



Higher National Unit specification

General information for centres

Unit title: Equine Studies: The Brood Mare

Unit code: DP24 34

Unit purpose: This Unit is designed to enable candidates to develop knowledge and utilise skills in the care and management of breeding mares. Candidates will develop knowledge and skills to select, care for and manage brood mares throughout the possible stages of covering, pregnancy and parturition. The different management techniques of the Thoroughbred and non-Thoroughbred industry will be covered.

On completion of the Unit the candidate should be able to:

- 1 Appraise the breeding potential of a mare.
- 2 Develop a management programme for a brood mare.
- 3 Plan an organisational programme in preparation for foaling.

Credit points and level: 1 HN credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Recommended prior knowledge and skills: Prior achievement of the HN Unit *Equine Nutrition* would be beneficial. Several years of practical experience would be beneficial. It would be helpful if the candidate had completed an appropriate certificate in horse management.

Core Skills: There are opportunities to develop the Core Skills of *Communication* and *Problem Solving* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

This Unit is included in the optional framework of the HNC/HND in Equine Studies. It is a free-standing Unit and may be delivered as such for the purposes of continuing professional development.

Assessment: This Unit is assessed holistically using a closed-book assessment consisting of structured questions incorporating diagrams where appropriate. The assessment should be one hour thirty minutes in duration. A report/log and witness testimony of the candidate's practical placement work could be included.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Appraise the breeding potential of a mare

Knowledge and/or Skills

- ◆ Anatomy of the reproductive system of the mare
- ◆ Physiology of the reproductive system of the mare
- ◆ The breeding cycle of the mare
- ◆ Embryo transfer and artificial insemination
- ◆ Relevant Health and Safety legislation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ correctly label four features of the reproductive systems of the mare
- ◆ describe the function of three features of the reproductive system of the mare
- ◆ explain the oestrus cycle of the mare
- ◆ demonstrate knowledge of the best time for covering within the mares cycle to achieve optimum success
- ◆ explain when embryo transfer and artificial insemination would be useful and describe the problems they present

Assessment Guidelines

This Unit is assessed holistically. The assessment for all three Outcomes is combined to form a written test conducted in controlled conditions and lasting one hour and thirty minutes.

Higher National Unit specification: statement of standards (cont)

Unit title: Equine Studies: The Brood Mare

Outcome 2

Develop a management programme for a brood mare

Knowledge and/or Skills

- ◆ Physical assessment of the mare prior to covering including possible hereditary problems
- ◆ Arrangements for all necessary swabbing and pre-covering health care
- ◆ Factors affecting fertility
- ◆ Methods of diagnosing pregnancy
- ◆ The different stages of development of pregnancy
- ◆ Disorders that may affect pregnancy
- ◆ Management of the health and condition of the mare including nutrient requirements prior to, and throughout her pregnancy
- ◆ Relevant Health and Safety legislation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ describe three desirable characteristics of the potential brood mare
- ◆ describe three possible hereditary problems
- ◆ list four health checks that should be carried out prior to covering
- ◆ list four health checks that should be carried out prior to foaling
- ◆ explain two ways of diagnosing pregnancy in the mare and give two disorders that may occur
- ◆ describe two different stages during development of the foetus
- ◆ explain the nutritional requirements of the mare during the last four months of pregnancy

Assessment Guidelines

This Unit is assessed holistically. The assessment for all three Outcomes is combined to form a written test conducted in controlled conditions and lasting one hour and thirty minutes.

Higher National Unit specification: statement of standards (cont)

Unit title: Equine Studies: The Brood Mare

Outcome 3

Plan an organisational programme in preparation for foaling

Knowledge and/or Skills

- ◆ Facilities and stable requirements for foaling.
- ◆ General procedures for the prevention of disorders and diseases.
- ◆ The normal foaling procedure
- ◆ Problems that may be encountered and their solutions.
- ◆ Relevant Health and Safety legislation
- ◆ Pre-natal and post-partum signs, symptoms and care
- ◆ Care of mother and foal in first two weeks

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ describe correct stable dimensions required for foaling, the appropriate bedding and give three additional necessary features
- ◆ describe the normal foaling procedure
- ◆ explain two foaling problems and give the solution of each

Assessment Guidelines

This Unit is assessed holistically. The assessment for this Outcome should be combined with Outcomes 1 and 2. This should be a written test, consisting of structured questions, undertaken in controlled conditions and lasting one hour thirty minutes.

Administrative Information

Unit code: DP24 34

Unit title: Equine Studies: The Brood Mare

Superclass category: SH

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Version: 02 (August 2014)

History of changes:

Version	Description of change	Date
02	Additional bullet point added to Outcome 2 Knowledge and/or Skills.	05/08/14

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Higher National Unit specification: support notes

Unit title: Equine Studies: The Brood Mare

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

This Unit is aimed at enabling candidates to develop and utilise a sound knowledge in the care and management of breeding mares. Throughout the Unit the different management techniques of the Thoroughbred and non-Thoroughbred industry will be covered. The candidate should develop the knowledge to select, care and manage brood mares throughout the possible stages of covering, pregnancy and parturition. It is aimed at those who have had some experience in general horse care and health.

Outcome 1 looks at the practical aspects of breeding in horses compatible with high success rates. It gives the candidate an understanding of the anatomy and physiology of the reproductive system of the mare, and looks at the breeding cycle of the mare with regard to optimum fertility (eg effects of season, external manipulation, ovulation). Knowledge of the use of embryo transfer and artificial insemination should be achieved.

Outcome 2 looks at the health and welfare programme for the mare prior to covering and during pregnancy. Candidates should look at conformation, type, breeding, temperament and soundness when making a physical assessment of the mare. Types of hereditary problems should be addressed, with the use of records and history possible hereditary problems may be discovered. The candidate should be made familiar with all necessary health checks (swabbing, equipment, fitness, veterinary records, vaccinations, worming etc) prior to covering and during the mare's pregnancy.

The stages of pregnancy including diagnosis and embryological development of the foal will be covered and candidates are expected to understand common disorders that may affect pregnancy (abortion and twinning). The management of health and condition of the mare including nutrient requirements prior to and throughout pregnancy should be covered with the candidate. They should develop a practical knowledge of how to monitor the condition of a pregnant mare and how to care for her.

Outcome 3 looks at the preparation for the foaling of a mare. The facilities required for the foaling (stable dimensions and appropriate types of bedding) along with the general procedures to prevent disorders and diseases (hygiene), should be understood by the candidate. The candidate should explain the correct procedure for foaling and develop a practical knowledge of possible eventualities of parturition in the mare. This Outcome should also cover the first 14 day cycle post-partum including signs, symptoms and aftercare.

Higher National Unit specification: support notes (cont)

Unit title: Equine Studies: The Brood Mare

Guidance on the delivery and assessment of this Unit

This Unit is designed to enable the candidate to acquire the knowledge necessary to give them a clear understanding of all areas in Brood Mare Management.

Most of the Unit will be covered in the classroom but candidates should spend several weeks on ‘stud placement’ during the breeding season where they will gain practical experience of mares foaling and the handling, covering and general care of them.

The use of video, slides and diagrammatic material will be used to cover all aspects of brood mare management.

Group work would be appropriate when considering the handling of problem foaling.

Class discussion would be useful following the return of candidates from their stud placements.

Opportunities for developing Core Skills

There are opportunities to develop the Core Skills of *Communication* and *Problem Solving* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Open learning

This Unit may be delivered by open or distance learning methods. For further information and advice on assessment and quality assurance, please refer to SQA guide: *Assessment and Quality Assurance for Open and Distance Learning*.

Candidates with disabilities and/or additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (www.sqa.org.uk).

General information for candidates

Unit title: Equine Studies: The Brood Mare

This Unit is designed to allow you to develop and utilise your knowledge of the care and management of breeding mares. You should develop the knowledge to select, care and manage brood mares throughout the stages of covering, pregnancy and parturition. By the end of the Unit you should have learned how to consider the breeding cycle of the mare with regard to optimum fertility, make a physical assessment of the mare, be familiar with all health checks, develop a practical knowledge of how to monitor the condition of a pregnant mare and how to care for her. Explain the correct procedure for foaling and develop a practical knowledge of possible eventualities of parturition in the mare. Throughout the Unit the different management techniques of the Thoroughbred and non-Thoroughbred industry will be covered

This Unit is aimed at those who have had some experience in general horse care and health.

The Unit is organised into 3 Outcomes, covering the following topics:

- 1 Appraise the breeding potential of a mare.
- 2 Develop a management programme for a brood mare.
- 3 Plan an organisational programme in preparation for foaling.

In **Outcome 1** you will learn about the anatomy and physiology of the reproductive system of the mare and gain an understanding of the mare's breeding cycle.

In **Outcome 2** you will learn how to assess the physical potential of the brood mare, the correct management procedures for the mare, ways of diagnosing pregnancy and the different stages of development throughout the mare's pregnancy.

In **Outcome 3** you will learn about the facilities required for a foaling, the procedures for the prevention of disorders and diseases, the correct foaling procedure, problems and their solutions that may be encountered.

Assessment will take the form of one holistic assessment covering all three Outcomes. This will be a closed-book written test taken under controlled conditions and it will last one hour thirty minutes. It will consist of structured questions involving diagrams, where appropriate. A report/log and witness testimony of your practical placement work should be included.