

# Certificate in Advanced Veterinary Practice

## B-EP.3 Equine Practice

### Module Outline



**Module Leader:**

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**Reader in Equine Medicine**

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This module is relevant to a number of species and discipline based modular certificates, such as equine practice, anaesthesia, cardiology, dermatology, diagnostic imaging and reproduction, and can also be taken as a standalone module. Candidates who are aiming to achieve one of the equine designated Certificates in Advanced Veterinary Practice should refer to the modular combinations document which is available on the RCVS website.

### **Learning objectives**

Candidates should have a sound grounding in the areas listed below. They also need to develop the skills needed to write case reports that demonstrate the following competencies:

- To acquire and develop the written communication skills required to present case reports.
- To demonstrate an ability to communicate competence in decision making and clinical reasoning.
- To demonstrate reflective skills that enable understanding of the issues raised in clinical practice and the candidate's learning as a result of completing the module.

### **Learning outcomes**

Having completed the module candidates should be able to deal competently with a range of commonly presented conditions or situations from equine practice. In the presentation of these cases the following learning objectives should be achieved:

- Demonstrate a sound and logical approach to clinical cases and an understanding of the pathophysiological principles of the disorders diagnosed and treated.
- Clearly articulate the clinical reasoning and the decision making process in assessing clinical cases including discussion of diagnostic procedures and assessment of relevant laboratory data. This should include demonstration of a problem-orientated approach to clinical cases and development of appropriately prioritised differential diagnosis lists.
- Demonstrate an appreciation of the principles of clinical pharmacology related to drugs used in equine practice.
- Demonstrate understanding of the principles of surgical practice as they relate to pre-operative evaluation of the patient, aseptic technique, peri-operative analgesia, justification for surgical procedure chosen, client education, postoperative care.

- Demonstrate understanding of the principles of anaesthetic management including pre-anaesthetic assessment, drug pharmacology, choice of anaesthetic equipment, monitoring and supportive measures, and recovery/post op care.
- Describe use of diagnostic imaging in their practice premises and (where applicable) in the field including quality control procedures in place that allow for the safe production of a diagnostic image.

## Assessment

- 5 case reports with a word count between 1,000 and 1,500 words each and all cases are to have been managed by you. The 5 case reports need to cover at least 5 different body systems and should demonstrate that you have an understanding and appreciation of all the learning objectives for the module. One case report should specifically cover the diagnostic imaging learning objective. It is essential that you demonstrate that you have a sound and logical approach to their clinical cases and an understanding of the pathophysiological principles of the disorders diagnosed and treated. Discussion of technical and clinical features of the case should not take precedence over clearly articulating your clinical reasoning. Cases selected should illustrate that you have dealt competently with a range of commonly presented conditions or situations from equine practice. Cases do not need to be complicated or unusual and case series are generally not suitable or, at least, do not provide any advantage over individual case reports.
- An essay with a word count between 1,000 and 1,500 words justifying your choice of cases and reflecting upon your learning during the module. This essay should only be submitted after all case reports/essays are assessed and returned to you as it is possible that the assessor feedback from the case reports/essays may contribute to your learning through the module.

The module leader will **review your first case report**; you may wish to receive this feedback before submitting further cases for marking.

## Assessment weighting

- |                 |      |
|-----------------|------|
| • Case reports  | 100% |
| • Summary essay | Pass |

Each case report has a 20% weighting of your final module result. The final summary essay will not receive a mark but submitting and passing it is a condition of passing the module.

## Assessment timetable

Reports may be submitted at any time during the year and they will be assessed within 4 weeks of receipt.

It isn't recommended to submit all five reports at once. The module leader will **review your first case report**; you may wish to receive this feedback before submitting further cases for marking.

Once you have received the feedback on one report, then submit your reports gradually (for example, submit 1-2 reports first), then the feedback you receive on your first few reports should give you a good idea of what is required of your other reports. Another reason is if your grammar and spelling were poor, and your references were cited incorrectly, then this would be highlighted in your first submissions. You could then correct these for the remaining reports. You are allowed to submit as many as you wish, but it isn't recommended to submit all five for marking at the same time.

**The summary essay may only be submitted after all five of your reports have been assessed and returned to you as it is possible that the assessor feedback from the five reports may contribute to your learning through the module.**

## Learning support

Learning support is provided to aid self-directed learning and to provide easy access to published articles. You will be given a username and password which will allow you to log on to 4 different systems:

### 1. RVC Learn (<http://learn.rvc.ac.uk/>)

- Sample case reports with feedback for each area
- Papers and case studies periodically added
- Access to a discussion forum that is used by all candidates enrolled on the CertAVP and periodically accessed by the module leader and the RVC Equine team
- A recorded webinar (*coming soon!*) from the module leader giving:
  - The aims and objectives of the module – the learning outcomes tested and what we are looking for
  - How the module is structured and what is required for each of the elements
  - Tips and instructions for the case reports
- Sample case reports with feedback
- Access to SCOUT, RVC's solution for the discovery and delivery of resources including books, ebooks, journal articles and digital objects, all in one single search. Log in to SCOUT using your RVC username and password to save items on your eshelf. If you are able to use the library in person, you can borrow a book for one week with photo ID. IT and Library support is available for this facility (email [library@rvc.ac.uk](mailto:library@rvc.ac.uk) or [helpdesk@rvc.ac.uk](mailto:helpdesk@rvc.ac.uk)).

### 2. RVC Intranet (<https://intranet.rvc.ac.uk/>)

Access to all information available to all RVC students and employees, for example, news, events, policies, committees, services, Library, IT helpdesk, etc.

### 3. Athens (<http://www.openathens.net/>)

A huge amount of any library's information is now available online, e.g. electronic journals, e-books and databases. 'Athens' is a system used by UK universities for controlling access to these type of online services and with your username and password, you can access many of a library's online databases, electronic journals and e-books seamlessly.

### 4. Email (<http://mail.rvc.ac.uk/>)

You are given an RVC email address, which is compulsory to use for CertAVP communication and submission of work.

## Case report guidelines

The purpose of the CertAVP B module case reports is to show your clinical reasoning and the decision making process you followed in assessing the case. The focus of the report should therefore be on assessment and justification of the decisions made, rather than the clinical details of the horse's disease/syndrome or the treatment(s) followed.

When presenting each case a good way to structure your assessment so you keep an open mind and don't get bogged down in remote diagnostic possibilities or lose sight of the patient is to do the following:

1. Summarise the key information from the history and presenting/clinical signs
2. Make a problem list: identify what the problems are, which are specific and which are the most important. Order them on the problem list with the most specific and important problems first.
3. Define each problem: ensure you have appropriately defined each problem if necessary (this varies from problem to problem). Remember that define means – 'do I really know what the clinical problem is e.g. weakness vs ataxia or anorexia versus dysphagia' – it doesn't mean having to write a wordy definition of the problem
4. Discuss each specific problem: list the possible systems involved
5. Consider whether the problems are related or separate: make an assessment about whether all problems are related to one diagnosis. If they are (i.e. if it is inconceivable there could be different explanations for the problems) you can select one key specific problem and use this on which to base your diagnostic plan. If there is anything to suggest they may not be (different chronology, unusual association of clinical signs etc.) then you need to assess each specific problem separately.
6. List a differential diagnosis: following the clinical reasoning shown in steps 1-5
7. Indicate which of the systems or diagnoses are more likely in light of the problem list and by considering the history, clinical signs and problem list as a whole. At this stage you should be attempting to integrate these data and considering which information is important, which is unimportant and therefore which differential diagnoses are more likely and which are less likely. Provide an overview of your summation of the case data. Discuss how you would explain/summarise your thoughts to an owner so that they understand why you are going to initiate the diagnostic or treatment plans you propose.

8. Explain your diagnostic plans - if you are having difficulty articulating your plan, write down why you want to carry out these investigations, e.g. take blood, do radiography, ultrasonography etc and then explain why you want to do those tests. If you can't explain why you want to do them then you probably don't have a good reason for spending the client's money! It therefore follows that there should not be a diagnostic or treatment plan that does not relate to your assessments in steps 6 & 7, e.g. do S.equi serology if you have never mentioned in your assessment the possibility of S.equi as a diagnosis. It is not necessary to go into a lot of detail about the technical aspects of the diagnostic tests themselves or how the tests are interpreted, although you should indicate whether the tests were judged to be positive or negative/supportive or unsupportive of the differential diagnosis being considered. The aim is to show how the tests you choose relate to your differential diagnosis and how they will help you reach a definitive diagnosis.
9. Don't just state 'I want to do bloods'. State which assays you are interested in and why. If you have chosen a biochemical profile, explain why you chose this rather than individual assays. While a biochemical profile is often the most cost effective way to obtain data, it is still important to consider which specific tests within the profile you are interested in and why. This (i) ensures you don't overlook important tests that may not routinely be available to you (e.g. electrolytes in some in-house systems) and (ii) intellectually prepares you to appropriately assess the significance of the results for your particular case.
10. Outline your treatment plan, giving an indication of where your treatment priorities lie and justifying why specific medicines or surgical procedures were chosen: the aim here is to explain why you selected the treatments used, not to discuss the treatments in detail

For **surgery cases**, your case report should be laid out as above. The report should not be a lengthy description of the particular condition requiring surgery or surgical procedure but instead should focus on the following topics:

- Pre-operative assessment of the patient and your decision making process, as outlined in steps 1 –9 above.
- Pre-operative education of client expectations – this includes discussing risks and complications associated with surgery and expected outcome (i.e. prognosis and recovery time)
- Aseptic technique – would include all aspects from preparation of patient, theatre, instruments and surgical team
- Very brief description of diagnostic test(s) performed and surgical procedure(s)
- Justification for the therapeutic protocols used e.g. analgesia, antimicrobial therapy but not anaesthesia protocols



- Justification for choice of surgery procedure(s) – a brief discussion as to why a particular surgery was performed
- Post-operative care of the patient

**Reproduction cases** should be presented in a similar way: the report should not focus on a detailed description of the particular reproductive condition requiring treatment. The aim is to show the clinical reasoning and decision making processes you followed in your assessment of the case. Your report should focus on assessment of the case as in steps 1-9 above and should include your communication to the client and management of their expectations for the case. Your account of diagnostic tests should focus on the reasons for carrying out those tests and you should concentrate on the justifications for the treatment chosen, rather than providing lots of detail about the treatments themselves.

### Summary essay

The final submission is a 1,000 - 1,500 word reflective essay discussing the reasons for the choice of cases, your learning during the module and how this learning has influenced your and/or your team's current and future practice. This might include what has changed in your approach to a case, any new procedures or investigations that are now considered, any additional reading or learning strategies which were helpful, support you have been able to give to your colleagues and/or any unexpected features of a case which will influence decision making in the future. It can be helpful to base the essay using the **reflective Three What's** approach:

- **What?** (did I do/observe/write about);
- **So What?** (did I learn),
- **Now What?** (how will this change my practice in the future).

This essay should only be submitted after all case reports/essays are assessed and returned to you, as it is possible that the assessor feedback from the case reports/essays may contribute to your learning through the module.

Each case report has a 20% weighting of your final module result. The final 1,500 word summary essay will not receive a mark but submitting and passing it is a condition of passing the module.

## Instructions for submitting case reports

Please ensure that your report includes this table on the front page:

|   |        |
|---|--------|
| <b>Name:</b>  |        |
| <b>Module:</b>  | B-EP.3 |
| <b>Subject and case report number:</b>                                |        |
| <b>Word count:</b><br>(excluding tables, photo titles and references) |        |

To submit a report for review/marking, **it needs to be uploaded on to Learn**; you will be given further instructions when you enrol.

We recommend that text font and size, paragraph spacing, layout, spelling and grammar are considered when writing your work. Consider using a suitable font (for example, Arial or Calibri), a font size no smaller than 10 and an essay looks better with a 1.5 line spacing setting.

If your report exceeds the word count (as calculated by Word) but includes cited references then you will need to either reduce the total word count or cite your references in number format – we cannot spend time manually counting the cited reference names to check whether the word count has been adhered to.

A case report that exceeds the permitted word count will be returned to you for re-submission within the word limit. This is in the interest of fairness as it is difficult to compare an essay exceeding the word limit with one which has been kept to the required limits. Additionally, the ability to keep a discussion tightly focused, with every word counting, is an important skill to have developed at this level. Information included in a table will be included in the word count unless it is mainly numerical information (e.g. laboratory data in a table is not included in the word count).

### References:

- These should be properly cited in the text, in accordance with the style in the Journal of Small Animal Practice (JSAP) or Equine Veterinary Journal. Avoided listing references that were not cited in the text or vice versa.
- We recommend using Harvard referencing as described by the Anglia-Ruskin University (<http://libweb.anglia.ac.uk/referencing/harvard.htm>).

- You will find it very helpful to use a program such as Endnote® or Reference manager® to organise your references.

### **Plagiarism:**

All written work submitted to the Royal Veterinary College is passed through plagiarism detection software. Work submitted for this module should not have been submitted for any other courses at RVC or other institutions.

### **Mentor**

You may wish to have a mentor with which you can discuss cases. Ideal mentors would have post-graduate qualifications (for example, certificate, diploma) relevant to equine practice. RVC academic staff will not be available as mentors.

## Recommended reading list

The following list is given as a guide as to where to start and for this reason cannot be considered 'complete'. We also don't expect candidates to read texts from cover to cover or to use all of the texts listed, however we do recommend you make use of the most recent edition of textbooks where available. We apologise if candidates feel a particular favourite is missing - feel free to use the Learn discussion board to pass on additional suggestions to other candidates.

- Manual of Equine Practice (Eds Rose and Hodgson), Saunders
- The Equine Manual (Eds Higgins and Snyder), Saunders Elsevier
- Equine Medicine Surgery and Reproduction (Mair, Schumaker, Love and Watson), Saunders
- Manual of Equine Dermatology (Pascoe, Knottenbelt and Pascoe), Saunders
- Equine Respiratory Medicine and Surgery (Eds McGorum, Dixon, Schumaker, Robinson), Saunders
- Equine Infectious Diseases (Eds Sellon and Long), Saunders
- Equine Internal Medicine (Eds Reed, Bayly, Sellon), Saunders
- Disease and Disorders of the Horse (Knottenbelt and Pascoe), Saunders
- Manual of Equine Emergencies (Orsini, Divers, Somerville), Saunders
- Equine Ophthalmology (Gilger), Saunders Elsevier
- Equine Dentistry (Baker and Easley), Saunders
- Diagnosis and Management of Lameness in the horse (Dyson and Ross), Saunders
- Clinical Examination of Horses (Speirs), Saunders
- Equine Stud Farm Medicine and Surgery (Eds Knottenbelt, Pascoe, Leblanc, Lopate, Saunders
- Allen's Fertility and Obstetrics in the horse (Allen), Saunders Elsevier
- Saunders Equine Formulary (Knottenbelt), Saunders Elsevier
- Current Therapy in Equine Medicine (Ed Robinson), Saunders Elsevier
- Clinical Anatomy of the Horse (Clayton), Saunders Elsevier
- Clinical Radiology of the Horse (Eds Butler, Colles, Dyson, Kold, Poulos), Blackwells
- Equine Wound Management (Ed Stashak), Blackwells
- Large Animal Neurology (Ed Mayhew), Blackwells
- Blackwell's Five-Minute Veterinary Consult Equine (Ed Lavoie), Blackwells
- Equine Veterinary Journal
- Equine Veterinary Education
- Journal of Veterinary Internal Medicine
- Veterinary Surgery