

C-E.4 Equine Neuromuscular, Behaviour and Special Senses

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 aims of this module are to increase your depth of knowledge of disease and disorders involving the equine nervous system, eyes and ears as well as develop your understanding of equine behaviour, stress, pain and suffering in the horse. This module will also incorporate the generic skills of evidence-based medicine, clinical reasoning, literature review and critique, communication, clinical audit and reflection.

Learning Outcomes

By the end of this module successful candidates will be able to:

1. critically evaluate the pathophysiology and clinical disease syndromes, and the approach to diseases affecting the eye and neuromuscular systems of the horse;
2. critically appraise the physiology of pain, suffering and stress in the horse to compare and contrast stress and pain in the horse;
3. apply clinical reasoning skills and evidence-based medicine in the diagnostic approach and management of diseases relevant to the topic covered;
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 4 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: Equine Ophthalmology

- Ocular anatomy, immunology and physiology
- The ocular examination
- Ophthalmic and periocular diseases
- Clinical presentations: visual deficits, ocular and periocular discharge, ocular pain

Study Unit 2: Equine neuromuscular disease

- Equine neuroanatomy
- The neurological examination
- Neurological diseases: Brain, cerebellum, brainstem, spinal cord and peripheral nerve disease

- Myopathies and muscular disorders
- Clinical presentations: ataxia, paresis, muscle atrophy, sensory deficits, abnormalities of balance, trembling, seizures, sleep disorders, altered states of consciousness and mentation, deafness, pain or swelling and myopathy.

Study Unit 3. Equine Headshaking

- Pathophysiology and relevant neuroanatomy of headshaking
- Clinical presentation, diagnosis and treatment of headshaking

Study Unit 4. Equine pain and stress

- Physiology of pain and suffering and stress
- Clinical indicators of pain on the horse
- Stress versus pain
- Minimising stress

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 – 10 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.