



## Higher National Unit specification

### General information for centres

**Unit title:** Poultry Health

**Unit code:** F4SE 34

**Unit purpose:** This Unit develops the knowledge and skills needed to permit effective management of farmed poultry by minimising disease problems. The Unit enables candidates to improve their awareness of the principal diseases of poultry, the available control measures and appropriate actions, and thereby to assist veterinary professionals. The Unit considers poultry health in the context of both management and legislative constraints.

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

- 1 Explain important infectious diseases of poultry.
- 2 Explain the vaccination of poultry.
- 3 Manage a breakdown in poultry health.
- 4 Explain the current legislation relevant to poultry health and welfare.

**Credit points and level:** 1 HN credit at SCQF level 7: (8 SCQF credit points at SCQF level 7\*)

*\*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:** No prior knowledge is required however, it is recommended that candidates have an appreciation of cell function and microbial activity equivalent to Biology at Intermediate 2/credit Standard Grade.

**Core Skills:** There are opportunities to develop the Core Skill of *Communication* 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:** Outcomes 1 and 2 are assessed by means of closed-book tests, which may be integrated. Outcome 3 is assessed using an investigative exercise. Outcome 4 is assessed by restricted response questions in an open-book exercise.

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

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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 important infectious diseases of poultry

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

- ◆ Poultry diseases
- ◆ Disease aetiology
- ◆ Clinical signs of disease
- ◆ Treatment and control methods

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can for five infectious diseases:

- ◆ explain the incidence and causes of the disease
- ◆ describe the clinical signs of the disease
- ◆ explain the methods of treatment and control appropriate to the disease

The five infectious diseases must include at least one from each of the following categories:

- ◆ bacterial
- ◆ viral
- ◆ protozoal
- ◆ parasitic

#### **Assessment Guidelines**

This may be assessed by means of a closed-book, restricted response supervised assessment. The assessment may be combined with that for Outcome 2.

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

**Unit title:** Poultry Health

### **Outcome 2**

Explain the vaccination of poultry

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

- ◆ Vaccine types
- ◆ Vaccine administration methods
- ◆ Resources required for vaccination

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ explain three differences between live and inactivated types of vaccines
- ◆ explain two methods of vaccination and for each, give three advantages and three disadvantages
- ◆ explain the resources required to administer vaccine by one method

#### **Assessment Guidelines**

This may be assessed by means of a closed-book, restricted response supervised assessment.

The assessment may be combined with that for Outcome 1.

### **Outcome 3**

Manage a breakdown in poultry health

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

- ◆ Poultry flock husbandry
- ◆ Infectious diseases
- ◆ Non-infectious causes of disease
- ◆ Treatment measures
- ◆ Preventative measures

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ accurately record the flock husbandry in terms of stock performance and management and the case history of the progression of a disease
- ◆ analyse husbandry and case history information and based on the analysis, prepare a diagnosis as to the likely infectious and non-infectious causes of the disease

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

### Unit title: Poultry Health

- ◆ develop appropriate treatment measures to be taken for the study flock that would apply in a commercial situation on health and cost benefit grounds, with consideration of relevant legal, welfare and financial constraints
- ◆ recommend preventative measures for future flocks to avoid recurrences, in accordance with commercial practice

### Assessment Guidelines

This Outcome may be assessed by means of an assignment where the candidate investigates a disease scenario. This may be a real situation or more likely as a role-play type exercise.

### Outcome 4

Explain the current legislation relevant to poultry health and welfare

### Knowledge and/or Skills

- ◆ Welfare legislation and guidance on farm, during transport and at slaughter
- ◆ Legislation relating to notifiable diseases
- ◆ Legislation relating to *Salmonella* control

### Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can explain the application and provisions of defined legislation and other significant documents on poultry health and welfare issues, to 10 defined situations. The situations should include at least: one notifiable disease, one *Salmonella* situation, and three welfare issues.

The explanations must include the actions that should be taken by specified responsible persons (eg the stockworker, farmer veterinarian, etc) to protect bird health and welfare in specific situations likely to arise on a poultry farm with reasoning based on the relevant legislation and/or guidance document.

### Assessment Guidelines

This Outcome is best assessed by restricted response questions in an open-book exercise. Access to the following Scottish legislative or guidance documents or their amendments, will be required:

- ◆ Diseases of Poultry (Scotland) Order 2003 (Scottish Statutory Instrument 2003/354)
- ◆ Avian Influenza (Preventive Measures) (Scotland) Regulations 2005 (SSI 2005/530)
- ◆ Animal Health Act 1981
- ◆ Welfare of Farmed Animals (Scotland) Regulations 2000 (SSI 2000/442)
- ◆ Welfare of Farmed Animals (Scotland) Amendment Regulations 2002 (SSI 2002/334)
- ◆ Zoonoses Order 1989 (SI 1989/285)

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

### **Unit title: Poultry Health**

- ◆ Poultry Breeding Flocks and Hatcheries (Scotland) Order 2007 (SSI 2007/254)
- ◆ Welfare of Animals (Slaughter or Killing) Regulations 1995 (SI 1995/731)
- ◆ Welfare of Animals (Transport) (Scotland) Regulations 2006 (SSI 2006/606)

Tutors should ensure that the current legislative and guidance documents are available to candidates for consideration.

## Administrative Information

**Unit code:** F4SE 34

**Unit title:** Poultry Health

**Superclass category:** SH

**Original date of publication:** August 2008

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### History of changes:

Version	Description of change	Date

**Source:** SQA

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## Higher National Unit specification: support notes

### Unit title: Poultry Health

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

Infectious and non-infectious diseases of poultry can have a significant effect on the health, welfare and productivity of commercial poultry kept for meat or egg production. It is essential that poultry farmers are familiar with the most important diseases of poultry to permit them to take appropriate measures to prevent or treat such diseases. Poultry farmers must also be aware of the legislation appertaining to poultry health and welfare. This Unit seeks to improve understanding of poultry health and associated legislation.

Outcome 1 is concerned with specific important infectious diseases of poultry caused by bacteria, viruses, protozoa, internal parasites and external parasites. The incidence, cause, clinical signs, treatment and control of specified diseases will be considered.

Outcome 2 focuses on the use of vaccination as a means of disease control by the poultry industry. The advantages and disadvantages of different methods of vaccine delivery will be explored, and the resources required to administer different types of vaccine will be discussed.

Outcome 3 builds on Outcomes 1 and 2 by considering the actions to be taken in the event of a specific breakdown in poultry health. The interaction between management, husbandry, infectious and non-infectious diseases will be considered, and the candidate will learn the process of disease diagnosis, treatment and future control.

In considering appropriate treatment measures to be taken for the study flock, the important skill is that when there is a health breakdown, the candidate should be able to gather all *relevant* information to make a diagnosis, instigate treatment and modify the production to minimise the risk of recurrence to the standard expected of a good house/farm manager.

Outcome 4 requires candidates to be familiar with legislation relating to different scenarios such as on-farm welfare, welfare during transit, welfare at slaughter, notifiable disease legislation, and legislation for the control of salmonella in poultry. Access will be required to the following documents or their amendments:

- ◆ Diseases of Poultry (Scotland) Order 2003 (Scottish Statutory Instrument 2003/354)
- ◆ Avian Influenza (Preventive Measures) (Scotland) Regulations 2005 (SSI 2005/530)
- ◆ Animal Health Act 1981
- ◆ Welfare of Farmed Animals (Scotland) Regulations 2000 (SSI 2000/442)
- ◆ Welfare of Farmed Animals (Scotland) Amendment Regulations 2002 (SSI 2002/334)
- ◆ Zoonoses Order 1989 (SI 1989/285)
- ◆ Poultry Breeding Flocks and Hatcheries (Scotland) Order 2007 (SSI 2007/254)
- ◆ Welfare of Animals (Slaughter or Killing) Regulations 1995 (SI 1995/731)
- ◆ Welfare of Animals (Transport) (Scotland) Regulations 2006 (SSI 2006/606)

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

**Unit title:** Poultry Health

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

The Unit is specifically designed for use as part of a Group Award in poultry production and it is best studied in this context. The Unit is expected to be delivered primarily in a classroom environment; however, access to a poultry flock would be beneficial. As the Unit covers significant poultry diseases including notifiable diseases it is unlikely that they will be observed first hand by candidates. Hence it is anticipated that significant photographic, video and other A/V resources will be needed to deliver and assess the Unit. A large bank of such material will be required in order to illustrate the range and diversity of symptoms evident with some diseases, and to ensure that candidates consider the detail of the material rather than associate the disease with a particular photograph.

The Unit is assessed by different instruments of assessment. Outcomes 1 and 2 can be assessed as closed-book in-class tests. This is desirable because the candidate is expected to learn and know the information presented in these Outcomes without resort to reference material.

By contrast, Outcome 3 is perhaps best assessed by an assignment consisting of an examination of material gathered by the candidate during role-play exercises and further developed and interpreted by the candidate, and submitted by the candidate at the end of the Outcome delivery. For example, the candidate could take the part of an animal health adviser, and a staff member could assume the role of the poultry farmer. The 'health adviser' could quiz the 'farmer' to discover the signs and extent of disease, how the farm is managed, the actions taken by the farm, the response of the birds to remedial measures, and other information critical to the diagnosis. This could take place over a true-to-life timeframe. Alternatively the candidate could take the role of the farm manager with the staff member assuming the role of the stockman. The manager could quiz the stockman to discover the cause of the health breakdown and monitor the success, or otherwise, of the treatment methods.

Outcome 4 deals with specific detailed legislation and can be assessed by means of an open-book in-class assessment, to demonstrate the ability candidates to locate the required information in previously distributed documents. In this case, it is desirable for the questions to be constructed such that candidates are encouraged to answer in plain language rather than reiterating the legislation verbatim. For example, the candidate may be asked to explain the actions that are required of the farmer and the veterinarian in the event of an outbreak of avian influenza.

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

The assignment developed for Outcome 3 requires the candidate to collect and collate data from both oral and written sources. They then prepare an evaluation involving complex interpretations and judgement. This should provide ample opportunity to demonstrate the skill of Communication including reading, writing and Oral Communication elements, at SCQF level 6, although there is no automatic certification of Core Skills or Core Skills components.



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

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### **Open learning**

It would be possible for this Unit to be completed by distance learning. The assessments can be completed on-line with appropriate supervision arrangements for the closed-book assessments. Access to the specified pieces of current legislation and guidance would be required. For Outcome 3 it would be necessary to access suitable facilities, for example telephone or video conferencing facilities, to enable the requisite role-play elements of the data gathering exercise to be completed satisfactorily.

### **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: Poultry Health

This Unit is designed to enable you to develop the Knowledge and/or Skills to permit effective management of farmed poultry by minimising disease problems. It will improve your awareness of the principal diseases of poultry, the available control measures and appropriate actions and thereby to assist veterinary professionals. The Unit considers poultry health in the context of both management and legislative constraints.

Infectious and non-infectious diseases of poultry can have a significant effect on the health, welfare and productivity of commercial poultry kept for meat or egg production. It is essential that poultry farmers are familiar with the most important diseases of poultry to permit them to take appropriate measures to prevent or treat such diseases. This Unit will arm you with the vital knowledge and skills that will help to ensure the health of your poultry flock. It is also essential that you are aware of the signs and symptoms of notifiable diseases so that the appropriate authorities can be informed, and again this forms an important part of this Unit. Poultry farmers must also be aware of the legislation relating to poultry health and welfare. This Unit will improve your understanding of poultry health and associated legislation.

This Unit is assessed using four instruments of assessment. Outcomes 1 and 2 are assessed by means of closed-book tests. Outcome 3 is assessed using an investigative exercise. Outcome 4 is assessed by restricted response questions in an open-book exercise.

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