

Reference Number	C-E.12
Module Title	Equine Dental Anatomy and Physiology
Category and Value	C – 10 credits
Study Hours	100

Introduction

This module will cover the underlying theory of equine dentistry and promote the development of practical equine dental skills. It is aimed at practicing equine veterinarians.

This module is one of three C-modules covering Equine Dentistry, which can be used towards a designated Certificate in Advanced Veterinary Practice (Equine Dentistry). Candidates are advised to consult the list of available modules for the complete set of options. Upon completion of all the necessary modules, a further synoptic assessment will also be required to achieve a designated certificate.

It is recommended that candidates complete Foundations of Advanced Veterinary Practice (A-FAVP.1) and Equine Practice (B-EP.3) prior to this module, as they provide essential postgraduate training in literature critique and evidence-based medicine (required for journal clubs and assessments) and fundamental training in reflective and evidence-based writing, and clinical reasoning, required for case-based assessments.

Aims

The aims of this module are to develop knowledge of the underlying theory of equine dentistry and to promote the development of practical equine dental skills.

Learning Outcomes

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

1. Demonstrate an in-depth knowledge of the normal anatomy and physiology of the equine oral cavity and associated structures and the practical application of this knowledge;
2. identify and evaluate developmental disorders of the equine oral cavity and how they affect normal function;
3. demonstrate the application of a sound clinical reasoning process in the approach to dental problems, identifying evidence from the diagnostic database and scientific literature as well as the ability to appropriately adapt approach to client, animal and practice factors;
4. critically appraise literature relevant to clinical cases in the topics covered and explain how the literature can be used to inform practice;
5. demonstrate the ability to critically review and reflect on clinical work, recognise the truly unusual case and when to refer a case that is beyond personal or practice capabilities

This module will also incorporate the generic skills of evidence-based medicine, clinical reasoning, literature review and critique, communication and reflection.

Module Content

Dental Anatomy and Anatomical Abnormalities

- The anatomy of the head, oral cavity, and teeth.
- Embryological development of the teeth.
- The modified Triadan system of dental nomenclature.
- Aging by dentition - and its great limitations - eruption times of all deciduous and permanent teeth
- Developmental abnormalities of dental tissues and structures including malocclusions

Dental Physiology and Nutrition

- The masticatory cycle and factors influencing the development of enamel points
- Function of the occlusal surfaces and transverse ridges.
- Concepts of molar occlusion (lateral excursion assessment)
- Effect of nutrition on the dental health of the horse
- Effect of poor dentition on nutrition – e.g. presence of long fibres/undigested grains in faeces
- Nutritional advice for horses with dental disease.

The Dental Examination and Equipment

- Appropriate restraint, visual and manual examination
- Completion of a dental chart and formulation of individual dental maintenance schedules
- Recognition of clinical signs of dental disease – including quidding, weight loss, oral ulceration, gingivitis, diastema, occlusal defects, and dental fractures
- Knowledge of regularly used dental equipment including speculums, manual and motorised floats
- Maintenance of equipment in a safe, clean and hygienic condition

Odontoplasty and maintenance of dental health

- Reasons for odontoplasty in some horses.
- Techniques for floating specific areas of the mouth.
- Arguments for and against the creation of 'bit seats'.
- Dangers of over treatment – smooth mouth and exposure or thermal damage to pulp horns.
- Wolf tooth extraction.

The law and professional ethics as related to equine dentistry.

Knowledge of:

- The Veterinary Surgeons Act (VSA).
- Potential derogations under the VSA to permit dental procedures to be performed by lay people.
- Ethically and legally working with accredited lay Equine Dental Technicians and Veterinary Surgeons

Assessment Strategy

Module providers are responsible for deciding on assessment strategies and methods, subject to accreditation by RCVS.