entry

Entry is at the discretion of the centre.

Credit points and level

0.5 National Unit credit at SCQF level 4: (3 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.*

General information (cont)

Unit title: Agricultural Crops: An Introduction

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

Unit title: Agricultural Crops: An Introduction

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

Describe a range of agricultural crops and their uses.

Performance Criteria

- (a) Identify the crops in a pre-harvest stage.
- (b) Identify the crops at post-harvest stage.
- (c) Describe the primary use for the crops.

Outcome 2

Conduct a study of one locally grown agricultural crop.

Performance Criteria

- (a) Identify and describe one local crop type.
- (b) Describe the suitability to soil type, climate and area.
- (c) Describe the establishment, maintenance, harvest and yield of one local crop

Evidence Requirements for this Unit

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

The tutor must be satisfied that all health and safety requirements are followed.

Outcome 1: Written and/or oral evidence. Closed book under supervision.

PC (a) and (b)

Evidence must be provided to show that candidate can identify a minimum of five different agricultural crops at pre and post harvest stages, as well as describe the primary use of a minimum of five agricultural crops.

National Unit specification: statement of standards (cont)

Unit title: Agricultural Crops: An Introduction

Outcome 2: Written and/or oral and product evidence.

PC (a)

Evidence showing the candidate has identified and described a local agricultural crop must include:

- ◆ the variety of crop grown.
- ◆ the product obtained through harvest (including any by-product, eg straw from barley).
- ◆ the intended use (eg animal feed/beer production etc).

PC (b)

Evidence showing the candidate has successfully described the crops suitability to soil type, climate and area must include:

- ◆ a description of soil texture:
 - structure, moisture, textural class.
- ◆ soil pH.
- ◆ average annual rainfall.
- ◆ average temperatures.
- ◆ position of land:
 - orientation, altitude, topography.

PC (c)

Evidence showing the candidate has successfully described the establishment, maintenance, harvest and yield must include:

- ◆ timings of establishment, routine maintenance and harvest.
- ◆ ground preparation.
- ◆ sowing/planting method/s.
- ◆ sowing/planting rates.
- ◆ three routine maintenance tasks.
- ◆ particular methods of harvest:
 - labour
 - machinery
 - storage.
- ◆ expected yield.

National Unit specification: support notes

Unit title: Agricultural Crops: An Introduction

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 20 hours.

Guidance on the content and context for this Unit

This Unit is designed to introduce the candidate to commonly grown agricultural crops and could include cereals, pulses, field-scale vegetables and fruit, and grasses. However, any agricultural crop could be included (eg biomass) if deemed relevant to the local area.

Seasonality and time of year should be taken into consideration to ensure candidates experience crops in at least one state of establishment, maintenance and/or harvest.

Outcome 1

The purpose of this Outcome is to provide the candidate with the knowledge to be able to identify and briefly describe a range of commonly grown crops through observation of physical features.

Examples of crops could include:

- ◆ barley
- ◆ wheat
- ◆ oats
- ◆ oil seed rape
- ◆ beans
- ◆ potatoes
- ◆ carrots
- ◆ grass
- ◆ strawberries.

Candidates should experience crops in their physical environment so multiple site visits and talks with industry professionals are recommended. Physical examples of harvested crops should also be used.

Candidate support notes could be provided containing basic methods of identification as well as reference and/or links to relevant resources (eg websites).

Group discussion and activities should be used to embed knowledge on identifying crops through physical features.

Locally grown crops should be included in the delivery of this Outcome in order to aid candidates in selection for Outcome 2.

A visit to a processing establishment using a harvested crop would enhance knowledge and understanding (eg feed mill, brewery). If this is not available, a visit to a supermarket could be undertaken to identify products derived from crops.

National Unit specification: support notes (cont)

Unit title: Agricultural Crops: An Introduction

Outcome 2

The purpose of this Outcome is to allow students to gain more in-depth knowledge of one locally grown crop and the reasons for growing in the area.

It is intended to be as practical as possible so site visits, talks and interviews with industry professionals should be arranged in order for candidates to gain knowledge and understanding whilst gathering the necessary information specified in the Performance Criteria.

Support notes and/or worksheets could be issued containing guidance on the information candidates must acquire.

Gathering visual evidence should also be encouraged as a means of documenting the study.

A variety of methods could be used in order to gain knowledge however, making contact with farming establishments should be encouraged as discussion with the grower will enable the recording of specific information regarding the chosen crop.

The tutor must be satisfied that all health and safety requirements are followed when taking groups of candidates on industry visits. In addition any local authority instructions, including risk assessment procedures must be followed. Clear arrangements must be made prior to any visits.

Information regarding crop varieties should be obtained in relation to its intended use. For example, El Santa strawberries are grown because of their high yield, appearance and disease resistance.

Demonstrating how to access and use meteorology websites will aid candidates in gathering information regarding climatic conditions and area. Candidates may also need to access local maps to investigate land position.

Information regarding soil texture class should be provided alongside practical activities to determine which soil class their chosen crop is grown in. Classes are as follows:

- ◆ sand
- ◆ loamy sand
- ◆ silt loam
- ◆ loam
- ◆ clay loam
- ◆ light clay
- ◆ heavy clay.

Practical activities would involve adding water to moisten samples of soil. The ability of the soil to mould into certain shapes will help to identify its class. Soil pH could be determined using simple testing kits.

National Unit specification: support notes (cont)

Unit title: Agricultural Crops: An Introduction

Time should be allowed at the end of the Unit to enable sharing and discussion of candidates' findings.

Guidance on learning and teaching approaches for this Unit

Outcome 1

Emphasis on practical learning sessions, which could include:

- ◆ site visits
- ◆ talks with industry professionals.

Support material could be provided such as:

- ◆ worksheets
- ◆ publications
- ◆ video
- ◆ internet
- ◆ slides.

Outcome 2

A mixture of class and practical sessions incorporating the use of various resources could be used to provide and gather the necessary information. For example:

- ◆ site visits
- ◆ talks/interviews with industry professionals
- ◆ accessing data through internet
- ◆ map reading
- ◆ practical demonstrations.

Guidance on approaches to assessment for this Unit

Outcome 1

Written and/or oral evidence.

The candidate could be shown photographic and/or physical evidence of five different crops at pre-harvest and post-harvest stages from which they will be expected to provide short answers for each of the Performance Criteria.

Any photographic materials used should be of an acceptable and unambiguous quality, which enables candidates to make a decision about the crop type.

An assessor checklist could also be used to record the candidate's performance.

National Unit specification: support notes (cont)

Unit title: Agricultural Crops: An Introduction

Outcome 2

Written and/ or oral evidence and product.

Performance Criterion (a) to (c) should be gathered and collated as part of portfolio. Suitable methods could include:

- ◆ worksheets
- ◆ oral recording
- ◆ e-portfolio.

Photographic evidence is not essential but should be encouraged and will aid in the effective presentation of information.

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 social software. 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)*.

Opportunities for developing Core Skills

In this Unit candidates will identify and describe a range of crops commonly grown within the UK agricultural industry. Candidates will also investigate one locally grown agricultural crop. Candidates will:

- ◆ carry out research using ICT.
- ◆ produce written work using ICT.
- ◆ work in groups to investigate and record findings.

As they are doing this Unit candidates will be developing aspects of the Core Skills in *Problem Solving, Communication, Information and Communication Technology (ICT)* and *Working with Others*

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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