

C-VC.1 Cardiovascular Anatomy, Physiology and Pathology

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:

1. to increase the student's depth of knowledge and understanding of the normal anatomy and physiology of the cardiovascular and respiratory systems of veterinary species;
2. to develop the student's knowledge and understanding of pathological changes to the cardiovascular and respiratory systems in veterinary species.

Learning Outcomes

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

1. critically evaluate the anatomy and physiology of the cardiovascular and respiratory systems and apply this understanding of normal anatomy to appreciate how alterations in the normal structure and function of these systems contributes to clinical disease manifestations.
2. apply clinical reasoning skills and evidence-based medicine in the diagnostic approach and management of diseases relevant to the topic covered.
3. 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 3 study units, preceded by an introductory week, 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 anatomy of the mammalian cardiovascular and respiratory systems. The focus is on the integration of structure and function at the cellular and tissue level and how this is altered during embryological development and in congenital disease states.

Study Unit 2: This unit will cover cardiorespiratory physiology. The focus is on physiology in the normal animal and the alterations seen in disease states or physiological alterations such as exercise and pregnancy

Study Unit 3: This unit will cover cardiovascular and respiratory pathology. The focus is on the pathophysiological effects of the more common disease states affecting these body systems

Assessment Strategy

- **1 x 1500-word reflective case report (30%)**
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.
- **2 x 1-hour open book examinations (60%)**
Based around clinical scenarios/cases, relevant to the module study units.
- **1 x written journal critique (not more than 500 words) and short oral presentation of the critique (15 minutes) (10%)**
Hosted by a staff member online synchronously using MS Teams. Students present their critique to 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.