

REF. NO.	C – E.12
TITLE:	EQUINE DENTISTRY – EQUINE DENTAL ANATOMY AND PHYSIOLOGY
VALUE:	10 CREDITS
NOTIONAL STUDY HOURS:	100

GENERAL GUIDANCE NOTES

The following applies to all C modules.

Before embarking on this, or other modules, candidates must fulfil the following criteria:

- a) Be a member of RCVS, or hold a registrable degree.
- b) Have at least 1 year's postgraduate experience working as a veterinary surgeon
- c) Be enrolled with RCVS if intending to take the Certificate in Advanced Veterinary Practice (enrolment will be valid for 10 years)
- d) It is also recommended that candidates who graduated after 2007 will have already declared themselves competent in their 'Year One Competencies', by completing the Professional Development Phase (PDP) before enrolling for any modules.

PREPARING FOR A C MODULE

Before embarking on any module, candidates are advised to plan a structured programme of continuing professional development to help them achieve their objectives. Involvement in 'learning sets' and networks of other candidates working towards the same or similar modules is encouraged; this could be a service provided by CPD providers, or could be initiated by the candidates themselves on a less formal basis. RCVS considers that candidates will need advisers/mentors to support them through the programme. Candidates are free to choose their own advisers/mentors, or they may wish to enrol on a course offered by a university or by other CPD providers, where tutorial or supervisor support is available.

GUIDANCE FOR THIS MODULE

This module can be taken as a 'stand alone' option or as part of a structured course of study aimed at obtaining the Cert AVP Equine Dentistry. The other designated modules are C-E.13 Equine Dental Care and Treatment and C-E.14 Equine Dental Surgery

All candidates will normally have completed the A module, Professional Key skills, and at least one of the B modules, before undertaking a C module, although candidates can choose to work through modules in a different order if they wish.

CPD providers may offer the module as a self-standing course or may wish to combine it with others as part of a longer study programme.

Whichever order modules are tackled, compliance with best practice for all the topics covered by module A-PKS.1 will be expected whenever these are appropriate in C modules. For example, awareness of, and compliance with, all relevant legislation, welfare and ethical principles, will be required throughout.

LEARNING OBJECTIVES

The objective of this foundation module is to promote a scientific, evidence based approach to equine dentistry, and to help candidates develop both practical and theoretical skills in the field.

At the end of this module module, candidates should:

- have a thorough understanding of the normal anatomy and physiology of the oral cavity and associated structures and be able to use this to enable a methodical approach to the diagnosis and treatment of a range of common equine dental conditions.
- be aware of scientific, evidence-based rationales for equine dental procedures.
- be confident in the completion of dental charts and developing treatment plans.
- be able to take a well balanced approach to equine dentistry
- be able to readily identify cases requiring referral to a specialist institution or practitioner.

ASSESSMENT STRATEGY FOR THIS MODULE

It is suggested that this module could be assessed by the following methods:

- A short learning diary which should contain 50 dental charts completed by the candidate within a six month period. These charts should be selected to demonstrate the candidate's skills at recording normal dental findings and dental abnormalities and ability to determine and execute appropriate treatment plans. At foundation level the main skill being assessed is the ability to make an accurate record of the horse's dentition.
- A 10 question short answer written examination testing knowledge of the syllabus.

MODULE CONTENT

Anatomy

Candidates should be able to demonstrate a detailed knowledge of

- The anatomy of the oral cavity and its supporting structures including nerve supply and normal variations.
- Gross anatomy of the head including sinus structure, cranial nerves, and oral cavity.
- Histological anatomy of the teeth / morphology.
- The modified Triadan system of dental nomenclature.

- Embryological development of the teeth.
- Age by dentition - and its limitations - eruption of molars.

Anatomical abnormalities

Candidates should be able to demonstrate understanding of a range of developmental abnormalities, including:

- Hypoplasia of dental tissues e.g. cementum or enamel.
- Oligodontia - polydontia.
- Brachygnathia.
- Prognathia.
- Campylorrhinus lateralis (Wry nose).
- Other types of malocclusions including those of individual teeth.
- Abnormal or delayed shedding of deciduous caps.
- Cleft palate

Dental Physiology

Candidates should be able to demonstrate an appreciation of normal dental physiology, including:

- The effect of the development of the permanent dentition on dental diseases
- The chewing cycle
- Function of the tables and transverse ridges.
- Function of the sharp enamel points.
- Concepts of molar occlusion (lateral excursion). No rigid or arbitrary formulae to be applied.
- Modifications to normal that may be required to aid the rider / use of bits.
- Affect of nutrition on dental health in the horse - variation between locations.

Nutrition.

Candidates should have a sound basic knowledge of good management practices.

- Basic nutrition for maintenance, work, growth and pregnancy.
- Effects of poor dentition on nutrition – analysis of long fibre in faeces.
- Nutritional advice for horses with dental disease.

The Dental Examination

Candidates should demonstrate an ability to take a dental and general history and to take a logical and systematic approach to dental examination.

- Appropriate sedation techniques - consideration to safety and risk assessment.
- Completion of a dental chart and formulation of individual dental maintenance schedules.
- Palpation.
- Manipulation - excursion test.
- Use of speculum.
- Visual and manual examination including appropriate use of dental mirror.
- Recognition of clinical signs of dental disease - including oral ulceration, gingivitis, diastema, occlusal defects, dental fractures, quidding and weight loss.

Equipment

Candidates should have knowledge of, and be able to compare the effectiveness of, regularly-used dental equipment, including:

- The various floats.
- Different types and shapes of blade available.
- Gags and full mouth speculums. The pros and cons of the various types.
- The commoner power instruments both rotary and reciprocal (including the dangers both thermal and traumatic of using this equipment).
- Safety equipment such as goggles, masks and gloves.
- Maintenance of equipment in a clean and hygienic condition.
- Apical abscessation

Basic 'Floating' and Maintenance of dental health.

Candidates should be able to understand the principles involved in 'floating' the teeth.

- Reasons for floating.
- 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 of pulp cavities.
- Wolf tooth extraction.

The law and professional ethics as related to equine dentistry.

- The Veterinary Surgeons Act.
- Potential derogations under the VSA to permit equine dentistry by lay people.
- Working with lay Equine Dental Technicians and other Veterinary Surgeons.
- When to refer a case to a centre of excellence.