GENERAL GUIDANCE NOTES

The following applies to all B modules.

Before embarking on this, or other modules, candidates must fulfil the following criteria:

a) Be a member of RCVS, or hold a registrable degree.
b) Have at least 1 year’s postgraduate experience working as a veterinary surgeon
c) Be enrolled with RCVS if intending to take the Certificate in Advanced Veterinary Practice (enrolment will be valid for 10 years)
d) It is also recommended that candidates who graduated after 2007 will have already declared themselves competent in their ‘Year One Competencies’, by completing the Professional Development Phase (PDP) before enrolling for any modules.

PREPARING FOR A B MODULE

Before embarking on any module, the candidate is advised to plan a structured programme of continuing professional development to help them achieve their objectives. Involvement in ‘learning sets’ and networks of other candidates working towards the same or similar modules is encouraged; this could be a service provided by CPD providers, or could be initiated by the candidate themselves on a less formal basis. RCVS and the University of Edinburgh consider that a candidate will need advisers/mentors to support them through the programme. The candidate is free to choose their own advisers/mentors, or they may wish to enrol on a course offered by a university or by other CPD providers, where tutorial or supervisor support is available.

GUIDANCE FOR THIS MODULE

Candidates working towards the designated Certificate in Advanced Veterinary Practice (Laboratory Animal Science) will need to complete the following modules: A-FAVP.1 Foundations in Advanced Veterinary Practice, B-LAS.4, and three other C modules (from LAS-designated modules) plus one other B or C module. Upon completion of all the necessary modules, a further synoptic assessment will also be required.
AIMS
The aim of the module is to enable candidates to extend and consolidate the clinical knowledge and skills they will have gained at undergraduate level, and the foundation skills developed as part of their A module. The candidate will be able to evaluate their own standards of practice and develop strategies for continuous improvement in the future, and in particular, when progressing to their C modules.

LEARNING OUTCOMES
At the end of this module candidates should be able to:

• Demonstrate a basic understanding of key areas of laboratory animal science
• Understand the interactions between laboratory animals, their environment, and their use in research
• Apply the information gained to advise on the housing, husbandry and use of laboratory animals
• Be aware and advise on the legal and ethical requirements required for use of animals in research procedures in the UK and Europe

ASSESSMENT STRATEGY FOR THIS MODULE
The candidate is required to submit the following two items of evidence for assessment – a learning diary and a case book of two cases.

1. Learning diary
A diary maintained over a period of two months for those in full-time employment as NVS, and 6 months for those in part-time work. This should demonstrate regular contact with laboratory animals in a research facility or laboratory animal breeding establishment, and should document how the role of the NVS was fulfilled during this period.

The diary should include problems encountered (e.g. diseases, welfare problems, problems with model development) and how they were managed, as well as time spent on other aspects of the NVS’s role, e.g. training, advising on best practice, preventative medicine.

2. Case book
The case book should contain two case reports of a maximum of 2000 words each. These may comprise:

• investigation and/or management of a health or welfare or experimental design problem in a research facility
• development of teaching or training of research staff
• development and/or refinement of an animal model
• development and/or refinements of anaesthetic or peri-operative care protocols
• fear and distress minimisation strategies
- development and/or refinement of environmental enrichment measures and potential impact on the science

This list is not intended to be prescriptive, but aims to provide some guidance on suitable topics for case reports.

**All cases are to have been managed by the candidate.** Cases selected should demonstrate that the candidate has dealt competently with a range of commonly presented conditions or situations from the area of practice in which they are working.

**Cases should be recent,** with “recent” indicating cases seen preferably within the period of registration on the module. Where this is not possible, i.e. due to late registration, cases seen within the last 2 years will be acceptable.

It is not possible to take one element of an assessment in one year, and the remaining in a following year.

**ASSESSMENT STYLE AND FORMAT**

The candidate is expected to pay close attention to the specific format and style for their submission as outlined in the **CertAVP Assessment Style and Format Guidelines** document provided via the online learning environment.

As **standard**, the candidate should ensure that each submitted element:

- Displays the **word count** at the start of the document (where specified)
- Includes the candidate’s **examination number**
- Has had all other identifying details, e.g. candidate’s name and contact details, removed to ensure anonymity in the marking process

If the candidate has any questions on the assessment process, these should be directed to the CertAVP team at Edinburgh. Full contact details are provided at induction, and via the virtual learning environment.
SYLLABUS CONTENT

Species to be studied: greatest emphasis will be given to the most commonly used species (rodents and rabbits), but also non-human primates, fish, birds and those other species used in research including any invertebrates that may be included in future legislation.

1. Biology and behaviour
   - Taxonomy, anatomy, physiology, recognition of normal behaviour and abnormal behaviour
   - Breeding systems, recording systems and interpretation of data
   - Use of behavioural and physiological data as welfare indicators

2. Nutrition
   - What animals normally eat and what is offered in the laboratory
   - Presentation, processing and storage of diet and nutritional requirements
   - The concept of nutrition as an occasional source of enrichment

3. Housing, husbandry and management
   - Animal house design, ventilation, heating and lighting, cage construction, etc.
   - Animal house management systems and record keeping
   - Impact of housing and husbandry systems on scientific outcome measures and fidelity of data
   - Barrenness, environmental enrichment and housing

4. Genetics and genetic manipulation
   - General principle of practical genetics including genetic modification strategies and aims, definitions, nomenclature and genetic monitoring

5. Disease, diagnosis and control
   - General principles with emphasis on the common and important diseases
   - Concepts of rederivation and individually ventilated racks as methods of disease control

6. Ethics
   - Use of animals, three Rs, cost / benefit analysis, and moral agency
   - Sufficient depth to allow appreciation of Project licence system and general ethical concepts
   - Law Council of Europe Convention and the EU Directive, ASPA, COSHH, the Animal Welfare Act and Animal Health and Welfare (Scotland) Act, VSA, Codes of Practice, guidelines and other European and UK laws
7. Anaesthesia and euthanasia
   • Introduction to laboratory animal anaesthesia
   • Methods of humane killing and impact on animal welfare and scientific procedures

8. Analgesia
   • Introduction to the recognition, assessment, prevention and management of pain in laboratory animals

9. Surgery and common procedures
   • Introduction to experimental surgery in small animals

10. Experimental design
    • Introduction to research strategies that minimise pain, distress, and suffering
    • Experimental design and statistics