

## C-VA.2 Equine Anaesthesia and Analgesia

**Credits:** 10 (100 hours)

**Provider:** Veterinary Postgraduate Unit – School of Veterinary Science

### RCVS Content Covered

Click [here](#) to view the module content as outlined by the RCVS.

### Aim of the Module

The aim of this module is to enable the candidate to extend and consolidate clinical knowledge and skills gained at undergraduate level, and to develop an in-depth understanding of the application of that knowledge in a practice environment in relation to equine anaesthesia.

### Learning Outcomes

At the end of the module, candidates should be able to:

1. critically evaluate pre-existing disease, using assessment of clinical, haematological, biochemical and other diagnostic findings, and its impact on the conduct of anaesthesia and management of the peri-operative period;
2. critically apply knowledge of the anatomy and physiology of the neurological, cardiovascular and pulmonary systems, the effects of anaesthesia on these body systems and how deleterious effects can be minimised with appropriate selection of drugs;
3. critically evaluate the pharmacology of the commonly used drugs and their application in sedation, premedication, standing surgery, induction and recovery in equine anaesthesia;
4. recognise and manage common anaesthetic emergencies and complications that develop in the postoperative period, which result in mortality or morbidity, and critically evaluate methods to minimise their development;
5. critically appraise the literature relevant to clinical cases in the topics covered and how the literature can be used to inform practice.

### Module Structure

The syllabus will be divided into 5 study units, each containing basic lecture and reading material supported by weekly interactions in the form of asynchronous case-based discussions, other discussions and/or synchronous journal clubs/literature critiques.

**Study Unit 1.** This unit will cover the anatomy and applied physiology of the cardiovascular and respiratory systems with specific emphasis on their role in oxygenation and ventilation. It also includes a review of the anatomy neurological system and its relevance to equine anaesthesia.

**Study Unit 2.** This unit will cover the pharmacology of the drugs commonly used in equine anaesthesia, including injectable and inhalational agents, and their role in sedation and

anaesthesia of the equid. A focus is placed on the potential side effects of these drugs, and strategies to pre-empt and manage side effects.

**Study Unit 3.** This unit will cover the cover the equipment used in equine anaesthesia and its application. The advantages and disadvantages of intermittent positive pressure ventilation and the importance of appropriate monitoring are emphasised.

**Study Unit 4.** This unit will focus on the specific considerations in anaesthesia of the foal including the importance of recognition of pre-existing disease and hypothermia.

**Study Unit 5.** This unit will cover common equine emergencies including wounds, fractures and colic and the special anaesthetic considerations given to each disease state. Emphasis is placed on an understanding of the underlying disease conditions and how these affect anaesthesia planning.

## Assessment Strategy

- **2 x 1500-word reflective case reports (60%)**  
On a topic related to the relevant study units, students are required to reflect on their own practice, using evidence-based veterinary medicine to inform their reflection. Reflective case reports are written following the format of published case reports in the veterinary literature. The case report component of the assessment must be passed for successful completion of the module, and is non-compensatory with other assessments, however there is compensation between case reports. Case reports are also submitted to a discussion board for critique and discussion by/with peers. A proportion of marks for this assessment are also allocated to this discussion element.
- **1 x 1-hour open book examination (30%)**  
Based around clinical scenarios/cases, relevant to the module study units.
- **1 x written journal critique (not more than 500 words) and group discussion (10%)**  
Hosted by a staff member online synchronously using MS Teams. 2-4 students critique the same paper, and then discuss their critiques and any variations with the group, and the tutor and the students then hold a discussion of all papers. These are assessed on the submitted critique as well as the discussion.
- **1 x case log – 20 cases (pass/fail)**  
The case log assessment is designed to assist the candidate in developing a solid foundation for everyday equine practice and demonstrate the necessary knowledge and skill base in the clinical setting.

Assessments are submitted sequentially with feedback being given between assessments to aid in the development of writing skills.

PLEASE NOTE: It is your responsibility to ensure that you have access to sufficient appropriate cases where you were the primary decision maker to produce adequate material for the module. This may not be possible with some internship positions. You must also be aware of any limitations of your facilities that may make the accumulation of appropriate cases difficult or impossible.