

C-LAS.4

**TITLE: LABORATORY ANIMAL SCIENCE
 DISEASES OF LABORATORY ANIMALS**

CATEGORY AND VALUE: C - 10 CREDITS

NOTIONAL STUDY HOURS: 100

Candidates working towards the designated Certificate in Advanced Veterinary Practice (Laboratory Animal Science) will need to complete the following modules: A Professional Key Skills, B-Clinical Key Skills, B-Laboratory Animal Science and three out of a choice of four C-Laboratory Animal Science modules. Candidates may substitute one of the C-Laboratory Animal Science modules and replace it with one of the C Animal Welfare, Science and Ethics modules.

Candidates are encouraged to visit to a diagnostic laboratory for laboratory animals.

LEARNING OUTCOMES

This module will enable the candidate to:

- Gain a sound understanding of the common diseases affecting laboratory animals and the implications for scientific studies.
- Consider all factors in approaching an investigation leading to a diagnosis, treatment and or control.
- Consider and apply the principles of disease surveillance and health monitoring.
- Understand and implement the principles of biosecurity, containment, control and prevention of disease.
- Evaluate and implement methods of treatment, control and eradication.
- Understand diagnostic methods and appreciate their limitations.
- Perform simple diagnostic tests.
- Recognise and evaluate the risk of zoonosis.

ASSESSMENT STRATEGY FOR THIS MODULE

1. A learning diary of 3 months' duration (not necessarily consecutive). This will document the candidate's experiences with diseases of laboratory animals during this period, including diagnosis, treatment and prevention of diseases handled by the candidate, and also those encountered by the candidate through reading or discussion with others (*e.g.* diseases encountered through review of health reports on animals from external sources; novel diseases reported in the literature). A list of bibliography or other learning resources used to contribute to the learning diary should be included.

2. **EITHER:**
 - a. ONE case report of up to 2000 words in length, formatted along the lines of a published case report, *e.g.*:
 - a. Introduction: background information, set stage for problem
 - b. Case history, clinical presentation
 - c. Diagnostic evaluation
 - d. Outcome and response (*e.g.* methods of control if infection)

- e. Discussion: analysis of case; alternative strategies that could have been adopted, comparison to similar cases in literature

AND

A Critical review of one publication in a refereed scientific publication relevant to the module content (approx 2000 words).

OR

- b. TWO case report of up to 2000 words in length Cases should involve two different species and should be formatted along the lines of a published case report (as described above).

These submissions should be retained by the candidate and will be part of the submission of work for the final synoptic assessment for the full qualification.

MODULE CONTENT

Species to be included: primarily rodents and rabbits, but also non-human primates, fish and birds (in a laboratory/research setting) and larger species where specific research orientated issues arise.

- Disease prevention – biosecurity, quarantine, isolation and barrier methods, specific pathogen free and quality assurance.
- Infectious disease agents – clinical signs, pathology, epidemiology, methods of diagnosis, treatment and control.
- Non - infectious diseases – clinical signs, pathology, epidemiology, methods of diagnosis, treatment and control.
- Zoonosis
- Health surveillance – health screening, health monitoring, diagnostic methods and limitations, diagnostic laboratories and quality assurance
- Treatment, control and eradication of disease.
- Implications of disease on the animal, colony and science.

Reference list and suggested reading

Examples of relevant literature and websites can be provided by the RCVS Library if they are not already available through the module provider.