

## **C-VC.3 Cardiovascular Therapeutics**

**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:

- 1. increase the student's depth of knowledge and understanding of the therapeutic management of cardiorespiratory disorders in veterinary species;
- 2. develop the student's knowledge and understanding of how to reduce deleterious effects of procedures such as anaesthesia and other interventions on the cardiorespiratory system and to manage any complications that occur.

## **Learning Outcomes**

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

- apply clinical reasoning skills and evidence-based medicine in the management of cardiovascular and respiratory disease, including the pharmacology and clinical application of the major drug groups, relevance and utility of non-pharmacological therapy and the surgical options available;
- 2. critically evaluate the effects of fluid therapy, anaesthetics and other systemic agents on the cardiovascular system;
- 3. critically evaluate the principles and application of cardiopulmonary resuscitation;
- 4. critically appraise the literature relevant to clinical cases in the topics covered and how the literature can be used to inform practice;
- 5. critically reflect on the appropriate case for onward referral.

#### **Module Structure**

The syllabus will be divided into 5 study units, each containing 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 cardiac medications

The focus will be on the mechanism of action, pharmacology and clinical application of the commonly used medications in the treatment of cardiorespiratory disorders.

### Study Unit 2: This unit will cover non-pharmacological therapy

The focus will be on the role of neutraceuticals, diet, exercise and other management tools when treating patients with cardiorespiratory disorders.

Study Unit 3: This unit will cover surgical therapy for cardiorespiratory patients
The focus will be on awareness of the procedures and appropriate patient selection rather than the specifics of the procedures themselves.

# Study Unit 4: This unit will cover management of the most common cardiorespiratory disorders

The focus will be on integrating medication and non-medical therapies to create a treatment plan and therapeutic goals, then monitoring patient response.

Study Unit 5: This unit will cover the effects of fluid therapy, anaesthetics and other systemic agents on the cardiovascular system and cardiopulmonary resuscitation. The focus will be on understanding pathophysiological changes and how to identify and manage them.

## **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 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.