

Certificate in Advanced Veterinary Practice

C-POU.3 Minor Poultry Species, Hatcheries and Incubation, Poultry Processing and Legislation

Module Outline



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GUIDANCE FOR THIS MODULE

This module can be taken as a free-standing module, or as part of the Certificate in Advanced Veterinary Practice.

Candidates working towards the designated Certificate in Advanced Veterinary Practice (Poultry) will need to complete A-PKS.1 Professional Key Skills module, B-CKS.0 Clinical Key Skills, B-PAP.2 Production Animal Practice and the three C-POU modules. Upon completion of all the necessary modules, a further synoptic assessment will also be required.

LEARNING OBJECTIVES

Candidates should have a sound grounding in the areas of practice listed below. They also need to develop the skills needed to create case studies that demonstrate the following competencies:

- The written communication skills required to present case studies:
- An ability to demonstrate their competence in observation, data collection, analysis, reasoning, decision-making and advice delivery in the area under discussion
- Reflective skills that enable them to understand the issues raised by the case and their practice more generally, what they learnt from it.

At the end of the modules, candidates should be able to demonstrate:

Part A

- A sound working knowledge of the common health and management problems and their epidemiology in the minor poultry species and in game birds.
- Strategies for diagnosis, disease prevention and control.

Part B

• A sound working knowledge of hatcheries and incubation and the identification and prevention of hatchery/incubation problems.

• A good understanding of the welfare and health issues in hatching poultry and in day old chicks

Part C

• A sound working knowledge of the legislative requirements applicable to poultry production, processing and product export, and a sound understanding of the legislation relevant to zoonoses and notifiable diseases.

Part D

- A thorough understanding of primary processing, further processing, meat inspection, and hygiene issues.
- The identification of the common causes of downgrades and rejects and the development of strategies to minimize loses.
- The welfare issues related to poultry slaughter and the means to audit the process.

LEARNING TOPICS

Part A of this module covers husbandry and management and disease for growing turkeys, breeder turkeys, ducks, geese, and game birds. Part B covers hatcheries and incubation of poultry. Part C covers poultry processing and Part D covers legislation and codes of practice relevant to the poultry industry.

A) This section covers husbandry and management and disease for the following species:

growing turkeys, breeder turkeys, ducks, geese, and game birds. Content is restricted to where there is significant variation from those species discussed in Modules C1 and C2

Major Diseases their Diagnosis and treatment, control or prevention:

- Viral diseases
- Bacterial diseases

- Fungal disease
- Protozoal diseases
- Parasites and parasitic diseases
- Toxicity
- Metabolic disorders
- Nutritional disorders and deficiencies
- Zoonosis
- Miscellaneous diseases
- **B)** This section covers most aspects relevant to veterinary involvement in a Hatchery and the Incubation process
 - The incubation process
 - Management and organization of a hatchery
 - Cleaning and Disinfection of a hatchery
 - Chick processing
 - Assessing Hatchery performance
 - Common hatchery health and welfare issues
- **C)** Poultry processing at primary and further processing levels
 - Processes in both small throughput and high throughput plants
 - Common causes of carcase rejection and downgrades.
 - Legislation of food production
 - Legislation related to low and high throughput plants
 - Working knowledge of the white meat regulations

- **D)** A list is provided of the UK legislation and codes of practice related to animal welfare with special reference to poultry species.
 - Animal welfare
 - Welfare of farmed animals regulations
 - Welfare of animals in transport
 - Welfare of animals at slaughter
 - Zoonotic and notifiable diseases
 - Feed Manufacture

ASSESSMENT

This module is split into an A, B, C and D component, the module is completed by doing 2 of the 4 components.

- 1) For Part A
 - a. A **learning diary** which documents the candidate's experiences over the period of study. This will list the diseases encountered by the candidate and include basic information on the diagnosis, treatment and prevention of the diseases listed. The diary will distinguish between diseases encountered personally and those learned of by means of reading or discussion with others. Photographic examples plus diagnostic test results and interpretation will be included. A list of learning resources used to contribute to the learning diary should be included in the diary.

This learning diary should be kept separate from any other created as part of this module.

- b. A **case book of two examples** from the learning diary where disease agents have affected flocks either clinically or sub-clinically, and which can be substantiated by a combination of history, clinical examination. The candidate should have managed or have had a significant involvement in all of the cases. Cases should include discussion of the relevant diagnostic techniques and corrective/preventative strategies. These cases may be presented in summarised or note form of **up to 1000 words each**, and should cover at least two of growing turkey, breeder turkey, duck, geese, or game bird examples and may be components of cases offered for other C modules for poultry.
- c. A **1,000 word reflective synopsis** justifying the candidate's choice of cases and reflecting upon the candidate's learning during the module. This might include what has changed in their approach to a case, any new procedures or investigations that are now considered, any additional reading which was helpful, and/or any unexpected features of a case which will influence decision making in the future. This essay should only be submitted after all case reports/essays are assessed and returned to the candidate as it is possible that the assessor feedback from the case reports/essays may contribute to the candidate's learning through the module.

2) For Part B

a. A learning diary which documents the candidate's experiences over the period of study. This will describe hatcheries visited, the layout, airflow and management of the hatchery will be thoroughly described along with hatchery data and any interactions with specialists that have contributed to the learning process. A list of learning resources used to contribute to the learning diary should be included in the diary.

This learning diary should be kept separate from any other created as part of this module.

- b. A **case book of two examples** where hatchery problems are investigated. All conclusions must be substantiated by hatchery records, breakout examinations etc. The candidate should have managed or have had a significant involvement in all of the cases. Cases should include discussion of the relevant diagnostic techniques and corrective/preventative strategies. These cases may be presented in summarised or note form of **up to 1000 words each**, and should cover at least two of broiler, breeder, layer, or turkey examples and may be components of cases offered for other C modules for poultry.
- c. A **1,000 word reflective synopsis** justifying the candidate's choice of cases and reflecting upon the candidate's learning during the module. This might include what has changed in their approach to a case, any new procedures or investigations that are now considered, any additional reading which was helpful, and/or any unexpected features of a case which will influence decision making in the future. This essay should only be submitted after all case reports/essays are assessed and returned to the candidate as it is possible that the assessor feedback from the case reports/essays may contribute to the candidate's learning through the module.

3) For Part C

a. A **learning diary** which documents the candidate's experiences over the period of study. This will include visits to processing plants in order to gain experience as well as details of any interaction with specialists that have contributed to the learning

process. An account of the reason for the visit to any facilities and what was learnt should be included. The objective of such visit should be to gain a basic understanding of the processes, objectives and economics of the facility. A list of learning resources used to contribute to the learning diary should be included in the diary.

This learning diary should be kept separate from any other created as part of this module.

- b. A **case book of two examples** where a processing plant problem is investigated. All conclusions must be substantiated by plant records etc. The candidate should have managed or have had a significant involvement in all of the cases. Cases should include discussion of the relevant diagnostic techniques and corrective/preventative strategies. These cases may be presented in summarised or note form of **up to 1000 words each**, and should cover at least two of broiler, breeder, layer, or turkey examples and may be components of cases offered for other C modules for poultry.
- c. A **1,000 word reflective synopsis** justifying the candidate's choice of cases and reflecting upon the candidate's learning during the module. This might include what has changed in their approach to a case, any new procedures or investigations that are now considered, any additional reading which was helpful, and/or any unexpected features of a case which will influence decision making in the future. This essay should only be submitted after all case reports/essays are assessed and returned to the candidate as it is possible that the assessor feedback from the case reports/essays may contribute to the candidate's learning through the module.
- 4) For Part D
 - a. A **detailed file** which lists all legislative documents relevant to UK poultry production together **with short summaries** listing the main points relevant to a practicing poultry veterinarian, created by the candidate.
 - b. A **case book of two examples** where the legislation is central to an issue. Explain the problem and the relevant legislation and the solutions / actions required. The candidate should have managed or have had a significant involvement in all of the

cases. These cases may be presented in summarised or note form of **up to 1000 words each**, and should cover at least two of broiler, breeder, layer, or turkey examples and may be components of cases offered for other C modules for poultry.

c. A **1,000 word reflective synopsis** justifying the candidate's choice of cases and reflecting upon the candidate's learning during the module. This might include what has changed in their approach to a case, any new procedures or investigations that are now considered, any additional reading which was helpful, and/or any unexpected features of a case which will influence decision making in the future. This essay should only be submitted after all case reports/essays are assessed and returned to the candidate as it is possible that the assessor feedback from the case reports/essays may contribute to the candidate's learning through the module.

Any material presented for this module may be incorporated into the synoptic assessment required for the final certificate.

ANNUAL ASSESSMENT TIMETABLE

1 st February	If you are intending to submit work for assessment on the following
	dates, please inform CertAVP Admin Manager by this date
1 st March	Learning diaries/ legislative file/case books
	Synopses (only to be submitted once the associated case book has been assessed)
1 st September	Learning diaries/ legislative file/case books
	Synopses (only to be submitted once the associated case book has been assessed)

INSTRUCTIONS FOR SUBMITTING CASE REPORTS / REFLECTIVE SYNOPSIS / LEARNING DIARIES

The case report should be written in the third person in a style suitable for publication in a Journal (for example Avian Pathology).

The following frame work should be used as a guide to the structure of the case report:

- Unit / Farm description (size, type, company or independent, etc.)
- History (disease, medications, vaccines, monitoring programme)
- Clinical Picture/ flock records etc.
- Investigation
- Diagnosis
- Treatment/ disease control (short. Medium and long term)
- Other implications (e.g. zoonosis, local, wider)
- Discussion
- References

INSTRUCTIONS FOR SUBMITTING CASE REPORTS / REFLECTIVE SYNOPSIS / LEARNING DIARIES

Please ensure that at the beginning of your case book/synopsis is included:

- Your candidate number (to be given to you by the CertAVP office)
- Module name
- Case book/synopsis title
- Word count (excluding the above, tables, photo titles and references)

Please remove your name from any laboratory reports or other documents which are included in your submission to ensure anonymity.

Please submit your case book/synopsis as a

• MS Word document (97-2003 format or later)*

(Please ensure digital images are submitted in a **compressed** format so that they can be easily transferred via e-mail)

and your learning diary as a

• MS Excel spreadsheet (97-2003 format or later)*

attached to an e-mail and send it to: certavp@rvc.ac.uk

The preferred way of naming your file is module code, your name, and the type of work you are submitting, for example, **C-POU.3 Candidate 6 – Part A Case Diary.xls** or **C-POU.3 Candidate 6 – Part B Case Report 1.doc.**

* Please note that as case reports / synopsis / case diaries in alternative formats have been unreadable in MS Word, any other format will be sent back to the candidate.

RECOMMENDED READING LIST

Health and Disease

Poultry Diseases Sixth Edition (2008) eds. Pattison, McMullin, Bradbury and Alexander Disease of Poultry 12 edition (2011). Ed. Saif Diseases Of Poultry A Colour Atlas 2nd Edition Author: Ivan Dinev Color atlas of diseases of the domestic fowl & turkey (1985) C. J. Randall Diseases and Disorders of the Domestic Fowl and Turkey(1991) C. J. Randall

Nutrition

Nutritional and Digestive Disorders of Poultry (2006) eds Simon M. Shane, Lucy A. Tucker Nutrition of Chicken 4th edition eds. Leeson and Summers

Hatcheries and incubation

ROSS TECH Investigating Hatchery Practice October 2009 Avian Incubation (Poultry Science Symposium Series) [Hardcover] 1991 S. G. Tullett http://www.howtoincubate.com http://www.natureform.com

Poultry slaughter and processing

Poultry Meat Processing By Alan R. Sams - CRC Press (2009)

Handbook of Poultry Science and Technology : Primary Processing , Volume 1 Isabel Guerrero– Legarreta (editor) Wiley-Blackwell (2010)

Management Guides

Aviagen - Breeder and Broiler Manuals and Technical notes available online

Cobb - Breeder and Broiler Manuals and Technical notes available online

Hyline - Layer Manuals and Technical notes available online

Hendrix Poultry - Layer Manuals and Technical notes available online Hubbard - Breeder and Broiler Manuals and Technical notes available online Lohmonn - Layer Manuals and Technical notes available online

Codes of Practice

DEFRA Codes of Practice for Welfare Assured Chicken Production Code of Practice for Lion Eggs - The British Egg Industry Council RSPCA Welfare Standards for Laying Hens

Poultry Science Symposium Series Volumes 1-30.

Volumes 1-24 published and may be available from Carfax Publishing Company. Volumes 25 on are published by CAB International (CABI).

Journals – which also contain some good review articles

Avian Pathology Poultry Disease

Marking Regulations

1.	Course: RCVS – Certificate of Advanced Veterinary Practice
2.	Section: C Module Minor Poultry Species, Hatcheries and Incubation, Poultry Processing and Legislation (C-POU.3)
3.	Applicable to Academic Year: 2012/13 onwards
4.	Aspects of course covered by Examination: All areas studied during the module
5.	Requirement to be completed to permit entry to the examination:1. Appropriate enrolment to the C module.2. Candidates are advised that they should achieve a pass grade in the Module B-PAP.1
6.	 Form of Examination: This section is split into an A, B, C and D component, the module is completed by doing 2 of the 4 components. Part A, B and C i) a learning diary/case log ii) a casebook of two cases (1,000 words each), iii) a reflective synopsis (1,000 words) justifying the candidate's choice of cases and reflecting upon the candidate's learning during the module Part D i) a detailed file listing all legislative documents relevant to UK poultry production together with short summaries listing the main points relevant to a practicing poultry veterinarian ii) a casebook of two cases (1,000 words each)
7.	 Marking Criteria: 1. Case book, synopsis - The RVC common 17 point marking scheme applied at the post graduate (Masters) level. 2. Learning diary/case log, legislative file - approval of appropriate timeline and content as described in course literature
8.	Allocation of Marks and any additional requirements Each case report or essay is equally weighted
9.	Requirements to Pass Overall and Progress to the Next Stage Work must be submitted and assessed within the 10 year registration period, or if enrolled after 1st July 2010, within the 2 year registration period.
	First Submission

	Approval of the learning diaries/legislative file 50% or greater in the grading of each reflective synopsis 50% or greater in the grading of each case book
	Re-submission Sections graded below 50% in the first submission are re-graded on re-submission and the following criteria must be reached taking that new grading into account: Approval of the learning diaries/legislative file 50% or greater in the grading of each reflective synopsis 50% or greater in the grading of each case book
10.	Consequences of Failure 1. A candidate who fails at their first submission will be required to re-submit or re-sit the sections they have failed in the next or a future assessment cycle, or withdraw from the Certificate.
	2. A candidate who does not meet the requirements to pass overall after taking all the allowed opportunities to resubmit their work will normally be required to relinquish the course of study but s/he will have the right of appeal as described in the College Regulations.
	3. Should a candidate successfully appeal to be re-admitted to the Certificate they would normally have to repeat the entire module with new case material and would incur a further assessment fee.
11.	Classification The examination is only classified as a Pass or a Fail. Candidates that pass the examination will be allocated 10 credits in the CertAVP structure and the RCVS will be appropriately informed.
12.	Disclosure of Marks Candidates will be advised of their marks by email and they can request a letter confirmation
13.	Late submission of work Work that is submitted after the deadline cannot be accepted for grading in that cycle. Work may stay on file for grading at the next submission date or the candidate may re-submit before that date