



## Higher National Unit specification

### General information for centres

**Unit title:** Organic Production Systems

**Unit code:** F1YA 35

**Unit purpose:** To introduce the principles of organic production and explain organic certification. To evaluate the conversion and certification process and the operation of a production unit within the context of geographical, climatic and infrastructural limitations.

On completion of the Unit the candidate should be able to:

- 1 Explain the principles of organic production.
- 2 Explain organic certification, standards and conversion in the EU.
- 3 Plan an organic system.

**Credit points and level:** 1 HN credit at SCQF level 8: (8 SCQF credit points at SCQF level 8\*)

*\*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.*

**Recommended prior knowledge and skills:** Access to this Unit is at the discretion of the centre. It would be beneficial for candidates to have a basic knowledge of crop and livestock production, or horticultural production, preferably gained from prior completion of the HN Units F1Y4 34 *Arable Crop Production* and F2ED 34 *Livestock Production Systems* or D7W334 *Horticultural Practices* and F1J4 35 *Crop Production Practices*. In addition, it would be a great advantage if candidates have vocational experience in farming or horticultural production in general, or on an organic holding.

**Core Skills:** There are opportunities to develop the Core Skill of *Communication* at SCQF level 6 *Problem Solving* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

**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.

**Assessment:** This Unit could be assessed by a single report on the conversion to organic production of a whole selected holding, or units within a holding as allowed under the organic standards; and operation of the units or holding under organic standards. Alternatively each Outcome may be assessed by a separate assessment event.

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

**Unit title:** Organic Production Systems

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

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. Candidates 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**

Explain the principles of organic production

#### **Knowledge and/or Skills**

- ◆ Production principles
- ◆ Environmental principles
- ◆ Food processing principles
- ◆ Social principles

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can, with reference to agriculture or horticulture:

Explain production principles including at least two of:

- ◆ food quality
- ◆ natural cycles
- ◆ fertility and biological activity of soil
- ◆ ethics
- ◆ regional differences

Explain environmental principles including at least two of:

- ◆ biodiversity and landscape
- ◆ utilisation of renewable resources and recycling
- ◆ minimising pollution

Explain food processing principles including at least one of:

- ◆ minimising processing
- ◆ maximising information provided to the consumer

## **Higher National Unit specification: statement of standards (cont)**

### **Unit title:** Organic Production Systems

Explain social principles including at least two of:

- ◆ wider social issues
- ◆ quality of life
- ◆ issues concerning the food chain
- ◆ the influence of the principles on demand for organic produce

### **Assessment Guidelines**

Outcome 1 may be assessed as a separate assessment event in the form of a supervised, closed-book, restricted-response test of approximately 45 minute duration.

Alternatively, assessment of this Outcome could be combined with both Outcomes 2 and 3 through a single instrument of assessment as detailed under Outcome 3 below.

### **Outcome 2**

Explain organic certification, standards and conversion in the EU

#### **Knowledge and/or Skills**

- ◆ Certification schemes in the EU
- ◆ Organic standards
- ◆ Conversion

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can, with reference to agriculture or horticulture:

- ◆ evaluate how organic certification operates in the EU
- ◆ explain the organic standards operated by an approved organic sector body
- ◆ explain the conversion process of a holding to organic standards

#### **Assessment Guidelines**

Outcome 2 may be assessed alone by closed-book, restricted-response test of 90 minutes' duration.

Alternatively, assessment of this Outcome could be combined with both Outcomes 1 and 3 through a single instrument of assessment as detailed under Outcome 3 below.

## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** Organic Production Systems

### **Outcome 3**

Plan an organic system

#### **Knowledge and/or Skills**

- ◆ Audit
- ◆ Organic System
- ◆ Conversion
- ◆ Economic Viability

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can, with reference to the standards for organic production (Outcome 2):

- ◆ plan an organic system. Candidates should audit a holding's suitability for organic production to enable planned organic production.

In the case of an agricultural holding or Unit within a holding that has livestock, the plan will take account of soil and nutrient management; crop, forage and livestock management; animal health plan; processing and marketing; staffing and record keeping; and environment and biodiversity.

In the case of a horticultural holding or Unit within a holding that has no livestock, the plan will take account of soil and nutrient management including stockless systems and use of green manures; crop management; processing and marketing; staffing and record keeping; and environment and biodiversity.

#### **Assessment Guidelines**

This Outcome can be assessed as a report as a separate assessment event. The report should be in compliance with organic standards (Outcome 2), and should present a realistic and viable organic production system as relevant to a specific situation on an agricultural or horticultural holding.

Alternatively, all three Outcomes may be combined as part of a single assessment of the Unit in a report supplemented by additional questions to ensure all aspects of the Evidence Requirements are covered.

## Administrative Information

**Unit code:** F1YA 35

**Unit title:** Organic Production Systems

**Superclass category:** SD

**Original date of publication:** August 2008

**Version:** 01

### History of changes:

Version	Description of change	Date

**Source:** SQA

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

### **Unit title: Organic Production Systems**

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 aims of the Unit are to develop knowledge and skills in organic production, complying with the principles and practices of organic production as required by organic certification schemes. The Unit addresses these concepts within the contexts of the conversion of a holding or Unit within a holding to organic production, and operation of the holding or Unit within a holding under an organic system. The Unit will be vocationally relevant to candidates for all land-based courses and, in particular, agriculture, and production horticulture.

In addition to covering the items listed in the Knowledge and/or Skills section, it would help candidates if methods of marketing organic produce were investigated such as box schemes and farmers' markets. Additionally attention should be paid to support for organic production, and profitability of production.

The content throughout the delivery of the Unit should be vocationally relevant and stress an integrated and planned approach to organic production. Candidates should be expected to use the Knowledge and Skills from the Unit to enable them to assess practical issues in their vocational area and to recommend appropriate strategies that are acceptable within an organic system.

### **Guidance on the delivery and assessment of this Unit**

The Unit is primarily designed to provide candidates with technical or professional knowledge and skills related to occupations in agriculture and production horticulture. It can be delivered as a stand-alone Unit or as part of a Group Award. Candidates will need to relate information learnt in the Unit to the integrated production and management requirements of the Graded Unit.

As the Unit draws together material from a wide range of other subject areas and Units, it would best be delivered after these and assessed holistically.

Delivery should place emphasis on the practical aspects of organic production. It should include a range of approaches from formal lectures and visits to discussions and library sessions, giving access to appropriate publications and appropriate websites. Computer-based packages could also be used. The Unit also lends itself well to the use of tutorials and workshops as a means of delivery, where the tutor can encourage candidates to share and develop their existing knowledge and skills as each subject area is explored.

## **Higher National Unit specification: support notes (cont)**

**Unit title:** Organic Production Systems

### ***Opportunities for developing Core Skills***

There are opportunities to develop the Core Skill of *Problem Solving* to SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Financially viable organic production can only be achieved if the organic standards are applied to a holding (or Unit within a holding) in order to produce a reasonable yield of marketable produce. Because organic production is based on management of biological systems with minimisation of external inputs, problem solving skills will be required and developed by the assessment of Outcome 3, which asks candidates to plan a viable organic system that makes best use of the resources of the holding, that are identified in the audit of the holding.

There are opportunities for the candidate to develop Written Communication at SCQF level 6 in the assessment of all Outcomes. If candidates complete written work for each Outcome a they will an opportunity to develop the general skill 'Produce well structured written communication on complex topics'. Candidates when completing their responses to Outcomes will have to present essential ideas/information and supporting detail in a logical and effective order

### **Open learning**

This Unit could be delivered by distance learning.

### **Candidates with disabilities and/or additional support needs**

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* ([www.sqa.org.uk](http://www.sqa.org.uk)).

## General information for candidates

### Unit title: Organic Production Systems

This Unit addresses and will develop your knowledge of the principles and practice of organic production. Organic production is carried out under rules imposed by the EU, the UK government and approved organic sector bodies. Standards documents detail how organic production should be managed, and what techniques and inputs are permitted. Organic production is supported by government schemes, but systems must be economically sound to be viable. Marketing of organic produce is very important in order to achieve added value. Direct selling via farmers' markets, farm shops or box schemes are important features of organic production.

The aim of the Unit is to develop your knowledge and skills in organic production through understanding the principles of organic systems. The Unit addresses these concepts within the constraints of organic certification and organic standards. An understanding of the standards of an approved organic sector body is essential. Consequently, the Unit will be vocationally relevant to candidates of all land-based courses and, in particular, agriculture and horticulture.

The Unit is primarily designed to prepare you for management roles in the organic sector later in your career. If you already hold a management position, you will find this Unit of direct benefit. If you have prior experience of organic production you will be able to make use of this during your study.

You will learn how the principles of organic production are very important because these relate directly to the market demand for organic products. You will investigate the reasons why consumers buy organic products.

During the Unit you will learn about the principles, certification and standards of organic production. You will look at support schemes and marketing of organic produce in order to understand what influences the financial viability of organic production. You will carry out an audit of a holding or Unit within a holding and plan conversion and organic production and where relevant, take into account soil and nutrient management, environment and biodiversity, crop management, animal health, processing and marketing, staffing and record keeping.

You will be expected to use the Knowledge and Skills from the Unit to enable you to assess practical organic production issues in either an agricultural or horticultural situation and to recommend appropriate strategies in order to develop viable production systems.

In order to complete this Unit successfully, you will be required to complete up to three pieces of assessed work. The selection of assessment will depend on the mode of delivery and may consist of a written test or tests, and/or a detailed report.

There are opportunities to develop the Core Skill of *Problem Solving* to SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components. Since organic production is based on management of biological systems with minimisation of external inputs, your problem solving skills will be required in Outcome 3. In the Outcome, you will be asked to plan a viable organic system, which makes best use of the resources of the holding that are identified in the audit of the holding. *Problem Solving* skills are particularly needed because financially viable organic production can only be achieved if the organic standards are applied to a holding or Unit within a holding in order to produce a viable yield of marketable produce.