



## National Unit specification: general information

**Unit title:** Farm Maintenance (SCQF level 5)

**Unit code:** H2MV 11

**Superclass:** SL

**Publication date:** February 2013

**Source:** Scottish Qualifications Authority

**Version:** 02

### Summary

This Unit enables learners to develop knowledge and practical skills in farm maintenance tasks such as fencing, concreting, plumbing, and welding. Learners will plan for the tools and resources required for tasks, carry out the tasks and maintain the tools as appropriate.

This is a mandatory Unit within the National Certificate in Agriculture (SCQF level 6) but is also available as a free-standing Unit.

This Unit is suitable for learners who have no previous knowledge in this area.

### Outcomes

- 1 Plan the tools and resources required for a given maintenance task.
- 2 Carry out a range of maintenance tasks in accordance with good farm practice.
- 3 Maintain the tools used in a range of maintenance tasks.

### Recommended entry

Entry is at the discretion of the centre.

### Credit points and level

1 National Unit credit at SCQF level 5: (6 SCQF credit points at SCQF level 5\*)

*\*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:** Farm Maintenance (SCQF level 5)

### **Core Skills**

Achievement of this Unit gives automatic certification of the following Core Skills component:

Complete Core Skill            None

Core Skill component        Critical Thinking at SCQF level 4

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

## **National Unit specification: statement of standards**

**Unit title:** Farm Maintenance (SCQF level 5)

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**

Plan the tools and resources required for a given maintenance task.

#### **Performance Criteria**

- (a) Identify the tools and materials used for a range of maintenance tasks.
- (b) Select suitable tools and materials for a given task.
- (c) Calculate the quantity of resources required for a given task.

### **Outcome 2**

Carry out a range of maintenance tasks in accordance with good farm practice.

#### **Performance Criteria**

- (a) Use tools, materials and equipment safely and in accordance with statutory regulations.
- (b) Complete tasks within a reasonable time and to industry standards.
- (c) Dispose of waste correctly in accordance with statutory regulations.

### **Outcome 3**

Maintain the tools used in a range of maintenance tasks.

#### **Performance Criteria**

- (a) Service and maintain tools after use.
- (b) Follow manufacturer's recommended procedures.

## National Unit specification: Evidence Requirements

**Unit title:** Farm Maintenance (SCQF level 5)

### Evidence Requirements for this Unit

Written and/or oral and performance evidence is required to demonstrate that the learners have achieved all of the Outcomes and Performance Criteria. Evidence must be obtained under supervised conditions at appropriate points throughout the Unit. Evidence can be generated holistically, or Outcome by Outcome.

For each Outcome, learners must provide evidence for **three** of the following maintenance tasks:

- ◆ concreting
- ◆ fencing
- ◆ plumbing
- ◆ wall building
- ◆ welding
- ◆ farm tracks
- ◆ drainage

For Outcome 1, learners must provide evidence of:

- ◆ Identification of a selection of common tools for the identified task
- ◆ Identification of a selection of common materials for the identified task
- ◆ Identification of the appropriate tools for the task
- ◆ Selection of suitable materials to carry out the task
- ◆ Calculation of the amount of materials required

For Outcome 2, learners must provide evidence of:

- ◆ Operations carried out safely and effectively with appropriate Protective Protective Equipment (PPE) as required
- ◆ Materials used economically
- ◆ Operations carried out within reasonable time and to industry standards
- ◆ Operations carried out in accordance with relevant regulations
- ◆ Waste disposed of appropriately and the site left tidy

For Outcome 3, learners must provide evidence of:

- ◆ Demonstration of the maintenance of a selection of tools by cleaning, checking and carrying out necessary repairs or adjustments
- ◆ Checking the maintenance procedures are correct by accessing the manufacturer handbook

## **National Unit specification: support notes**

### **Unit title:** Farm Maintenance (SCQF level 5)

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**

This is a mandatory Unit within the National Certificate in Agriculture (SCQF level 6) but is also available as a free-standing Unit. This Unit will help prepare learners for progression to Higher National Units in Agriculture, other related land-based qualifications or employment.

In this Unit learners are required to demonstrate their ability to carry out three different practical tasks from concreting, fencing, farm tracks, plumbing, wall building, drainage and welding. Learners will show their ability to organise and select correct materials and amounts.

In Outcome 1, learners will learn about a selection of tools that are required for specific tasks. This could include tools for any of the above selection. Learners will learn the purpose, safe use, care and repair of the tools. The range can include hammers, spades, shovels, saws, wire cutters, fencing pliers, wire strainers, auger, wood chisel, handsaw, brace, bow saw, hand axe, crowbar, mell, postholder, wire dispenser, other fencing tools, a cement mixer, spanners, screwdrivers, saws, trowels, welder. Other tools could be included, as appropriate with due regard to safety and age restrictions.

In addition, this Outcome covers recognition of various materials and their uses, selection of the right type of tools to carry out tasks effectively and the importance of this in relation to time saving and estimating the amount of different materials and their uses. A wide range from sand, posts, to welding rod size should be covered.

In Outcome 2, learners will gain an awareness of working safely and avoiding hazards to themselves and others. They will also learn about the importance of protective clothing and equipment and the safe operation of machinery.

For example, use of post hammers and welding shields could be covered, as could knowledge of regulations such as fencing-barbed wire on roadsides, electric fencing on roadsides.

Learners should be made aware that waste products must be collected and removed or recycled.

In Outcome 3, the importance of maintaining tools should be emphasised. Maintenance should be carried out in line with manufacturer handbooks.

## National Unit specification: support notes (cont)

### Unit title: Farm Maintenance (SCQF level 5)

This Unit is broadly aligned to the following National Occupational Standard (NOS) from Lantra:

CU18 Construct and maintain structures and surfaces

### Guidance on learning and teaching approaches for this Unit

The Unit should be delivered in a practical context by carrying out tasks in the field, farmyard, workshop and even simulated situations, whenever necessary. Some learning should take place in the classroom. The emphasis should always be on the practical application of knowledge and understanding.

Learners would benefit from a balanced approach to learning by undertaking field visits to farms when different types of farm maintenance activity are required and participating in classroom activities. Working in small groups during practical sessions can help understanding of activities.

By adopting the above learning and teaching approaches and/or through the Outcomes and corresponding Evidence Requirements, the Unit should provide learners with an opportunity to develop the following essential skills for life, learning and work:

- ◆ Employability — through developing practical skills to industry standards and working on time limited tasks
- ◆ Sustainability — through considering the use of resources, the effect of carrying out tasks on the environment
- ◆ Technical skills — through investigations into repairs and maintenance of fences, roads, buildings, etc
- ◆ Organisational skills — in terms of personal management through punctuality, record keeping, organising portfolio work, etc
- ◆ Interpersonal skills — through contact with farm staff, supervisors and class teams

### Opportunities for developing Core Skills

In this Unit learners will learn about farm maintenance, and will perform a range of maintenance tasks. Learners will:

- ◆ Identify areas for repair and renewal
- ◆ Follow instructions
- ◆ Explain the purpose and safe use of tools
- ◆ Make decisions about the suitability of materials
- ◆ Take measurements and make calculations
- ◆ Advise on appropriate actions

This means that as they are doing this Unit, learners may develop aspects of the Core Skills of *Communication*, *Numeracy* and *Problem Solving*.

## National Unit specification: support notes (cont)

### Unit title: Farm Maintenance (SCQF level 5)

This Unit has the Critical Thinking component of Problem Solving embedded in it. This means that when candidates achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 4.

In addition, aspects of the following Core Skills could be developed where particular learning and teaching approaches are adopted:

- ◆ *Working with Others* — through group work, eg in performing tasks
- ◆ *ICT* — through recording data electronically

### Guidance on approaches to assessment

The practical, performance and written/oral elements of the Unit lend themselves to holistic assessment approaches. The learners could compile a portfolio of evidence for all Outcomes which includes individual information on tools, materials and their uses, information on PPE, legislation and working practices, and descriptions and images of practical work. Assessors should use checklists to assess that all Outcomes and Performance Criteria have been achieved.

The following approaches to assessment are suggested:

- Outcome 1: This could be assessed by a combination of practical exercises and demonstrations or a written question paper.
- Outcome 2: This could be assessed by a combination of practical exercises and demonstrations.
- Outcome 3: This could be assessed by a combination of practical exercises and demonstrations.

### 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 learner 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)*.

### Disabled learners and/or those with additional support needs

The additional support needs of individual learners 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](http://www.sqa.org.uk/assessmentarrangements)

## History of changes to Unit

Version	Description of change	Date
02	Core Skills Component Critical Thinking at SCQF level 4 embedded.	04/02/2013

© Scottish Qualifications Authority 2012

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre, telephone 0845 279 1000.