

-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

**Hanover House
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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- 0078351 -Session- 1987-88

-Superclass- RH

-Title- EQUINE ANATOMY AND PHYSIOLOGY

-DESCRIPTION-

Type and Purpose

A general module which develops the knowledge of the structure and functions of the equine body to allow full appreciation of the reasons for specialist feeding programmes and health problems for horses.

Preferred Entry Level

No formal entry requirements

Learning Outcomes

The student should:

1. know the general organisation and function of the equine body;
2. know the detailed structure and function of the major systems;
3. identify the points and the position of the major organs in the live horse.

Content/ Context

Corresponding to Learning Outcomes 1-3:

1. General Introduction

Levels of organisation - cells tissues, organs etc.

General discussion of the horse as a monogastric vegetarian and its adaptations as a successful large herbivore.

2. Systemic Anatomy and Physiology

Skeletal

- structure and function of bone and growth of long bones.
- axial and a pendicular skeleton.

- adaptations in horse.
- joints.

Muscular

- structure and function of muscle
- skeletal
- cardiac
- smooth.
- tendon and ligaments.
- distribution and adaptations of gross muscle masses.
- synovial bursae and sheaths.

Integument

- structure and function of skin and sweat glands etc.
- hair growth patterns.
- colours and markings.
- specialised skin in the horny hoof capsule.

Respiratory

- nasal cavity and nostrils System structure and function of paranasal sinuses.
- pharynx and guttural pouch.
- larynx and trachea.
- lungs gross histology function.

Circulatory

- blood
- structure and function. System
- heart and blood vessels structure and function.

Digestive

- oral cavity
- structure System function. teeth
- structure and function and growth.
- salivary glands.
- oesophagus.
- stomach.
- small intestine.
- large intestine.
- organs and glands associated with digestion eg. liver, pancreas.

Urogenital

- structure and function. System
- kidney
- ureter
- bladder and urethra.
- female and male genital systems.

Lymphatic

- general outline. System

Nervous

- general outline. System

3. Topographical Anatomy

Relationships of organs and systems within body - main body cavities eg. thorax, abdomen - pelvis.

Relevance of position of diaphragm etc. pleura and peritoneum.

Live and surface anatomy - identification of points of horse.

Suggested Learning and Teaching Approaches

This module is concerned with the understanding of the general organisation of the equine body and the function of its organ systems.

Students should be guided through the wealth of detail found in texts and long term recall of details should not be required.

The Learning Outcomes should be undertaken by a series of short lectures by the tutor with note-making by the students. Students will be provided with prepared diagrams and exposed to models, pictures photographs and preserved preparations. Wherever possible fresh material should be dissected either by students individually or in groups, or by the tutor as a demonstration for the students.

Microscopical examination will not be required.

Activities should include discussion with the tutor and other class members, and assembling facts and illustrations from a variety of resources into the required overview.

Assessment Procedures

Acceptable performance in the module will be satisfactory achievement of the performance criteria specified for each Learning Outcome.

Where cutting scores are stated these are intended to be for guidance. The precise cutting score for a test will depend on the difficulty of the test and will have to be decided by the Tutor aided by the Assessor.

The following abbreviations are used below:

LO Learning Outcome
IA Instrument of Assessment
PC Performance Criteria

- LO1 IA Short answer test consisting of 10 items.
- PC The student describes the general organisation and function of the equine body.
- Cutting score 80%
- LO2 IA Folio
- The student completes a folio of work on the detailed structure and function of the major systems.
- PC The student:
- (a) describes the general structure of the organ systems of the horse
 - (b) explains the function of the major systems;
 - (c) ensures that all information is accurate;
 - (d) uses relevant terminology.
- LO3 IA Practical exercise in which the student identifies the points and positions of the major organs in the live horse.
- PC The student:
- (a) identifies the points of the horse;
 - (b) identifies the positions of the major organs relative to the surface of the horse.